Office of the City Manager

PUBLIC HEARING
January 18, 2023

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Jordan Klein, Director, Planning and Development Department

Subject: Adoption of 2023-2031 Housing Element Update

RECOMMMENDATION

Conduct a public hearing and upon conclusion, adopt a Resolution to: (A) certify the Environmental Impact Report (SCH#2022010331) and adopt related California Environmental Quality Act (CEQA) findings, a statement of overriding considerations, mitigation measures, and a mitigation monitoring and reporting program; and (B) approve and adopt a General Plan Amendment to update the Housing Element for the period of 2023-2031.

SUMMARY

Under state law (Government Code Article 10.6), each local government in California must adopt an update to its General Plan Housing Element every eight years. The City of Berkeley ("City") has prepared an update to the Housing Element of the General Plan to affirmatively further fair housing and accommodate the City's 8,934-unit Regional Housing Needs Allocation (RHNA) for the 2023-2031 Housing Element 6th cycle.

The content of the 2023-2031 Housing Element is structured for consistency with State Housing Element Law and prepared in conjunction with significant public participation and review. The Housing Element Update identifies locations for development or redevelopment of housing and also demonstrates the City's strategy to meet locally determined housing need through policies and housing programs outlined within the Housing Element.

This staff report provides a summary of the Housing Element requirements and how the requirements are addressed, as well as how the City has revised the Housing Element in response to HCD's review letter. Based on the comments from HCD and the City's responses to those comments, the 2023-2031 Housing Element would meet the statutory requirements of State Housing Element Law upon local adoption.

FISCAL IMPACTS OF RECOMMENDATION

An HCD-certified Housing Element makes the City eligible for numerous sources of funding, such as Local Housing Allocations, Affordable Housing and Sustainable Communities Grants, SB 1 Planning Grants, CalHOME Program Grants, Infill Infrastructure Grants, Pro-Housing Design funding, Local Housing Trust Funds, and Regional Transportation Funds such as OneBayArea Grants.

Conversely, if the City does not adopt a Housing Element in substantial compliance with state law, the City faces a number of penalties and consequences. In addition to significant fines of up to $100,000 per month, the City can be sued by individuals, developers, third parties, or the State. A court could also limit the applicability of local zoning standards and decision-making authority for projects containing lower or moderate-income units. Failure to comply would also impact Berkeley's eligibility and competitiveness for federal, state, and regional affordable housing and infrastructure funding sources.

CURRENT SITATUTION AND ITS EFFECTS

The Housing Element Update is a Strategic Plan Priority Project, advancing the City's goal to create affordable housing and housing support services for its most vulnerable community members. The Housing Element Update will serve as the City of Berkeley's housing framework for the eight-year period between 2023-2031 (herein referred to as the "6th cycle").

General Plan Housing Element Amendment

The proposed Resolution would comprehensively update the Housing Element of the General Plan. Staff have prepared an update to the Housing Element (**Attachment 1**), which includes the following components:

- **Chapter 1: Introduction.** Provides an overview of the purpose, scope and organization of the Housing Element.
- **Chapter 2: Goals and Policies.** Outlines the City's commitments to providing and preserving housing opportunities in the City.
- **Chapter 3: Housing Needs.** Provides a summary of the City's community profile, including demographic and housing characteristics, and an assessment of the associated housing needs.
- **Chapter 4: Housing Constraints.** Provides an assessment of the potential constraints to housing development and preservation, including governmental and non-governmental constraints.
- **Chapter 5: Housing Resources.** Provides a collection of resources available for meeting the City's existing and projected housing needs, including a sites inventory and housing implementation programs, as well as assessment of direct or indirect impacts in furthering fair housing choice.

- **Appendix A. Publicly Assisted Housing.** Provides a list of all deed restricted units that receive public funding, including units that are and are not at risk of conversion to market rate.
- **Appendix B. Development Standards**. Summarizes residential and mixed-use development standards, such as requirements for lot area, height limit, setbacks, coverage, and usable open space, in residential and commercial zoning districts.
- **Appendix C. Sites Inventory.** Provides quantitative and qualitative factors to indicate the potential for redevelopment on each candidate site, by income category.
- **Appendix D. Evaluation of Past Accomplishments.** Evaluates the housing programs and quantified objectives in the 5th Cycle Housing Element (2015-2023) and the City's efforts in meeting and achieving the program requirements and objectives.
- **Appendix E. Affirmatively Furthering Fair Housing (AFFH).** Provides a summary of the sites inventory by neighborhood groupings and zoning types to demonstrate how the inventory meets the criteria for AFFH, and identifies fair housing issues, their contributing factors, and prioritized actions to address them with specific goals and actions.
- **Appendix F. Outreach and Engagement.** Contains a record of the City's outreach and engagement efforts, including staff reports, presentations, survey results, and photographs of public input events and board meetings.

Sites Inventory

The Housing Element must include a sites inventory to demonstrate that there is sufficient land suitable for residential development or redevelopment to meet the City's RHNA. The number of units that can be realistically accommodated must be specified for each site, as well as whether the site is adequate to accommodate "lower income housing, moderate-income housing, or above moderate-income housing" (Gov Code §65583.2(c)). If a site is included in the sites inventory, it is expected to be a location where housing could be developed to help the City meet its RHNA.

The staff reports that accompanied the Planning Commission meetings on February 9, 2022[1], May 4, 2022[2], and the City Council Worksession on March 15, 2022[3] provide a detailed overview of the criteria and steps necessary to identify land suitable for

[1] February 9, 2022. Planning Commission: Housing Element EIR Scoping Session. https://berkeleyca.gov/sites/default/files/legislative-body-meeting-agendas/2022-02-09_PC_Agenda%20Packet.pdf

[2] May 4, 2022. Planning Commission: Housing Element Update: Preliminary Sites, Goals, Policies, and Programs. https://berkeleyca.gov/sites/default/files/legislative-body-meeting-agendas/2022-05-04%20PC%20Agenda%20Packet.pdf

[3] March 15, 2022. City Council Housing Element Worksession #3. https://berkeleyca.gov/sites/default/files/city-council-meetings/2022-03-15%20Agenda%20Packet%20-%20Council%20WS.pdf

residential development that can be feasibly developed during the 2023-2031 period. In summary, the City assessed sites in three categories to meet the RHNA:

1. **Likely Sites**. Actual residential or mixed-use residential development proposals that have received their land use entitlement since 2018 but did not receive their certificate of occupancy ("building permit finaled") prior to June 30, 2022. For these projects, the number of units and their affordability reflect actual project plans, including density bonus units. A projection of a number of Accessory Dwelling Units (ADUs) are also included in the Likely category, based on recent development trends since 2018, using assumed levels of affordability based on the draft *Using ADUs to Satisfy RHNA Technical Memo*, produced by the Association of Bay Area Governments (ABAG)[4].
2. **Pipeline Sites**. Residential or mixed-use residential proposals that are currently under review, have submitted pre-applications with the City, or are otherwise actively engaging with the City on development. The number and affordability levels of units in these projects reflect the proposed plans to the extent they are known. Projected development at the North Berkeley BART and Ashby BART stations within the planning period (2023-2031) is also included in the Pipeline category.
3. **Opportunity Sites**. Properties assessed and considered for re-use that fit certain criteria, such as larger parcel size, older existing structures, lower floor area ratio, lower improvement-to-land ratio, adjacency to new development, and potential for lot consolidation through common ownership. To count towards the RHNA, Opportunity Sites must be in a zoning district that allows for residential use and provides the potential for more units. For Opportunity Sites to count towards the lower income categories in the City of Berkeley, sites must meet a minimum lot size of 0.35 acres and a minimum density trend of 30 units/acre.

Table 1 Summary Sites Inventory Capacity

Project Status	Units by Income Category				
	Extremely /Very Low	Low	Moderate	Above Moderate	Total
RHNA	**2,446**	**1,408**	**1,416**	**3,664**	**8,934**
Likely Sites	313	346	189	1,853	2,701
ADU Trend	180	180	180	60	600
Entitled Projects since 2018	133	166	9	1,793	2,101
Pipeline Sites	647	352	41	4,771	5,811

[4] September 8, 2021. Draft Affordability of Accessory Dwelling Units. ABAG. http://21elements.com/documents-mainmenu-3/housing-elements/rhna-6-2022-2030/1327-draft-adu-affordability-report-sep-8-2021-1/file

BART Sites	210	210	---	780	1,200
Applications under Review	84	29	11	1,424	1,548
Anticipated Projects (Pre-application)	353	113	30	2,567	3,063
Opportunity Sites	3,201		1,867	1,421	6,489
High Priority (>0.5 acre)	2,225		338	340	2,903
Medium Priority (0.35-0.5 acre)	976		345	248	1,569
Low Priority (<0.35 acre)	0		1,184	833	2,017
Total Capacity	**4,859**		**2,097**	**8,045**	**15,001**
Surplus	*1,005*		*681*	*4,381*	*6,067*
% Buffer	*26%*		*48%*	*120%*	*68%*

Housing Programs

The Housing Element must include implementation programs that address identified housing needs—including accommodating special needs populations, responding to governmental and non-governmental constraints, and facilitating the development of housing to meet RHNA. HCD requires that Housing Element Programs be well developed. Programs must include specific action steps to achieve the City's goals and policies and take into account the following:

- Include a timeline for implementation.
- Identify staff resources (by Department and/or Division) that will be responsible for implementation.
- Describe the City's specific role in implementation and resources (e.g., providing funding, dedicating staffing).
- Identify specific and measurable outcomes.

City staff identify 37 housing programs offered through several City departments and divisions and described in detail in *Section 5.4 Housing Programs* of the Housing Element. Exclusion from the Housing Element does not preclude a housing program from implementation during the 6th cycle planning period; the housing programs largely reflect current City Council referrals that are funded and/or staffed and are included in the future workplans for departments, thus ensuring the programs can be realistically attained and implemented in the 2023-2031 period.

Affirmatively Furthering Fair Housing (AFFH)

Assembly Bill 686 (AB 686), passed in 2018, created new requirements for jurisdictions to affirmatively further fair housing as part of the Housing Element Update process. These requirements are intended to address racial inequalities, increase housing

opportunities in high resource neighborhoods, and bring additional resources to traditionally under-resourced neighborhoods.

The City's AFFH analysis includes:

- An assessment of the RHNA sites inventory by neighborhood groupings and zoning types to demonstrate how the inventory meets AFFH criteria, described in *Section E2 Sites Inventory* of *Appendix E Affirmatively Furthering Fair Housing*.
- An assessment of the City's fair housing issues, including enforcement and targeted outreach, demographic integration and segregation, and access to opportunities, as described in *Section E4 Assessment of Fair Housing Issues* of *Appendix E Affirmatively Furthering Fair Housing*.

Key findings of the AFFH analysis include:

- **Income Level.** A larger proportion of moderate and above moderate RHNA units are located in lower and moderate income areas (LMI), indicating that the City's RHNA strategy does not disproportionately place lower income units in LMI areas.
- **Race/Ethnicity.** Approximately 47 percent of Berkeley residents are non-white and the majority of RHNA units are located in Census block groups where between 41 percent and 80 percent of the population belongs to a racial or ethnic minority group, reflecting the overall composition of Berkeley.

Table 5.6 Summary of AFFH Actions provides an overview of the various housing program actions that have direct or indirect beneficial impacts in furthering fair housing choices, such as programs that support fair housing outreach and enforcement, housing mobility, and incentivize increased housing capacity in high resource areas.

HCD Review

On November 8, 2022 the City received HCD's formal 90-day initial review comments (**Attachment 4**). HCD identified revisions that they deemed necessary for the agency to certify the City's Housing Element. The following is a summary of the revisions made to address HCD's comments:

1. **Suitability of Nonvacant Sites.** Added references in *Appendix C, Table C-10 Opportunity Sites-No Rezone Required*, to similar development trend based on experience with Likely, Pipeline, or other recent projects for nonvacant opportunity sites. Supporting factors include land use and/or geographic trends to demonstrate that the existing land use is not an impediment to additional residential development and can be reasonably expected to discontinue within the planning period.
2. **Accessory Dwelling Units (ADUs).** Modified *Section 5.1.2 Projected ADUs* to reduce the projected number of ADUs from 100 units per year to 75 units per year to conservatively account for the City's revised February 2022 ADU

ordinance that limits the number of units in the Hillside Overlay District to one ADU or one JADU per lot.

3. **Environmental Constraints.** Clarified in *Section 4.2.2 Environmental Constraints* that (1) sites with configuration constraints such as irregular shapes or utility easements were only included if there were opportunities for lot consolidation under common ownership to create a developable site; and (2) no major environmental conditions were identified that would preclude redevelopment. Explained that developments must meet stringent seismic building codes, no higher density residential developments are identified within the 100-year flood plain, and demonstrated trend of redevelopment of vehicle service stations.
4. **Zoning for a Variety of Housing Types (Emergency Shelters).** Included additional detail in *Section 4.1.4 (Emergency Shelters)* on locations (C-DMU and other Commercial districts), acreages of potential capacity, and other existing land uses (e.g. hotel/motel conversions) where emergency shelters are permitted ministerially by-right for projects of a certain bed count (up to 60 beds in the C-DMU and up to 25 beds in other Commercial districts). Added text to *Program 31-Zoning Code Amendment: Special Needs Housing* that, by December 2023, the City will identify commercial zones where emergency shelters are permitted by right depending on size, and apply only objective development standards in compliance with Assembly Bill (AB) 2339.
5. **Program 28-Bart Station Area Planning**. Added to *Program 28-BART Station Area Planning* a detailed schedule of City actions and additional milestones proposed throughout the planning period. Included a reference to *Program 36-Adequate Sites for RHNA and Monitoring*, in which the City will identify alternative opportunity sites in the event that insufficient progress is made within the first three years of the planning period.
6. **Land Use Controls**. Described in *Section 4.1.2 Zoning Ordinance (Developing at Assumed Densities),* nine prototype site development projects that demonstrate existing standards do not constrain development at the assumed densities represented in the Sites Inventory. Added a summary of the February 2022 Financial Feasibility Analysis conducted by Street Level Advisors, which demonstrated that the City's current housing development environment and proposed affordable housing fee structure does not present a barrier to residential development. Highlighted references to *Program 3-Citywide Affordable Housing Requirements*, which proposes a residential financial feasibility study, and *Program 33-Zoning Code Amendment: Residential*, which proposes zoning amendments to increase development potential to ensure adequate baseline capacity to meet RHNA.
7. **Local Processing and Permit Procedures.** Added text to *Section 4.1.3 Permit Processing Procedures for Use Permits, Administrative Use Permits, and Design Review Committe*e detailing the timelines and specific procedures and findings for decision-making (staff level, Zoning Officer, and/or Zoning Adjustments

Board). Clarified that the City processes all eligible housing applications within the limit of five public hearing and meeting provisions of SB 330, including residential development or mixed-use with at least two-thirds of the square-footage residential, and transitional or supportive housing. Reiterated references to *Program 33-Zoning Code Amendment: Residential* for development of objective development standards, *Program 34-Permit Processing* amendments to reduce permit processing timelines, and *Program 29-Middle Housing* to provide a streamlined process for "middle housing" projects in lower density districts.

8. **Permit Streamlining Act.** Clarified in *Section 4.1.3 Permit Processing Procedures* that all projects—and subsequent resubmittals—are reviewed for completeness at the staff level within 30 days of initial paid invoice, in compliance with the Permit Streamlining Act.
9. **Constraints on Housing for Persons with Disabilities**. Clarified in *Section 4.1.5 Housing for Persons with Disabilities (Definition of Family)* that the City's definitions of "Family" and "Household" do not require a single lease or rental agreement, nor does the City monitor or enforce shared living expenses among household members. As a result, proposed definition amendment in *Program 31-Zoning Code Amendment: Special Needs Housing* to simplify the definition of "Household" while maintaining distinction from other residential arrangements, such as Dormitory or Group Living Accommodation.
10. **Requests for Lesser Densities.** Explained in *Section 4.2.3 Market Constraints (Density)* that actual development trends largely reflect higher densities than those assumed in the 5th cycle Housing Element, with the exception of neighborhood commercial districts, which are typically smaller sites under separate ownership with infill or small addition projects that characteristically yield a lower density. For neighborhood commercial districts, the 6th cycle Housing Element reduces the density assumptions to reflect actual trends and anticipated capacity. In addition, added reference to *Program 27-Priority Development Areas (PDAs), Commercial and Transit Corridors* and *Program 33-Zoning Code Amendment: Residential*. The City is in the process of evaluating zoning and objective development standards, which would accommodate increased housing capacity in higher density districts, along high resource transit and commercial corridors, and include a minimum density standard to ensure adequate baseline capacity to meet RHNA targets and achieve Housing Element compliance.
11. **Beneficial Impact.** Added near-term actions and deliverables and interim milestones during the first three years of the 6th cycle planning period between 2023-2026 for the following programs to ensure beneficial impact within the eight-year planning period:
    a. *Program 4 Housing Trust Fund* – Added near-term milestones for funding Homekey projects, Housing Trust Fund pipeline projects, Small Sites projects, and BART Station Area Planning development.

b. *Program 12 Workforce Housing* – Accelerated review and entitlement timeline for 110 units of workforce housing for Berkeley Unified School District (BUSD) education workers to June 2023. The City received an initial SB 35 application for the 1701 San Pablo site in October 2022.
c. *Program 17 Accessible Housing* – Added near-term action (December 2025) to facilitate first floor residential use that encourages accessible design in transit and service-rich neighborhoods as part of the City's effort to adopt Objective Design Standards for higher density districts.
d. *Program 28 BART* – Added near-term milestones for establishing agreements with BART, selecting developer teams, funding awards and assisting with project financing, and adopting Objective Design Standards to facilitate the entitlement process.
e. *Program 30 ADUs* – Added near-term action (December 2023) to amend the City's local ADU ordinance based on revised statutory requirements, including AB 2221 (detached garages, front setbacks) and SB 897 (maximum height).
f. *Program 33 Zoning Code Amendment: Residential*– No change, as the program already contained near-term action items.
g. *Program 34 Permit Processing*—Added near-term action (December 2025) to bring to Council for consideration increased thresholds for discretionary review of residential and mixed-use residential projects.

12. **Specific Neighborhoods for AFFH.** Added place-based emphasis to *Table 5.6 Summary of AFFH Actions* for the following programs:
    a. *Program 6-Fair Housing Outreach and Enforcement* – Added targeted emphasis in Central and South Berkeley, and areas surrounding UC Berkeley campus, where there are higher proportions of lower income households, protected groups at risk of displacement, and cost burdened renters.
    b. *Program 8-Rental Housing Safety* – Added targeted emphasis in Central and South Berkeley where there are higher proportions of renters and aging housing units.
    c. *Program 11*-Rental Assistance – Added targeted emphasis in Central and South Berkeley and areas surrounding UC Berkeley campus where there are higher proportions of cost burdened renter populations.

Project Timeline and Public Engagement

AB 215 (2021) effectively shortened the timeline for the preparation of the 6th cycle Housing Element by 74 days. The law requires that cities make the initial draft Housing Element publicly available for a minimum of 30 days, then take a minimum of 10 business days to consider and incorporate public comments, prior to sending a revised draft to HCD for initial review. In addition, any subsequent draft revision must be posted

online and noticed at least seven days before resubmitting to HCD. The law also increased HCD's initial review period from 60 to 90 days. However, the statutory deadline of January 31, 2023 remained unchanged.

Staff prepared the 2023-2031 Housing Element Update in conjunction with input from members of the community through three public workshops and six outreach events, four City Council Worksessions, five Planning Commission meetings, a dozen commission and committee meetings, three online surveys, two walking tours, and approximately 28 stakeholder interviews and meetings over the course of 17 months. Staff also received guidance from HCD and technical assistance from ABAG throughout the process.

- **June 13 – July 14, 2022 (30 days).** A public review draft of the Housing Element was made available for comment and the City received 563 comments.
- **July 15, 2022 – August 10, 2022 (18 business days).** Staff incorporated revisions based on public feedback received and submitted its Initial Draft Housing Element to HCD for 90-day review on August 10, 2022.
- **September 23, 2022 and October 10, 2022.** The City received preliminary comments from HCD and staff incorporated revisions based on HCD comments.
- **October 18, 2022 – October 25, 2022 (7 days).** The City published a Revised Draft "v2" for public comment and held office hours on October 24, 2022. The City received 11 comments.
- **November 1, 2022**. Staff incorporated revisions based on public comments and resubmitted Revised Draft "v3" to HCD for follow-up review.
- **November 8, 2022.** The City received HCD's formal comment letter listing revisions necessary to comply with State Housing Element Law. Staff revised the draft Housing Element in response to comments from HCD (detailed in the HCD Review section above).
- **November 23, 2022 – November 30, 2022 (7 days).** The City published and noticed a Public Draft "v4" for subsequent public comment. The City received five comments.
- **December 1, 2022 – January 30, 2023 (60 days)**. The City submitted Revised Draft "v5" to HCD for subsequent review.

Planning Commission Recommendation

On December 7, 2022, the Planning Commission conducted a public hearing and recommended that the City Council adopt the draft Housing Element Update for the 2023-2031 planning cycle and certify the accompanying EIR. The Planning Commission did not recommend changes and voted to attach a cover letter to register three thoughts with the City Council (**Attachment 5**). A summary of the points is provided below:

1. **Prioritize growth along transit and commercial corridors in the highest resource neighborhoods.** The Planning Commission recommends that City

Council prioritize *Program 27-Priority Development Areas (PDAs), Commercial and Transit Corridors* and consider the program as a priority when budgeting and/or advising the City Manager on the appropriate staff resources to do so.

2. **Prioritize policies to prevent displacement.** The Planning Commission and the community voiced concerns about the risk of displacement and recommends that City Council prioritize policies to prevent it, such as the proposed Tenant Opportunity to Purchase Act (TOPA).
3. **Commendation of staff's work on the Housing Element.**

Consequences of a Non-Compliant Housing Element

All jurisdictions within ABAG, including the City of Berkeley, must adopt a substantially compliant 6th cycle Housing Element by January 31, 2023. While HCD approval is not required for a Housing Element to be found substantially compliant with state law, Housing Elements are subject to regulatory oversight by HCD and jurisdictions must carry the burden of proof if challenged under the Housing Accountability Act (HAA).

Potential consequences for a non-compliant Housing Element, as determined by HCD, include:

1. **Loss of Eligibility of State Grants, Loans, and Incentives.** The City may lose eligibility or competitiveness for federal, state, and regional affordable housing and infrastructure funding sources. HCD may instead redirect funding into the Building Homes and Jobs Trust Fund.
2. **Enforcement and penalties by the Attorney General.** The Attorney General may bring suit to remedy the violations, including significant fines. HCD shall notify the jurisdiction and "may notify the Attorney General" if the agency determines that a housing element is not in substantial compliance with Housing Element Law. (Gov. Code Section 65585(j))
3. **HAA "Builder's Remedy."** A court may limit local zoning standards and decision-making authority for housing projects containing units for lower or moderate-income households. (Gov. Code Section 65589.5(d)(1)-(5))
4. **Consistency Rezoning Required.** A court may require rezoning of sites within one year from the statutory deadline (January 31, 2023) if the jurisdiction does not identify sufficient housing sites "to accommodate the need for all groups of household income levels." (Gov. Code Section 65583(c)(1)(A))

The proposed Resolution would authorize the City Manager to make non-substantive changes to the 2023-2031 Housing Element to achieve state certification. Non-substantive changes include revisions that do not require amending City policy or additional City legislative action.

Environmental Determination

An Environmental Impact Report (EIR) was prepared for the Housing Element Update Project (see **Attachment 3**). The Project does not propose specific development

projects, but for the purposes of environmental review, includes a buildout projection which represents a reasonably foreseeable maximum amount of development for the 2023-2031 planning period of the Housing Element update. In total, the proposed project's buildout projection would include the development of 19,098 units.

The EIR was made available for review through the City's website at https://berkeleyca.gov/construction-development/land-use-development/general-plan-and-area-plans/housing-element-update, at the Planning and Development Department at 1947 Center Street (2nd Floor), and at the following locations in the city:

- Tarea Hall Pittman South Branch Library, 1901 Russell Street
- West Branch Library, 1125 University Avenue
- Central (Downtown) Library, 2090 Kittredge Street.

The environmental review process for the Project has included:

- **January 14, 2022:** A Notice of Preparation (NOP) of a Draft EIR was circulated to potentially interested parties and agencies.
- **February 9, 2022:** The City held an EIR scoping meeting as part of the regularly scheduled Planning Commission meeting.
- **August 30, 2022:** A Notice of Availability for the Draft EIR was distributed to State and local planning agencies.
- **August 30, 2022 – October 17, 2022 (45 days):** The Draft EIR was made available for public review on August 30, 2022 and the public comment period closed on October 17, 2022.
- **September 7, 2022.** A Planning Commission hearing on the Draft EIR was held.
- **November 30, 2022.** The Final EIR document, consisting of the Draft EIR and the Response to Comments (RTC), was published.
- **December 7, 2022.** The Planning Commission conducted a hearing on the Final EIR and recommended that the City Council certify and adopt the EIR and adopt the Housing Element update.

City Council certification is required to complete this part of the environmental review of the Project.

Draft EIR

1. **Potentially Significant Impacts Identified in the Draft EIR.** All environmental impacts, relevant City Standard Conditions of Approval, and mitigation measures are summarized in the CEQA Findings and Statement of Overriding Considerations (see **Attachment 3, Exhibit B**). Other than the impacts discussed below, all of the environmental effects of the Project can be reduced to less than significant levels through implementation of Standard Condition(s) of Approval and/or recommended mitigation measures.

   The Draft EIR (see **Attachment 3, Exhibit C**) identified one significant and

unavoidable environmental impact related to Cultural Resources (impacts to historic-period resources), one significant and unavoidable impact related to Noise (temporary construction noise) and four significant and unavoidable impacts related to Wildfire (emergency evacuation and response, wildfire risk and pollutant exposure, terrain and slope impacts, and infrastructure). The Draft EIR identified cumulative impact related to Cultural Resources, Noise and Wildfire. All other environmental effects of the proposed Project can be reduced to less than significant levels through implementation of Standard Condition(s) of Approval and/or recommended mitigation measures. The findings include a statement of overriding consideration that provides reasons the Project could be adopted even though those impacts could occur.

2. **Alternatives.** As required by Section 15126.6 of the CEQA Guidelines, an EIR must examine a range of reasonable alternatives to the proposed Project that would feasibly obtain most of the CEQA Project Objectives, and avoid or substantially lessen the Project's significant environmental impacts.

- **Alternative 1: No Project Alternative.** The "No Project" Alternative involves continued implementation of the existing 2015-2023 Housing Element as well as the City's existing plans and policies that would accommodate development in accordance with the existing land use designations. This alternative assumes development of 12,450 units, or approximately 6,648 fewer units than the assumed development under the proposed HEU of 19,098 units.

- **Alternative 2: No Rezoning in the Hillside Overlay.** One of the implementation programs of the proposed HEU is to increase density in the R-1 District. The program would specifically allow increases in the total number of units allowed on a lot, increase the total achievable floor area on a lot, and encourage a mix of unit sizes and densities, adjusting the level of discretion to allow approval of such projects with a Zoning Certificate. Under Alternative 2, this program would not apply to portions of the R-1 district within the Hillside Overlay (R-1H district). Without the rezoning in the R-1H district, approximately 150 units in the hillside area would not be built compared to buildout under the proposed HEU. However, if the R-1H district remains single family residential, SB 9 would apply there. SB 9, signed into law in 2021 and codified as Government Code sections 65852.21, 66411.7, and 66452.6, requires agencies to ministerially approve up to two residential units on a parcel within a single-family residential zone if the development meets specific objective criteria. SB 9 also allows splitting one lot into two lots within a single-family residential zone and permitting up to two units on each parcel (four total dwelling units on what was formerly a single-unit lot) if the development complies with specific objective criteria. Based on SB 9 trends, it is anticipated that overall this alternative would not decrease development in the hillside overlay zone compared to buildout assumed under the proposed HEU.

- **Alternative 3: No Middle Housing Rezoning.** One of the implementation programs of the proposed HEU is the Middle Housing Rezoning program to increase density in the R-1, R-1A, R-2, R-2A and MU-R districts. The program would include Zoning Ordinance amendments that would allow increases in the total number of units allowed on a lot, increase the total achievable floor area on a lot, encourage a mix of unit sizes and densities, and adjust the level of discretion to approve such projects with a Zoning Certificate. For the purposes of this EIR, the Middle Housing Rezoning program was projected to result in 1,745 units over the Housing Element period. Under Alternative 3, the Middle Housing Rezoning program would not be included in the Housing Element Update. Without Middle Housing Rezoning as part of the proposed Project, approximately 975 units fewer units would be constructed compared to buildout under the proposed HEU, which constitute the effect of not rezoning the R-1A, R-2, R-2A and MU-R districts. As noted above in Alternative 2, the number of additional units in the R-1 district remains the same (770), whether as a result of rezoning or through utilization of SB 9 in a case where no rezoning would occur. Accordingly, the 770 units attributed to the R-1 district are not removed in the analysis of this Alternative. This alternative would meet all of the Project objectives, but to a lesser degree than the proposed Project, as it includes fewer units**.**

Table 3 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed HEU for each of the issue areas studied.

Table 3. Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project	Alternative 2: No Rezone in Hillside Overlay	Alternative 3 No Middle Housing Rezone
Aesthetics	Less than significant	+	=	+
Air Quality	Less than significant with mitigation incorporated	+	=	+
Biological Resources	Less than significant	+	=	+
Cultural Resources	Significant and unavoidable	+	=	=
Energy	Less than significant	+	=	+
Geology/Soils	Less than significant with mitigation incorporated	+	=	+
Greenhouse Gas Emissions	Less than significant	+	=	+
Hazards and Hazardous Materials	Less than significant	+	=	+
Hydrology and Water Quality	Less than significant	+	=	+
Land Use and Planning	Less than significant	=	=	=
Noise	Significant and unavoidable	+	=	=

Population/Housing	Less than significant	+	=	+
Public Services and Recreation	Less than significant	+	=	+
Recreation	Less than significant	+	=	+
Transportation	Less than significant	-	=	-
Tribal Cultural Resources	Less than significant with mitigation incorporated	+	=	+
Utilities/Service Systems	Less than significant	+	=	+
Wildfire	Significant and unavoidable	=	=	=

+ Superior to the proposed Project (reduced level of impact)
- Inferior to the proposed Project (increased level of impact)
= Similar level of impact to the proposed Project

Final EIR

The City received written and oral comments about the Draft EIR during the official public comment period (from August 30 through October 17, 2022). All of the written comments are reproduced in their entirety in the Response to Comments document of the Final EIR. Responses to all of the comments that pertain to the EIR are addressed, including specific revisions to text in the Draft EIR that are being made to correct errors or omissions or clarify information presented in the Draft EIR. In no case do these revisions result in a greater number of impacts or impacts of a substantially greater severity than those set forth in the Draft EIR such that recirculation of the Draft EIR would be required.

Mitigation Monitoring Reporting Program (MMRP)

The Environmental Impact Report (EIR) identifies mitigation measures that will be implemented to reduce the impacts associated with the implementation of the Housing Element. The California Environmental Quality Act (CEQA) requires a public agency to adopt a monitoring and reporting program (see **Attachment 3, Exhibit A**) for assessing and ensuring compliance with any required mitigation measures applied to proposed development.

CEQA Findings and Statement of Overriding Consideration

For each significant impact identified in the EIR, CEQA requires that a lead agency make one of the three following findings:

1) A change or mitigation has been incorporated in the project to lessen the impact;
2) Changes or mitigations to lessen the impact are the responsibility of another agency; or
3) Specific economic, legal, social, technological or other considerations make mitigation of the impact infeasible.

There are eight mitigations identified in the MMRP that address impacts identified in the EIR (Finding 1): three pertaining to air quality, two pertaining to cultural resources, one pertaining to geology, one pertaining to Tribal Cultural Resources and one pertaining to Wildfire.

There are no changes or mitigations to lessen impacts that are the responsibility of another agency (Finding 2).

After all mitigations are adopted, there remain significant and unavoidable impacts related to construction noise, cultural resources and wildfire (Finding 3). CEQA Guidelines §15093(b) provides that when the decision of the public agency results in the occurrence of significant impacts that are not avoided or substantially lessened, the agency must state in writing the reasons to support its actions. Therefore in order to certify the EIR and proceed with the project, the City Council will need to make a Statement of Overriding Consideration, a formal statement by the lead agency that, having balanced the economic, legal, social, technological or other benefits of the proposed project, including region-wide or statewide environmental benefits, against its significant and unavoidable environmental impacts, the City finds that the proposed project benefits outweigh its unavoidable adverse environmental effects. The Statement of Overriding Considerations includes the following:

- The proposed project will ensure that the City of Berkeley meets its State-mandated RHNA requirements, including the required buffer to comply with the State Housing Element Law.
- The proposed project will encourage affordable housing, which is desired by the community and will contribute toward alleviating a shortage of housing in Berkeley and the region.
- The proposed project will encourage development of a variety of types of housing at a range of income levels.
- The proposed project will encourage the development of housing with access to transit, jobs, services, and community benefits in a manner that distributes affordable and special needs housing, including in in high resource neighborhoods, and affirmatively furthers fair housing.

BACKGROUND

Pursuant to Government Code Section 65583, local governments are required to include the following items as components within their Housing Elements, and subsequent updates thereto:

- **Housing Needs Assessment.** Examine demographic, employment and housing trends and conditions and identify existing and projected housing needs of the community, with attention paid to special housing needs (e.g., large families, persons with disabilities). This Section includes a community's Regional Housing Needs Allocation (RHNA) as determined by a community's regional planning

body in partnership with HCD. *The Housing Needs Assessment is covered in Chapter 3 Housing Needs.*

- **Evaluation of Past Performance.** Review the prior Housing Element to measure progress in implementing policies and programs. *The Evaluation of Past Performance is covered in Appendix D Evaluation of Past Accomplishments.*
- **Housing Sites Inventory**. Identify locations of available sites for housing development or redevelopment to demonstrate there is enough land zoned for housing to meet future need at all income levels. *The Sites Inventory is summarized in Chapter 5 Housing Resources (Summary of Land Available for Housing) and further detailed in Appendix C Sites Inventory.*
- **Community Engagement.** Implement a robust community engagement program that includes reaching out to individuals and families at all economic levels of the community plus historically underrepresented groups. *A summary of community engagement efforts can be found in Chapter 1 Introduction and a full record is available in Appendix F Outreach and Engagement.*
- **Constraints Analysis.** Analyze and recommend remedies for existing and potential governmental and nongovernmental barriers to housing development. *An analysis of existing and potential governmental and nongovernmental constraints is detailed in Chapter 4 Housing Constraints.*
- **Policies and Programs**. Establish policies and programs to be carried out during the 2023-2031 planning period to fulfill the identified housing needs. *Policies and Programs are detailed, with specific actions and timelines, in Chapter 2 Goals and Policies and Chapter 5 Housing Resources (Housing Programs).*
- **Affirmatively Further Fair Housing (AFFH)**. Analyze and address significant disparities in housing needs and access to opportunity by proposing housing goals, objectives, and policies that aid in replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws. *AFFH analysis and actions are summarized in Chapter 5 Housing Resources (AFFH Actions Summary) and further detailed in Appendix E Affirmatively Further Fair Housing.*

Housing Sites Inventory

Berkeley's 6th cycle RHNA is 8,934 residential units[5] (Table 2). The City is not required to build housing, but it is required to identify and zone sufficient sites to accommodate the anticipated growth over the next eight-year period. If actual housing production is

[5] December 16, 2021. Final RHNA Plan: San Francisco Bay Area, 2023-2031. ABAG. https://abag.ca.gov/tools-resources/digital-library/proposed-finalrhnaallocationreport2023-2031pdf

less than the RHNA, eligible housing projects are subject to a streamlined approvals process.

Table 2 Berkeley RHNA Allocation, 5th and 6th Cycles

Income Level	5th Cycle RHNA Units	6th Cycle RHNA Units
Very Low (< 50% AMI)	532	2,446
Low (50 – 80% AMI)	442	1,408
Moderate (80 – 120% AMI)	584	1,416
Above Moderate (> 120% AMI)	1,401	3,664
Total	**2,959**	**8,934**

"No net loss" provisions of SB 166 (2017) require the City to ensure an adequate supply of land resources to be made available for housing development throughout the duration of the 2023-2031 planning period. This means if housing sites identified within the 6th cycle Housing Element are developed with non-residential uses, lower residential densities, or fewer affordable units than anticipated by the Housing Element, the Housing Element could be determined to be out of compliance. Accordingly, the City's RHNA requirement is further buffered with 6,067 units (68 percent), including a 1,005 unit (26 percent) buffer in the lower income categories, to ensure compliance with SB 166.

Project Team

The Project involved a highly iterative and collaborative effort led by Land Use Planning staff, with consultant support on necessary technical expertise and facilitation on wide-reaching public outreach efforts. The Housing Element draft was reviewed by City staff from multiple departments and other City agencies over several revisions.

- **Consultant Team**. The consultant team was led by Raimi and Associates, with technical guidance from Veronica Tam and Associates, environmental review by Rincon Consultants, and public engagement facilitation from Envirocom Communications.
- **Land Use Planning**. Jordan Klein (Planning Director), Grace Wu (Principal Planner), Zoe Covello (Assistant Planner), Justin Horner (Associate Planner), Alene Pearson (Deputy Planning Director), Steven Buckley (Planning Manager).
- **Heath, Housing, & Community Services**. Mike Uberti (Senior Community Development Project Coordinator), Margot Ernst (Housing & Community Services Manager), Jenny Wyant (Senior Community Development Project Coordinator).

- **Other City Divisions/Departments**. Sara Stephens (City Attorney Office), Sarah Moore (Office of Energy & Sustainable Development), Jenny McNulty (Building & Safety Division), Peter Radu (Neighbor Services Division), Kieron Slaughter (Office of Economic Development), Sarah Lana (Office of Emergency Services).
- **Other City Agencies**. Be Tran (Rent Board), Lief Bursell (Rent Board), Rachel Gonzalez-Levine (Berkeley Housing Authority).

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

The Housing Element Update is expected to result in greater infill housing development potential near transit and in employment-rich areas. Prioritizing density and affordable housing in these areas will incentivize community members to use alternative modes of transportation and reduce vehicle miles traveled (VMT), which are critical for reducing greenhouse gas emissions, and will bring the City closer to meeting its Climate Action Plan and Climate Emergency goals.

RATIONALE FOR RECOMMENDATION

The Housing Element of the General Plan is mandated by State law to be updated every eight years. The 2023-2031 6th Cycle Housing Element Update must be adopted by the City Council by the January 31, 2023 statutory deadline. A substantially compliant Housing Element will allow the City to continue to be eligible for numerous state and regional housing and infrastructure funding sources.

ALTERNATIVE ACTIONS CONSIDERED

The City may opt to make further substantive amendments, such as changes to City policies, and not adopt the 2023-2031 Housing Element by the January 31, 2023 deadline, although that would put the City at risk of the penalties associated with AB 1398 and housing statute, as mentioned earlier in this report (Consequences of a Non-Compliant Housing Element). As mentioned previously, any subsequent draft revision must be posted online and noticed at least seven days before resubmitting to HCD for review and certification.

CONTACT PERSON

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Justin Horner, Associate Planner, Planning and Development, jhorner@cityofberkeley.info

ATTACHMENTS

1. Draft 2023-2031 Housing Element and Appendices

2. Draft Resolution (See page 678 of the agenda item)
3. Final EIR and Response to Comments
   - Exhibit A. Mitigation Monitoring and Reporting Program (MMRP)
   - Exhibit B. CEQA Findings: Certifications of EIR, Rejection of Alternatives and Statement of Overriding Considerations
   - Exhibit C. Draft EIR and Appendices
4. HCD 90-Day Housing Element Comment Letter, dated November 8, 2022
5. Planning Commission Cover Letter to City Council, dated December 15, 2022
6. Public Hearing Notice

Links to Referenced or Related Documents:

1. March 25, 2021, *Initiation of Public Process and Zoning Concepts for 2023-2031 Housing Element Update*. Report to Berkeley City Council, Councilmember Droste et al.
   https://berkeleyca.gov/sites/default/files/documents/2021-03-25%20Special%20Item%2001%20Initiation%20of%20Public%20Process%20-%20Rev%20Mayor.pdf
2. March 25, 2021, *Initiation of Participatory Planning for Berkeley's Regional Housing Needs Allocation (RHNA).* Supplemental report to Berkeley City Council, Councilmember Hahn et al.
   https://berkeleyca.gov/sites/default/files/documents/2021-03-25%20Special%20Item%2002%20Initiation%20of%20Participatory%20Planning%20-%20Supp%20Hahn.pdf
3. April 28, 2021. *Housing Element Update and Annual Progress Report,* Off-Agenda Memo from City Manager to Berkeley City Council.
   https://berkeleyca.gov/sites/default/files/2022-01/2021-04-28%20Housing%20Element%20Update%20and%20Annual%20Progress%20Report.pdf
4. September 8, 2021. Draft Affordability of Accessory Dwelling Units. ABAG.
   http://21elements.com/documents-mainmenu-3/housing-elements/rhna-6-2022-2030/1327-draft-adu-affordability-report-sep-8-2021-1/file
5. September 21, 2021. *Housing Element Update Work Session 1*. Report from City Manager to Berkeley City Council.
   https://berkeleyca.gov/sites/default/files/documents/2021-09-21%20WS%20Item%2001%20Housing%20Element%20Update.pdf
6. December 9, 2021. *Housing Element Update Work Session 2*. Report from City Manager to Berkeley City Council.
   https://berkeleyca.gov/sites/default/files/documents/2021-12-

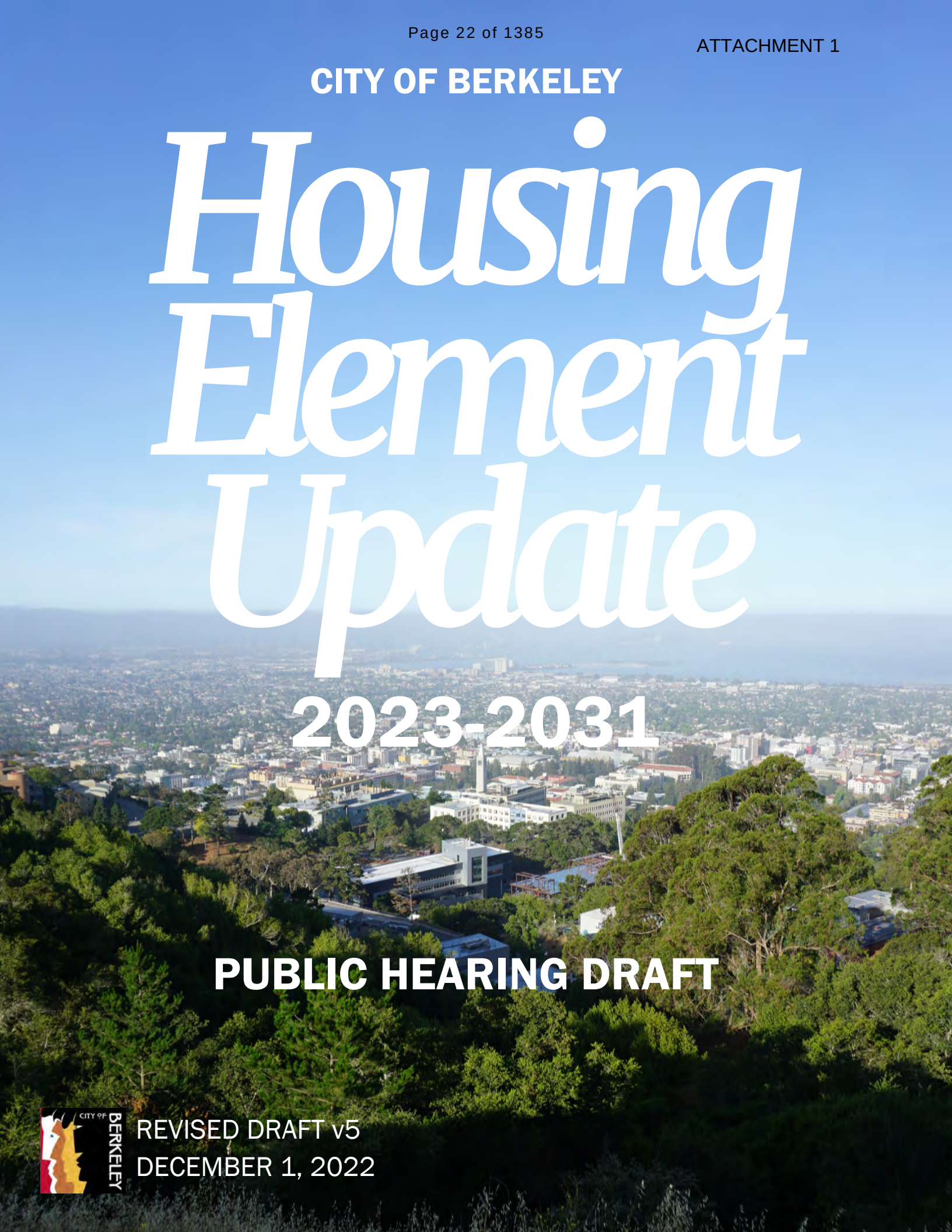
09%20Item%2001%20Housing%20Element%20Update%20Work%20Session.pdf

7. February 8, 2022. February 9, 2022. Planning Commission: Housing Element EIR Scoping Session. https://berkeleyca.gov/sites/default/files/legislative-body-meeting-agendas/2022-02-09_PC_Agenda%20Packet.pdf
8. March 15, 2022. City Council Housing Element Worksession #3. https://berkeleyca.gov/sites/default/files/city-council-meetings/2022-03-15%20Agenda%20Packet%20-%20Council%20WS.pdf
9. May 4, 2022. Planning Commission: Housing Element Update: Preliminary Sites, Goals, Policies, and Programs. https://berkeleyca.gov/sites/default/files/legislative-body-meeting-agendas/2022-05-04%20PC%20Agenda%20Packet.pdf
10. December 7, 2022. Planning Commission: Housing Element Update and Environmental Impact Report. https://berkeleyca.gov/sites/default/files/legislative-body-meeting-agendas/2022-12-07%20PC%20Agenda%20Packet_0.pdf

CITY OF BERKELEY

Housing Element Update

2023-2031



PUBLIC HEARING DRAFT

REVISED DRAFT v5
DECEMBER 1, 2022

Draft 2023-2031 Housing Element

This is a draft document that has not been adopted by the City of Berkeley. The purpose of this draft is to submit to the City Council for consideration for adoption.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

1 INTRODUCTION

City of Berkeley's Mission: Provide excellent service to the Berkeley community; promote a diverse, accessible, affordable, safe, healthy, environmentally sound and culturally rich city; innovate; embrace respectful, democratic participation in local decision-making; respond efficiently and effectively to neighborhood and commercial concerns; and do so in a fiscally sound manner.

Incorporated in 1909, Berkeley is centrally located within the Bay Area in Alameda County. While much more than just a university town, Berkeley benefits from the University of California's cultural and educational facilities and its positive impact on the local economy. Along with the University, other top employers include the Lawrence Berkeley National Laboratory, Alta Bates Summit Medical Center, and the City of Berkeley. As one of the older cities in the East Bay, Berkeley has a number of lively pedestrian-oriented commercial areas that developed along former streetcar routes and near the University. It has many pleasant, livable residential neighborhoods with many attractive older homes. It has largely avoided the newer car-oriented suburban sprawl and strip mall style of commercial development found in other parts of the Bay Area.

Berkeley last updated its 5th cycle Housing Element in 2015. In the time since, Berkeley's policies and actions have been shaped by worldwide, national, and local events including federal anti-immigration practices, the murder of George Floyd and resulting protests focused on racism and policing, the COVID-19 pandemic, and increased impacts due to climate change including severe local air quality impacts due to wildfire smoke in 2018, 2019 and 2020. Berkeley has taken local action to address these pressures and affirm its values of equity, inclusiveness, and innovative action.

Berkeley became the first sanctuary city in the U.S. in 1971 and reaffirmed it in 2016 to support its residents, regardless of documentation. In 2018, Berkeley City Council declared a Climate Emergency and a goal of becoming a Fossil Fuel Free City as soon as possible; in 2019, Berkeley adopted the nation's first prohibition on natural gas infrastructure in newly constructed buildings. Berkeley has acknowledged and is working to address racially discriminatory practices that impact housing, displacement, and policing; in 2021, Berkeley City Council approved a Resolution to End Exclusionary Zoning in Berkeley, declared Racism as a Public Health Crisis, and developed a Reimagining Public Safety Taskforce that began work to create a model of equitable and community-centered safety for Berkeley.

Plans adopted by Berkeley since 2015 that reflect Berkeley's values and actions, and shape the patterns, amenities, and quality of development in Berkeley include:

- **Berkeley Resilience Strategy (2016).** Advances community connections, preparedness, and equity in Berkeley.
- **Berkeley Strategic Transportation (BeST) Plan (2016).** Prepares for and prioritizes the physical enhancements of Berkeley's transportation network to improve access, safety, and mobility for all users.

- **Berkeley Bicycle Plan (2017).** Aims to make Berkeley a model bicycle-friendly city where bicycling is a safe, attractive, easy, and convenient form of transportation and recreation for people of all ages and bicycling abilities.
- **Berkeley Strategic Plan (2018).** Identifies the long-term goals and short-term priorities that the City government will focus on the benefit the Berkeley community. Its goals include creating affordable housing and housing support services for our most vulnerable community members; being a global leader in addressing climate change, advancing environmental justice, and protecting the environment; and championing and demonstrating social and racial equity.
- **Age-Friendly Berkeley Plan (2018).** Works on improving the experience of older adults in Berkeley with a focus on housing and economic security, transportation and mobility, health and wellness, and social participation and civic engagement.
- **Green Infrastructure Plan (2019).** To guide the identification, implementation, tracking, and reporting of green infrastructure projects within the City of Berkeley.
- **Local Hazard Mitigation Plan (2019).** To prepare for and mitigate the impacts of natural and human-caused disasters.
- **Vision Zero Action Plan (2019).** An equity-focused, data-driven effort to eliminate traffic deaths and severe injuries on our city streets by 2028.
- **Berkeley Electric Mobility Roadmap (2020).** Identifies goals, strategies, and actions to create a fossil fuel-free transportation system that integrates with and supports the City's ongoing efforts to increase walking, biking, and public transportation, and ensures equitable access to the benefits of clean transportation.
- **Adeline Corridor Specific Plan (2020).** Articulates a community vision and planning framework for an important Priority Development Area that will serve as a guide for the City and other public agency decision-makers, community members, and other stakeholders over the next 20 years.
- **Vision 2050 Framework (2020).** A long-term plan to build, upgrade, and repair Berkeley's aging infrastructure to be more sustainable and resilient in order to meet the serious challenges of the future, including climate change and is driven by a set of core values: equity, public health and safety, a strong local economy, resiliency, and sustainability.
- **Pedestrian Plan (2021).** Establishes a clear path forward for pedestrian infrastructure improvements by focusing its recommendations and goals squarely on equity and safety.
- **Berkeley Existing Buildings Electrification Strategy (2021).** A ground-breaking plan to transition existing buildings in Berkeley from natural gas appliances to all-electric alternatives in a way that benefits all residents, especially members of historically marginalized communities.

This Housing Element Update must meet state law, as detailed in Section 1.2 Overview and 1.3 Housing Element Requirements, and define the specific goals, polices, and programs that will support Berkeley's portion of the regional population growth. It must also do so in a manner that reflects Berkeley's mission, values, and is consistent with its plans and work towards sustainability, safety, and equity.

As Berkeley continues to grow and develop, housing density will increase. This increased density can have many benefits, including reduced greenhouse gas emissions, improved health, and more access to affordable housing.

Berkeley's Housing Element Update identifies policies and programs to provide and preserve healthy, resilient housing at a range of prices, with special attention given to special needs housing, homelessness prevention, and affirmatively furthering fair housing (AFFH). In doing so, it helps to realize Berkeley's sustainable future as a Fossil Fuel Free City, powered by 100 percent renewable electricity, with safe transportation options to vibrant commercial areas and institutions, providing social and community connections for all residents.

1.1 PURPOSE OF THE HOUSING ELEMENT

The Housing Element's purpose is to identify the City's housing needs and outline goals, policies, and programs to address them. The Housing Element is an eight-year plan, extending from January 31, 2023, through January 31, 2031. The Housing Element will primarily address these issues:

- Preserving and improving the existing housing stock;
- Providing housing for special needs populations;
- Supplying enough new housing to meet the City's fair share of the region's need; and
- Affirmatively furthering fair housing.

1.2 OVERVIEW

State law requires that jurisdictions prepare a Housing Element as part of its General Plan (Government Code §65302(c)). Since a General Plan serves as a jurisdiction's blueprint for future development and growth, the Housing Element plays a critical role in the overall Plan. A Housing Element is the primary planning guide for local jurisdictions to identify and prioritize the housing needs of the City and determine ways to best meet these needs while balancing community objectives and resources.

The 2023-2031 Housing Element has five chapters:

1. **Introduction.** Provides an overview of the purpose, scope, and organization of the Housing Element.
2. **Goals and Policies.** Outlines the City's commitments to providing and preserving housing opportunities in the City.
3. **Housing Needs.** Provides a summary of the City's community profile, including demographic and housing characteristics, and an assessment of the associated housing needs.
4. **Housing Constraints**. Provides an assessment of the potential constraints to housing development and preservation, including governmental and non-governmental constraints.
5. **Housing Resources.** Provides a collection of resources available for meeting the City's existing and projected housing needs, including a sites inventory and housing implementation programs, as well as assessment of direct or indirect impacts in furthering fair housing choice.

In addition, this Element includes several Appendices:

- Appendix A. Publicly Assisted Housing
- Appendix B. Development Standards
- Appendix C. Sites Inventory
- Appendix D. Evaluation of Past Accomplishments
- Appendix E. Affirmatively Furthering Fair Housing (AFFH)
- Appendix F. Outreach and Engagement

Importantly, the Housing Element quantifies how many new housing units the City needs to accommodate growth in the region as part of the Regional Housing Needs Assessment (RHNA). The State and our metropolitan planning organization, Association of Bay Area Governments (ABAG), carry out this process and allocate to each jurisdiction a share of California's new housing need based on the community's demographic trends, proximity to transit and employment, and other characteristics. As part of the Housing Element, the City must identify adequate land with appropriate zoning and development standards to accommodate the City's RHNA allocation.

When preparing the Housing Element, jurisdictions must consider California Department of Housing and Community Development's Guidelines (Government Code §65585). Jurisdictions must periodically review the Housing Element to evaluate (1) the appropriateness of its goals and policies in meeting the state's housing goals, (2) its effectiveness in attaining the City's housing goals and (3) the progress of its implementation (Government Code §65588).

1.3 HOUSING ELEMENT REQUIREMENTS

All Housing Elements must comply with several State laws. The preparation of the Housing Element is guided by California Government Code, Article 10.6. The law governing the contents of Housing Elements is among the most detailed of all elements of the General Plan. According to Section 65583 of the Government Code:

The Housing Element shall consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. The Housing Element shall identify adequate sites for housing, including rental housing, factory-built housing, mobile homes, and emergency shelters, and shall make adequate provision for the existing and projected needs of all economic segments of the community.

Housing Element Law requires "An assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs." The law requires:

- An analysis of population and employment trends, including the UC Berkeley student population;
- An analysis of household characteristics;
- An inventory of suitable land for residential development;

- An identification of a zone or zones where emergency shelters are permitted by right;
- An analysis of the governmental and non-governmental constraints on the improvement, maintenance, and development of housing;
- An analysis of special housing needs;
- An analysis of opportunities for energy conservation; and
- An analysis of publicly assisted housing developments that may convert to non-assisted housing developments.

The purpose of these requirements is to develop an understanding of the existing and projected housing needs within the community and to set forth policies and schedules, which promote preservation, improvement, and production of diverse housing types for all income levels throughout Berkeley.

Senate Bill (SB) 1087 (2005) (Government Code §65589.7) requires cities to provide a copy of the adopted Housing Element to local water and sewer providers, and also requires that these agencies provide priority hookups for developments with lower-income housing. The Housing Element will be provided to these agencies immediately upon adoption.

1.4 GENERAL PLAN CONSISTENCY

State law requires every California city to adopt a general plan that contains seven mandatory topics called "elements," but cities are given flexibility in how elements are named and organized. The Berkeley General Plan Land Use, Transportation, Environmental Management (which addresses noise and conservation), Housing, Open Space & Recreation, and Disaster Preparedness & Safety elements are mandatory elements. Cities may also adopt other optional elements. Berkeley has added Economic Development & Employment, Urban Design & Preservation, and Citizen Participation as optional elements.

All elements carry equal weight and are designed to be consistent with each other. State law (Government Code § 65300.5) requires that *"...the General Plan and elements and parts thereof comprise an integrated, internally consistent, and compatible statement of policies...".* The purpose of requiring internal consistency is to avoid policy conflict and provide a clear policy guide for the future maintenance, improvement, and development of housing within the City.

The Housing Element is being updated at this time in conformance with the 2023-2031 update cycle for jurisdictions in the Association of Bay Area Governments (ABAG) region. The City has reviewed the Housing Element for consistency with other General Plan Elements. The policies and programs in this Housing Element reflect the intent and policy direction contained in other General Plan Elements. As amendments are made to the General Plan, the City will also review and revise the Housing Element for ongoing consistency.

1.5 PUBLIC PARTICIPATION

The 2023-2031 6th cycle Housing Element Update includes input from a variety of public outreach efforts. A dedicated webpage is available on the City's website:

https://berkeleyca.gov/construction-development/land-use-development/general-plan-and-area-plans/housing-element-update.

The webpage includes a list of upcoming events, overview of the Housing Element update process, a timeline of key benchmarks, project documents, resources, and a summary of past events. The webpage also has the option to subscribe to a mailing list and an email address (housingelement@cityofberkeley.info) to contact with questions or concerns.

In a diligent effort to include all economic segments of the Berkeley community, the Housing Element team reached out to City boards and commissions that advise on housing-related issues, such as the Homeless Panel of Experts, Housing Advisory Commission, Rent Stabilization Board, Commission on Disability, Commission on Aging, and the Children, Youth and Recreation Commission. In addition, the outreach team conducted small group interviews with homeless interest groups, housing advocates, affordable housing developers, UC Berkeley's student housing commission, and representatives from local faith-based institutions. Renters were engaged through pop-up events at grocery stores, a renter-specific online survey, and a stakeholder meeting that brought together renters from various different income levels.

Public Input and the Housing Element Update

Input from the City's outreach events and meetings helped define the Housing Element Update priorities and goals, and provide direction on the sites inventory, housing policies and programs, and zoning efforts. The most common theme of comments received relate to housing affordability and housing supply. In response, nearly half of the 35 policies identified in the Housing Element are in support of housing affordability and production goals.

Public input also provided direction in how the community would like to see these broader goals achieved. For example, in response to Council referrals and a sizeable volume of feedback indicating interest in upzoning and increasing density in low-density neighborhoods, the City is prioritizing the timeline for Program 29 -Middle Housing, which would amend the zoning code to allow multi-unit development on one lot.

Staff also relied upon feedback gathered from stakeholder meetings to improve draft policies and programs. For example, Program 12 -Workforce Housing aims to provide low to moderate-income housing to middle-income households with the goal of attracting and supporting professionals who work in the City of Berkeley, such as teachers, healthcare workers, retail clerks, artists, and more. It was created with continued assistance from numerous community stakeholder groups that passionately advocated for the inclusion of such a program in the Housing Element.

All public comments provided to the City during the public comment period were reviewed by the Housing Element team and made available publicly on the Housing Element website. As mentioned above, the feedback received resulted in direct edits to the Housing Element Update.

Summary of City Meetings and Community Engagement Events

The following is a summary of workshops, meetings, surveys, and other outreach methods used during the update process. Key information from the public participation events and surveys are included in Appendix F Outreach and Engagement.

Table 1.1: City Meetings and Community Engagement Events

Meeting	Date(s)	Description
Public Workshop	10/27/2021 1/27/2022 6/29/2022	Online presentations and interactive breakout groups to provide an update on the planning process and gather input at key stages of the Housing Element project: Overview, Sites Inventory, and Public Draft document.
City Council	9/21/2021 12/9/2021 3/15/2022 8/26/2022 9/20/2022	Reports, presentations, public comment, and decision-maker feedback at four worksessions, which yielded policy direction for identifying suitable sites, housing programs, and zoning efforts.
Planning Commission	9/1/2021 2/9/2022 5/4/2022 6/1/2022 9/7/2022 12/7/2022	Presentation and accompanying memorandum to City boards and commissions took place throughout the Fall and Winter of 2021-2022 to introduce the Housing Element, seek input on key stakeholders for outreach, and identify a liaison to participate in ongoing Housing Element outreach efforts. Reports and presentations were given to the Planning Commission pertaining to the CEQA EIR Scoping Session and public comment on the Housing Element Draft EIR.
Homeless Services Panel of Experts	9/1/2021	
Commission on Disability	9/1/2021	
Landmarks Preservation Commission	9/2/2021	
Zoning Adjustments Board	9/9/2021	
Commission on Aging	9/15/2021	
Energy Commission	9/22/2021	
Children, Youth, and Recreation Commission	9/27/2021	
Housing Advisory Commission	9/30/2021	
Rent Stabilization Board	11/18/2021	
Civic Arts Commission	1/19/2022	
City/UC/Student Relations Committee	1/28/2022 10/14/2022	
Residential Walking Tours and Online Survey	11/23/2021- 1/31/2022	Two walking tours, one for Downtown Berkeley and another for West Berkeley, were created as an opportunity for community members to provide input on the development of housing options in Berkeley.
Citywide Housing Element Online Survey	10/28/2021- 11/14/2021	A total of 747 individuals submitted survey responses.

Renter Survey	4/21/2022-5/8/2022	Online survey requesting input on tenant programs and strategies that will help protect tenants, prevent displacement, and facilitate the construction of affordable housing. The first 100 respondents received a $10 gift card to Berkeley Bowl, a local grocer.
Southside Area UC Student Housing Survey	11/23/2022-12/18/2022	Online survey seeking input from UC Berkeley students (undergraduate, graduate, and post-doctoral) on their housing preferences to inform Southside zoning efforts (Program 27 - Priority Development Areas (PDAs), Commercial and Transit Corridors). The first 100 respondents received a $20 gift card to the Cal Student Store.
Black/African-American Interest Group	10/12/2021	Stakeholder Interviews and Small-Format Meetings with key business and advocacy organizations, business and property owners, housing developers, community leaders, UC Berkeley student housing commission and campus planning, and racial and ethnic interest groups.
Market-Rate Developers	10/12/2021 11/23/2021	
Senior Center	10/12/2021	
Associated Students of the University of California (ASUC) – Housing Commission	10/19/2021 10/4/2022	
Real Estate Professionals	10/19/2021	
Property Management and Business Owners	10/25/2021	
Homeless Interest Group	10/25/2021	
Housing Advocates	11/5/2021	
People with Disabilities Interest Group	12/3/2021	
Hispanic/Latinx Interest Group	12/17/2021	
Berkeley Unified School District	12/22/2021 1/24/2022	
UC Berkeley Campus Planning	12/20/2021 9/26/2022	
West Berkeley Community/Business Stakeholders	2/4/2022 2/11/2022	
Arts and Cultural Centers	3/8/2022 4/22/2022	
Building Trades Representatives	3/17/2022	
Community-Based Organizations	4/25/2022	
Black Ecumenical Ministerial Alliance	5/9/2022	
All-Income Renter Stakeholder Meeting	5/25/2022	
East Bay For Everyone	9/14/2022	Presentations and receive feedback on proposed Residential Objective Standards zoning amendments for the Southside Plan Area,(Program 27 -Priority Development Areas (PDAs), Commercial and Transit Corridors)
Berkeley Design Advocates	10/5/2022	
Southside Neighborhood Consortium	10/5/2022	
Downtown Berkeley Farmers' Market	2/26/2022	

Berkeley Bowl Renter Outreach	4/25/2022	Tabling outreach at community gathering locations, including local businesses, farmer's market, and recreation events.
Roses in Bloom Youth Outreach	5/14/2022	
Poppin' Thursday All Ages Skate Party	5/19/2022	
Harvest Festival	10/15/2022	
Sproul Plaza Southside Outreach	10/18/2022	
Public Drop-In Office Hours	10/24/2022	City staff and consultant held an 2-hour lunchtime drop-in office hours to answer questions and receive public input during the 7-day public review period of the revised Draft Housing Element.

Public Draft Housing Element Update

Pursuant to AB 215, the initial draft 2023-2031 Housing Element was made available for public comment for 30 days, from Monday, June 13, 2022 through Thursday, July 14, 2022. Two subsequent revised public drafts were made available for seven days each prior to submitting to HCD for subsequent review.

- **June 13 – July 14, 2022 (30 days):** A public review draft of the Housing Element was made available for comment on the City's website, including an accessible large print version that was shared with the Commission on Disability. Over the course of the public review period, three emails including links to the draft documents were sent to members of the public who indicated interest in the Housing Element Update. The City received a total of 563 comments.
- **July 15, 2022 – August 10, 2022 (18 business days):** Staff incorporated revisions based on public feedback received and submitted its Initial Draft Housing Element to HCD for 90-day review on August 10, 2022.
- **September 23, 2022 and October 10, 2022:** The City received preliminary comments from HCD and Staff incorporated revisions based on HCD comments.
- **October 18, 2022 – October 25, 2022 (7 days):** The City published a Revised Draft "v2" for public comment and held office hours on October 24, 2022. The City received 11 comments.
- **November 1, 2022**: Staff incorporated revisions based on public comments and resubmitted Revised Draft "v3" to HCD for follow-up review.
- **November 8, 2022:** The City received HCD's formal comment letter listing revisions necessary to comply with State Housing Element Law.
- **November 23—November 30, 2022 (7 days):** The City published and noticed a revised Public Draft "v4" for subsequent public comment.

2 GOALS AND POLICIES

Through extensive outreach and engagement – at public workshops, board and commission meetings, City Council worksessions, stakeholder interviews and small-format meetings, tabling events, and surveys – the Housing Element team has compiled a comprehensive set of goals and policies that reflect feedback received. The goals and policies guide decision-making to address the housing needs and constraints identified in Chapters 3 and 4. The set includes six goals, as well as 35 policies to enact those goals.

Goal A Housing Affordability

Berkeley residents should have access to quality housing at a range of housing options and prices. Housing is least affordable for people at the lowest income levels, especially those with extremely low income, and City resources should focus on this area of need.

Policies

H-1 Extremely Low, Very Low, Low, and Moderate-Income Housing
Increase the number of housing units affordable to current and future Berkeley residents, especially those with lower income levels.

H-2 Funding Sources
Seek, advocate for, and develop additional sources of funds for permanently affordable housing, including housing for people with extremely low incomes and special needs.

H-3 Permanent Affordability
Ensure that below market rate rental housing remains affordable for the longest period that is economically and legally feasible.

H-4 Economic Diversity
Encourage mixed income housing developments through both regulatory requirements and incentives.

H-5 Rent Stabilization
Protect tenants from large rent increases, arbitrary evictions, hardship from relocation, and the loss of their homes.

H-6 Low-Income Homebuyers
Support efforts that provide opportunities for successful home ownership.

H-7 Berkeley Housing Authority
Continue working with the Housing Authority to make quality affordable housing opportunities available to Berkeley residents.

H-8 Workforce Housing
Develop Workforce Housing for low- and moderate-income households, including teachers, artists, and other residents who work in the City of Berkeley.

Goal B Housing Preservation & Improvement

Existing housing should be maintained and improved. The City should promote efficiency in new and existing housing to improve building comfort and safety, reduce energy and water use and costs, provide quality and resilient housing, and reduce greenhouse gas emissions. Improvements that will prepare buildings for a major seismic event should be encouraged.

Policies

H-9 Housing Preservation
Maintain and preserve the existing supply of housing in the City.

H-10 Naturally Affordable Housing
Encourage strategies to protect, preserve, and rehabilitate properties that provide rental units that are unsubsidized but affordable to low- and moderate-income households, including rent-stabilized units.

H-11 Code Requirements
Enforce code requirements, and provide education, funding and incentives to property owners, to ensure that existing housing meets health and safety standards.

H-12 Prevent Deferred Maintenance
Prevent blight and the deterioration of housing units resulting from deferred maintenance.

H-13 Seismic Reinforcement
Maintain housing supply and reduce the loss of life and property caused by earthquakes by incentivizing structural strengthening and hazard mitigation in Berkeley housing.

H-14 Resource Efficiency and Climate Resilience
Implement Berkeley's Climate Action Plan to improve building comfort and safety, reduce energy and water use and costs, provide quality and resilient housing, and reduce greenhouse gas emissions.

Goal C Housing Production

Berkeley should provide adequate housing capacity to meet its current and future housing needs, including coordinating with the UC and other agencies. New housing should be developed to expand opportunities and choices to meet the diverse needs of all socioeconomic segments of the community, and should be safe, healthy and resilient.

Policies

H-15 Publicly-Owned Sites
Encourage use of publicly-owned or controlled sites for affordable housing and/or mixed-use residential projects with a substantial portion of affordable units.

H-16 Medium and High-Density Zoning
Maintain sufficient land zoned for medium- and high- density residential development to allow sufficient new construction to meet Berkeley's fair share of regional housing needs.

H-17 Transit-Oriented New Construction

Encourage construction of new high-density housing on major transit corridors and in proximity to transit stations consistent with zoning, applicable area plans, design review guidelines, and the Climate Action Plan.

H-18 Accessory Dwelling Units
Encourage and facilitate addition of accessory dwelling units on properties with single-family and multi-unit homes.

H-19 Regional Housing Needs
Encourage adequate housing production to meet City needs and the City's share of regional housing needs.

H-20 Monitoring Housing Element Progress
The City will continue to prepare annual Housing Element progress reports and present results of the review before the City Council, and make necessary and appropriate adjustments to programs and actions to achieve established objectives.

H-21 University of California
Urge the University of California to maximize the supply of appropriately located, affordable housing for its students and also to expand housing opportunities for faculty and staff.

H-22 Inter-Jurisdictional and Regional Coordination
Pursue opportunities to work with other jurisdictions and with ABAG to address issues of mutual interest and priority.

Goal D Special Needs Housing & Homelessness Prevention

Berkeley should expand the supply of housing for special needs groups, including housing affordable to those with extremely low incomes.

Policies

H-23 Homelessness and Crisis Prevention
Support programs and actions that prevent homelessness and other housing crises by making appropriate services available.

H-24 Homeless Housing
Seek solutions to the problems of individuals and families who are homeless, with the goal of first providing them with permanently affordable housing.

H-25 Family Housing
Support and encourage housing projects that include units affordable and suitable for households with children and large families.

H-26 Senior Housing
Support housing programs that increase the ability of senior households to remain in their homes or neighborhoods, and to offer other suitable affordable housing options.

H-27 Persons with Disabilities
Encourage provision of an adequate supply of suitable housing to meet the needs of people with disabilities, including developmental, behavioral health (mental health as well as alcohol and other drug dependence), and physical disabilities, as well as other medical conditions (such as HIV/AIDS).

H-28 Emergency Shelters and Transitional and Supportive Housing

Provide emergency shelter and transitional and supportive housing to homeless individuals and families, including people with mental, physical, and developmental disabilities, victims of domestic violence, youth, and seniors, as needed. The City's ultimate priority for new homeless housing opportunities is permanent housing.

Goal E Affirmatively Further Fair Housing

The City should continue to take meaningful actions to affirmatively further fair housing choices in Berkeley.

Policies

H-29 Fair Housing
Ensure compliance with federal, state, and local Fair Housing and anti-discrimination laws and ordinances and to affirmatively further fair housing for all, ensuring equal access to housing regardless of their special circumstances as protected by fair housing laws.

H-30 Accessible Housing
Promote housing mobility by exceeding the accessibility requirements of the ADA and California Title 24 Disabled Access Regulations, and by encouraging incorporation into new construction and rehabilitation the use of technologies and design features that create universal accessibility.

H-31 Affordable Accessible Housing
Encourage new construction and rehabilitation of accessible housing units that are permanently affordable, in particular to extremely low-income households.

H-32 Middle Housing
Promote and facilitate a mix of dwelling types and sizes, particularly infill middle housing in high resource neighborhoods.

Goal F Mitigate Governmental Constraints

Berkeley should identify and mitigate barriers to the construction and improvement of housing.

Policies

H-33 Reduce Governmental Constraints
Periodically review City fees and regulations to ensure that they do not unduly constrain housing development.

H-34 Streamlined Review Process
Provide for timely and coordinated processing of residential and mixed use development projects in order to minimize project holding costs and increase housing supply.

H-35 Incentivize Affordable Housing
Provide incentives where feasible to offset or reduce the costs of affordable housing development, including density bonuses and flexibility in site development standards.

3 HOUSING NEEDS

The purpose of this chapter is to identify characteristics of Berkeley's population and housing stock in order to understand the City's housing needs. These include the unmet needs of existing residents and future needs resulting from anticipated demographic changes.

This chapter is organized as follows:

1. Summary of Key Findings
2. Population and Household Characteristics
3. Income and Employment
4. Special Needs Populations
5. Housing Stock Characteristics
6. Housing Challenges, including cost burden and overcrowding

The City used a variety of sources to collect the information that follows, including:

- Housing Needs Data Packets prepared by the Association of Bay Area Governments (ABAG);
- U.S. Census Bureau's Decennial Census (referred to as "Census");
- U.S. Census Bureau's American Community Survey (ACS);
- California Department of Finance (DOF) population estimates;
- Comprehensive Housing Affordability Strategy (CHAS) reports (which are based on the ACS); and
- Data from the California Employment Development Department (EDD).

As of the writing of this report, the 2020 Census results have not yet been released with the exception of the preliminary population estimates for redistricting purposes. It is also important to note that some of these sources provide data on the same topic, but because of different methodologies, the resulting data may differ.

3.1 SUMMARY OF KEY FINDINGS

- **Population.** Berkeley's population grew by 9 percent from 2010 to 2020, to 122,580 people. ABAG projects that the City will grow 15 percent by 2040, to 140,935, which is an additional 18,355 people. (Goal C Housing Production)
- **Demographics.** Seniors ages 65 to 74 are the fastest growing age group in the City, and now comprise 9.2 percent of the population (compared to 6.5 percent in 2010). While young adults ages 15 to 24 remain the largest age group in the City (27 percent), the proportion of adults ages 25-34 grew by 25 percent since 2010 and now make up 18 percent of the population. (Policies H-25 Family Housing and H-26 Senior Housing)
- **Race and Ethnicity.** The Asian and Hispanic/Latinx populations continue to grow, with Asians comprising 21 percent (19 percent increase since 2010) and Hispanic/Latinx residents comprising 11 percent (13 percent increase since 2010) of the population, respectively. The

Black/African American population in Berkeley continues to decline and currently makes up 7.7 percent of the total population. (Policy H-29 Fair Housing)

- **Household Income**. The median household income in Berkeley was $95,360 in 2019, according to the American Community Survey. Based on HUD's income definitions, about 42 percent of Berkeley's households are considered lower income. (Goal A Housing Affordability)
- **Ownership Cost**. Housing costs have been rising since 2011 and the average Berkeley home value was over $1.5 million in September 2021, according to the Zillow Home Value Index. See Section 3.5.5 Housing Costs and Affordability for an explanation of the Zillow Home Value Index. (Policy H-6 Low-Income Homebuyers)
- **Rental Cost.** Median rents ranged from $2,950 for a studio to $5,648 for 4-bedroom units, according to a survey of available units conducted in November 2021. Median rents for rent stabilized units were about $1,000 per month less for units with two or fewer bedrooms. See Section 3.5.5 Housing Costs and Affordability. (Policy H-5 Rent Stabilization)

3.2 POPULATION AND HOUSEHOLD CHARACTERISTICS

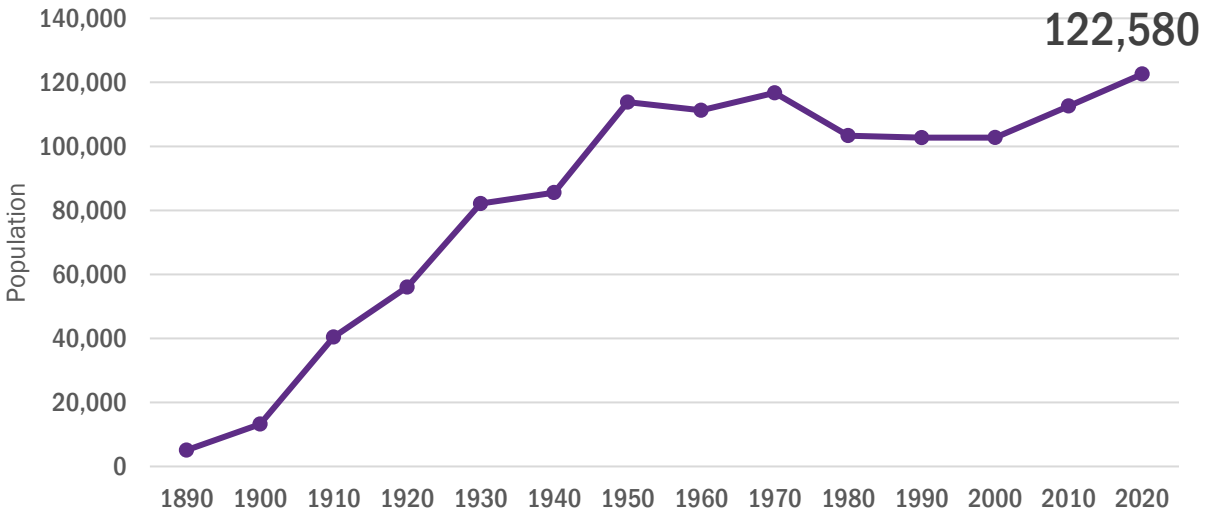
3.2.1 POPULATION GROWTH AND PROJECTIONS

The City of Berkeley experienced rapid population growth from its founding in the late 19th century through the 1940s (Figure 3.1). Growth within the City leveled off between 1950 and 1970, and experienced decline through the 1970s at a rate of just over one percent per year. From 1980-2000 the population was fairly steady at just over 100,000 people. Since 2000, the City's population has grown steadily, increasing approximately nine percent each decade. The Department of Finance estimates that the City's population was 122,580 in 2020.

Table 3.1 provides a comparison of population growth in Berkeley, the State, Alameda County and surrounding communities. Between 2000 and 2010, Berkeley grew at a faster rate than the County and its neighboring cities; however, growth in the City was comparable to the State overall. Between 2010 and 2020, Berkeley's growth rate was slightly lower than the County, but higher than that of the State. The majority of neighboring communities saw similar growth rates (approximately 7 to 11 percent), with the exception of San Leandro (3.5 percent).

Berkeley's population is anticipated to continue to grow steadily between 2020 and 2040 according to the Association of Bay Area Governments (ABAG) Plan Bay Area 2040 projections (Table 3.1). The City's population is anticipated to reach about 136,000 by 2030 and 141,000 by 2040.

Figure 3.1: Changes in Berkeley Population (1890-2020)



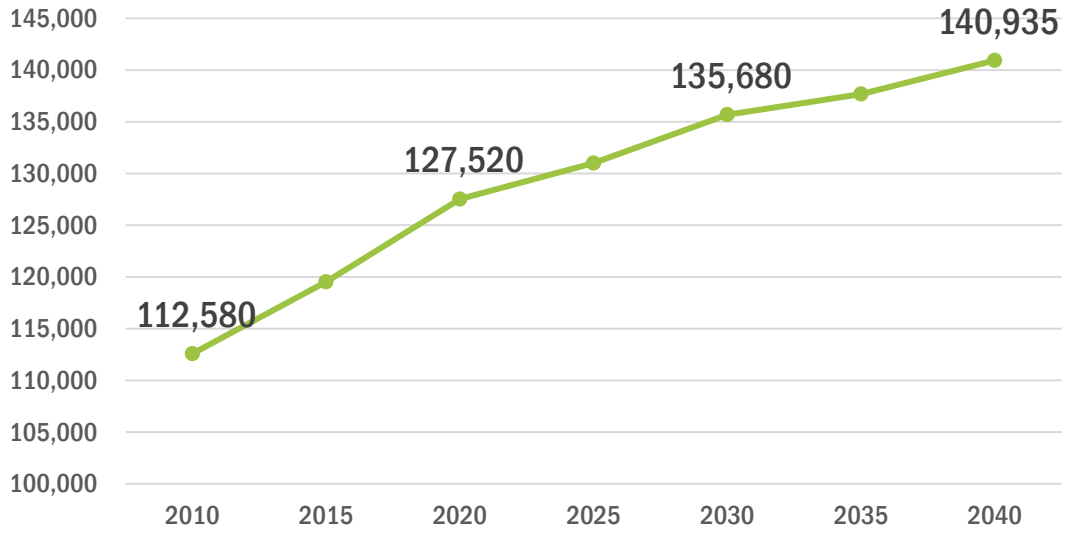
Sources: Decennial Census, 1890-2010; California Department of Finance, E-5 series, 2020.

Table 3.1: Population Change in State, County, and Neighboring Cities (2000-2020)

Jurisdiction	2000	2010	2020	% Change 2000-2010	% Change 2010-2020
California	33,871,648	37,253,956	39,782,870	10.0%	6.8%
Alameda County	1,443,741	1,510,271	1,670,834	4.6%	10.6%
Berkeley	102,743	112,580	122,580	9.6%	8.9%
Oakland	399,484	390,724	433,697	-2.2%	11.0%
Fremont	203,413	214,089	234,220	5.2%	9.4%
San Francisco	776,733	805,235	897,806	3.7%	11.5%
San Leandro	79,452	84,950	87,930	6.9%	3.5%
Hayward	140,030	144,186	160,311	3.0%	11.2%
Richmond	99,216	103,701	111,217	4.5%	7.2%

Sources: Decennial Census, 2000, 2010; California Department of Finance, E-5 series, 2020.

Figure 3.2: Berkeley Population Projections through 2040



Sources: US Decennial Census, 2010; ABAG Plan Bay Area 2040 Projections, 2018.

Note: Population for 2020 differs between the ABAG projections and CA DOF due to differences in methodology.

3.2.2 AGE DISTRIBUTION

Residents ages 15 to 24 comprised the largest age group in both 2010 and 2019, followed by people ages 25 to 34 (Table 3.2). Berkeley's high proportion of young adults is due to the presence of UC Berkeley within the City. While the population ages 15 to 24 stayed relatively flat between 2010 and 2019, the population ages 25 to 34 increased by 25 percent, suggesting that students may be choosing to stay in Berkeley after their degree is complete. Berkeley also experienced a significant increase in population ages 65 to 84, which may indicate an increasing need for housing appropriate for seniors in the community.

Table 3.2: Berkeley Age Distribution (2010 and 2019)

Age Group	2010		2019		Percent Change 2010-2019
	Number	Percent	Number	Percent	
Under 5	4,136	3.7%	4,323	3.6%	4.5%
Age 5-14	7,403	6.6%	7,991	6.6%	7.9%
Age 15-24	32,628	29.0%	33,051	27.2%	1.3%
Age 25-34	17,697	15.7%	22,124	18.2%	25.0%
Age 35-44	12,534	11.1%	13,204	10.9%	5.3%
Age 45-54	12,253	10.9%	11,179	9.2%	-8.8%
Age 55-64	12,753	11.3%	12,184	10.0%	-4.5%
Age 65-74	7,477	6.6%	11,174	9.2%	49.4%
Age 75-84	3,727	3.3%	4,547	3.7%	22.0%

Age 85+	1,972	1.8%	1,708	1.4%	-13.4%
Total	112,580	100.0%	121,485	100.0%	7.9%

Source: ABAG Housing Element Data Package (based on Decennial Census, 2010; American Community Survey, 5-Year Estimates (2015-2019))

3.2.3 RACIAL AND ETHNIC COMPOSITION

Table 3.3 illustrates the changes in racial and ethnic composition of Berkeley's population between 2000 and 2019. Over this time period, the proportion of Asian and Pacific Islander residents increased steadily, comprising 16 percent of the population in 2000 and 21 percent of the population in 2019. The proportion of Latinx residents also increased to about 11 percent of the population in 2019. The proportion of the Black population has declined by approximately 5.6 percent since 2000 and Black residents comprised just under 8 percent of the population in 2019. The proportion of White residents has remained relatively constant over the last two decades at approximately 54 to 55 percent of the overall population.

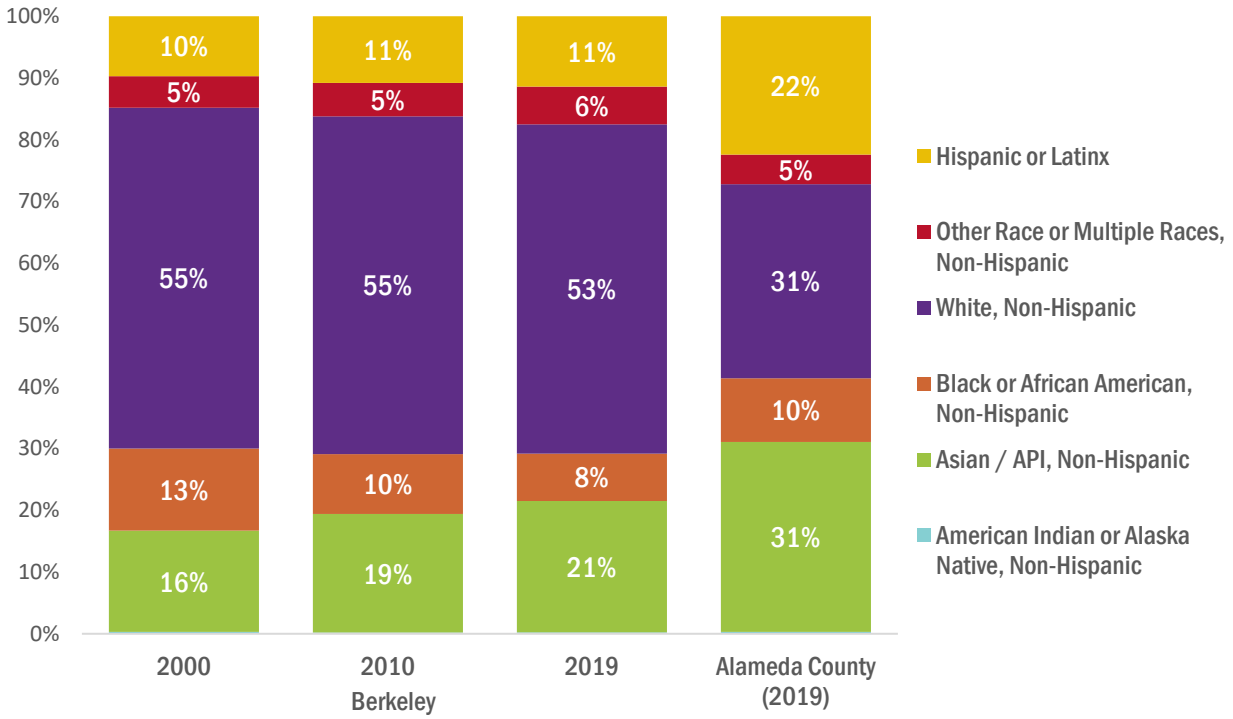
When compared to Alameda County as a whole, the City of Berkeley is somewhat less diverse (see Figure 3.3). Alameda County has greater proportions of Black, Asian and Pacific Islander, and Latinx populations than Berkeley. Conversely, the proportion of White residents is greater in Berkeley (53 percent, compared to 31 percent in the County).

Table 3.3: Changes in Racial and Ethnic Composition of Berkeley (2000-2019)

Race/Ethnicity	2000		2010		2019	
	Number	Percent	Number	Percent	Number	Percent
American Indian or Alaska Native, Non-Hispanic	293	0.3%	228	0.2%	282	0.2%
Asian / API, Non-Hispanic	16,861	16.4%	21,669	19.2%	25,845	21.3%
Black or African American, Non-Hispanic	13,707	13.3%	10,896	9.7%	9,324	7.7%
White, Non-Hispanic	56,691	55.2%	61,539	54.7%	64,781	53.3%
Other Race or Multiple Races, Non-Hispanic	5,190	5.1%	6,039	5.4%	7,400	6.1%
Hispanic or Latinx	10,001	9.7%	12,209	10.8%	13,853	11.4%
Total	102,743		112,580		121,485	

Source: ABAG Housing Element Data Package (based on Decennial Census, 2000, 2010; American Community Survey, 5-Year Estimates (2015-2019))

Figure 3.3: Racial and Ethnic Composition of Berkeley and Alameda County



Source: ABAG Housing Element Data Package (based on Decennial Census, 2000, 2010; American Community Survey, 5-Year Estimates (2015-2019))

3.2.4 HOUSEHOLD CHARACTERISTICS

According to the Census Bureau, a household consists of all the people who occupy a housing unit. Households may contain related or unrelated individuals; however, the definition of household excludes group quarters, including student dormitories. Household growth is a good indicator of housing unit production. Other metrics, such as household size, composition, and tenure can be related to factors such as age, cultural background, income level, and housing availability and cost.

According to the American Community Survey, there were an estimated 45,352 households residing in Berkeley in 2019, an increase of approximately 2,163 households since 2010.

Household Size and Type

According to the 2015-2019 American Community Survey, the average household size was 2.44 persons and the average family size was 2.90 persons. Average household size and average family size have both increased slightly since 2010 (see Table 3.4). The City's average household and family size remain below the averages for Alameda County as a whole, which had an average household size of 2.82 and average family size of 3.37 in 2019.

Although the distribution of household types in Berkeley has remained relatively steady between 2010 and 2019, the proportion of nonfamily households has decreased slightly. However, the

majority of Berkeley households were still nonfamily households in 2019 (54 percent). The proportion of seniors living alone has increased slightly since 2019.

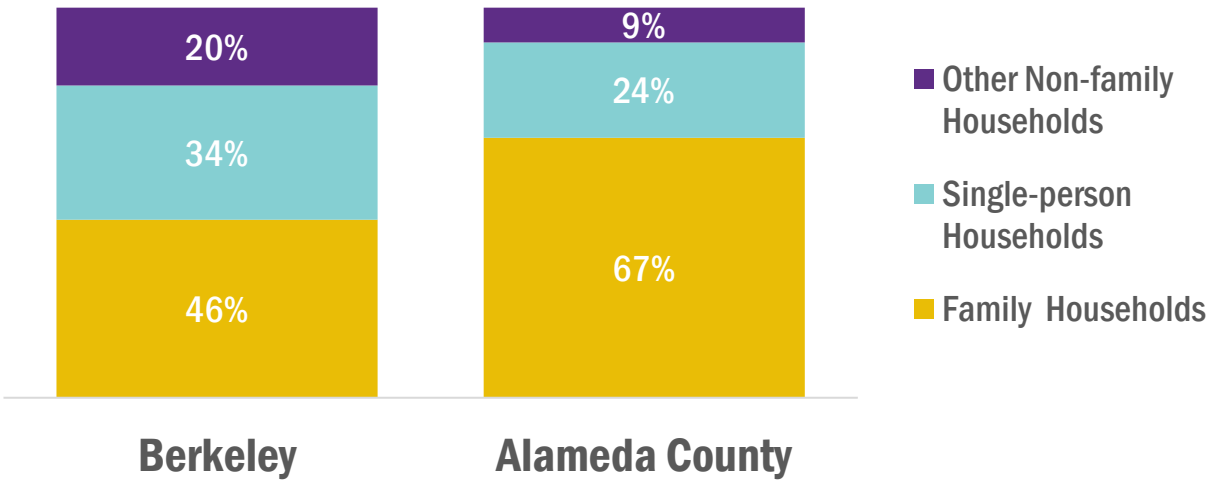
In Berkeley, there are nearly as many single-person households as there are married couple households (34 percent and 35 percent, respectively). This is in contrast to Alameda County, where the majority of households are family households (67 percent), and single-person households comprise just 24 percent of all households (see Figure 3.4).

Table 3.4: Berkeley Household Characteristics (2019)

Household Type	2010	2019	
		(#)	(%)
Total Households	43,189	45,352	100%
Family Households	44%	20,698	46%
Married Couple	32%	16,092	35%
Male Householder, No Spouse Present	3%	1,390	3%
Female Householder, No Spouse Present	8%	3,216	7%
Nonfamily Households	56%	24,654	54%
Single-person Households	37%	15,609	34%
Senior Living Alone	9%	5,449	12%
Average Household Size	2.25	2.44	
Average Family Size	2.89	2.90	

Source: American Community Survey, 5-Year Estimates (2006-2010, 2015-2019)

Figure 3.4: Berkeley and Alameda County Household Types (2019)



Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019))

Household Tenure

Housing tenure refers to whether housing units are owner occupied or renter occupied. In Berkeley, the majority of households are renters and the proportion of renter occupied and owner occupied units has remained relatively constant since 2000 (see Table 3.5). By contrast, the majority of Alameda County housing units are owner occupied.

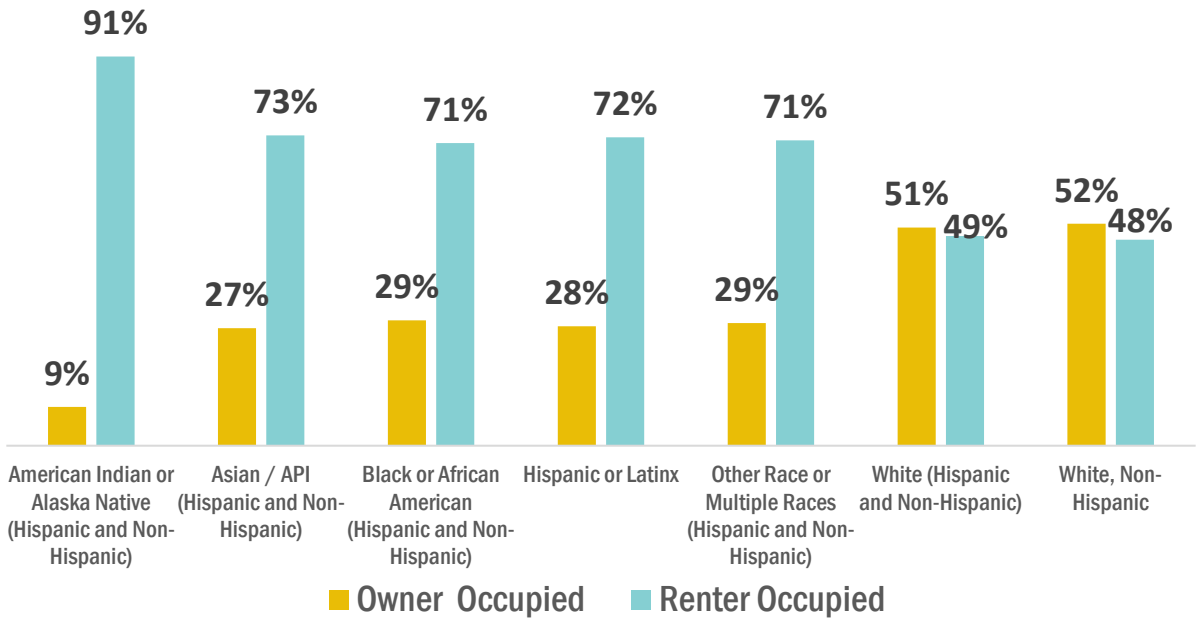
Figure 3.5: Tenure by Race of Householder (2019) shows significant differences in tenure based on the race of the householder. The rate of owner occupancy is significantly lower than the overall rate of 43 percent for all minority racial groups and Hispanic/Latinx households. In contrast, the owner occupancy rate for White householders is higher than the overall rate at 51 percent.

Table 3.5: Household Tenure (2000-2019)

Tenure	Berkeley						Alameda County
	2000		2010		2019		2019
	#	%	#	%	#	%	%
Owner Occupied	19,214	43%	18,846	41%	19,478	43%	54%
Renter Occupied	25,741	57%	27,183	59%	25,874	57%	46%
Totals	44,955	100%	46,029	100%	45,352	100%	100%

Source: ABAG Housing Element Data Package (based on Decennial Census, 2000, 2010; American Community Survey, 5-Year Estimates (2015-2019))

Figure 3.5: Tenure by Race of Householder (2019)



Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019))

Note: For this data, the Census Bureau does not disaggregate racial groups by Hispanic/Latinx ethnicity. Therefore, the groups included in this table are not all mutually exclusive.

Group Quarters

Group quarters are a distinct housing type that includes emergency and transitional housing, nursing homes, juvenile homes, residential treatment centers, and student dormitories. Unsurprisingly, Berkeley has a sizeable proportion of the population residing in group quarters due to dormitories and other student housing associated with the University. According to the 2015-2019 American Community Survey, just under 11 percent of Berkeley's population resides in group quarters. This is an increase of less than one percent from 2014. The proportion of County residents living in group quarters is much lower at about two percent.

While group quarters are a critical housing type for certain segments of the population, group quarters are not counted as units when meeting the City's Regional Housing Needs Assessment (RHNA). In order to receive RHNA credits, the units must be recorded by the State Department of Finance (DOF) as a housing unit. However, discussions with the State indicated that housing units owned by the University are treated by DOF as group quarters, not as housing units, regardless of the physical structural characteristics. Therefore, university-owned housing does not receive RHNA credits.

Table 3.6: Group Quarters Population in Berkeley and Alameda County

	2014		2019	
	Number	Percent	Number	Percent
Berkeley	11,459	9.9%	12,945	10.7%
Alameda County	32,814	2.1%	31,635	1.9%

Source: American Community Survey, 5-Year Estimates (2010-2014, 2015-2019)

3.3 INCOME AND EMPLOYMENT CHARACTERISTICS

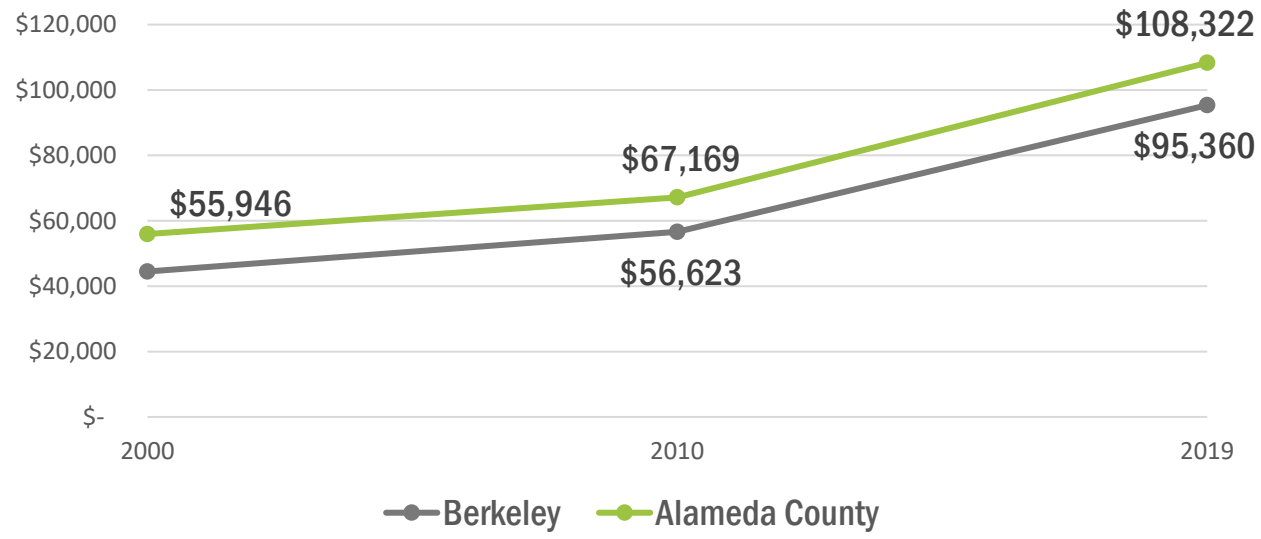
3.3.1 MEDIAN HOUSEHOLD INCOME

Household income is a dominant factor impacting housing needs in a community. With the exception of a minority of households that own a home with little or no mortgage, a household's ability to afford housing is directly related to household income.

Figure 3.6: Median Household Income, Berkeley and Alameda County (2000-2019) illustrates the change in median household income from 2000 to 2019 for Berkeley and Alameda County. Berkeley's median household income increased by 114 percent between 2000 and 2019, including a 27 percent increase between 2000 and 2010 and a 68 percent increase between 2010 and 2019.

While Berkeley and the County's median household income has increased similarly over the last two decades, Berkeley's median has remained below that of the County. This is likely due to Berkeley's large student population, of which over 90 percent live off campus. Students tend to have very low incomes which would skew the City's median household income downward. However, students are generally not considered "lower income" for the purposes of public housing programs because they often rely on support from families or public loans.

Figure 3.6: Median Household Income, Berkeley and Alameda County (2000-2019)



Sources: Decennial Census, 2000; American Community Survey, 1-Year Estimates (2010, 2019)

3.3.2 HOUSEHOLD INCOME CATEGORIES

State and federal housing assistance programs utilize income categories established by state and federal law. For the Housing Element and other state programs, the California Department of Housing and Community Development (HCD) has established the five categories listed in Table 3.7: HCD Income Categories. Together, the extremely low, very low, and low income categories are referred to as lower income. Although they differ slightly in their definitions, both state and federal income categories are based on the area median income or AMI. The AMI refers to the median income for a metropolitan statistical area. For 2021, HCD determined the AMI for a four-person household in Alameda County was $125,600.

For federal housing programs, eligibility is established for households with incomes up to only 80% of the AMI. Under the federal definition, these households are considered moderate income. These federal definitions are used for plans required by federal regulations (i.e., Consolidated Plans). The HCD definitions (shown in Table 27) are used in the Housing Element whenever possible; however, some datasets, such as the Comprehensive Housing Affordability Strategy (CHAS) utilized in this section, do not provide breakdowns by the HCD income categories.

Table 3.8: Household Income by Tenure provides information on household income by tenure for Berkeley households. Overall, 42 percent of Berkeley's households are considered lower income, earning less than 80 percent of the AMI. However, renter households are much more likely to be lower income than owner households (60 percent of renter households compared to 19 percent of owner households). Similarly, over 75 percent of owner households earn over 100 percent of the AMI, compared to just 32 percent of renter households.

Berkeley's breakdown of households in various income categories is similar when compared to Alameda County and the Bay Area as a whole, see Figure 3.7: Households by Income Group (2017).

However, Berkeley has a higher proportion of households earning less than 30 percent of the AMI when compared to the region.

Figure 3.8: Household Income by Race/Ethnicity (2017) shows stark differences in household income levels when broken down by race. American Indian/Alaska Native, Asian/API, and Black/African American households are all more likely to fall within one of the lower income categories, when compared to Berkeley households as a whole.

Table 3.7: HCD Income Categories

Income Category	Percent of Area Median Income (AMI)	For a four-person household
Extremely Low	Up to 30% of AMI	$41,100 or less
Very Low	31-50% of AMI	$41,101 to $68,500
Low	51-80% of AMI	$68,501 to $109,600
Moderate	81-120% of AMI	$109,601 to $150,700
Above Moderate	Greater than 120% of AMI	$150,701 or more

Source: California Department of Housing and Community Development, 2021

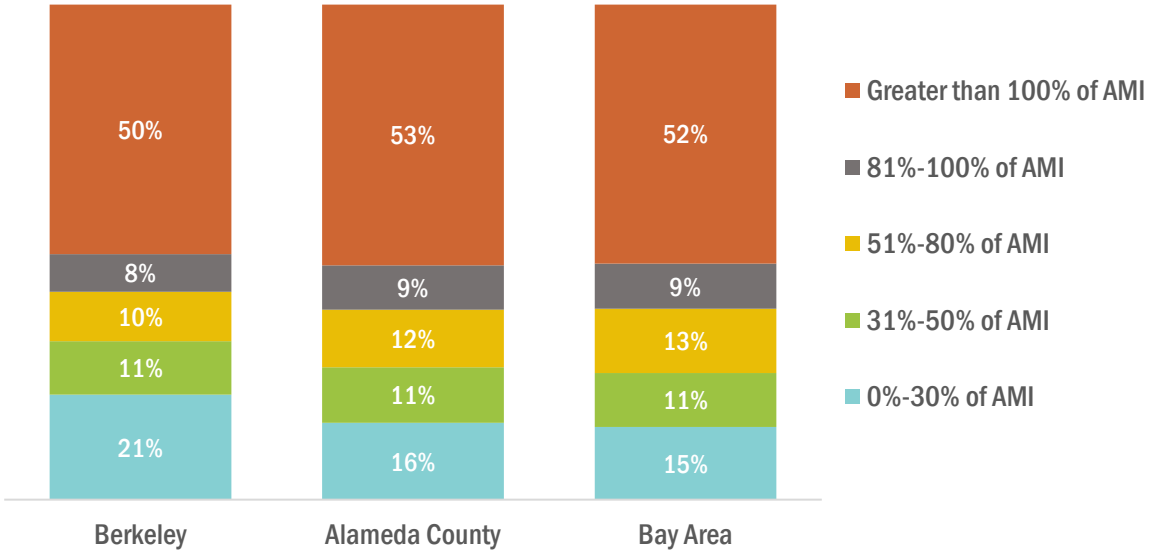
Table 3.8: Household Income by Tenure

Income Level[1]	Owner Occupied Households		Renter Occupied Households		Total Households	
	Number	Percent	Number	Percent	Number	Percent
0%-30% of AMI	1,140	5.8%	8,510	32.7%	9,650	21.2%
31%-50% of AMI	1,035	5.3%	3,880	14.9%	4,915	10.8%
51%-80% of AMI	1,449	7.4%	3,104	11.9%	4,553	10.0%
81%-100% of AMI	1,204	6.2%	2,259	8.7%	3,463	7.6%
Greater than 100% of AMI	14,699	75.3%	8,245	31.7%	22,944	50.4%
Totals	19,527	100.0%	25,998	100.0%	45,525	100.0%

Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation 2013-2017 release).

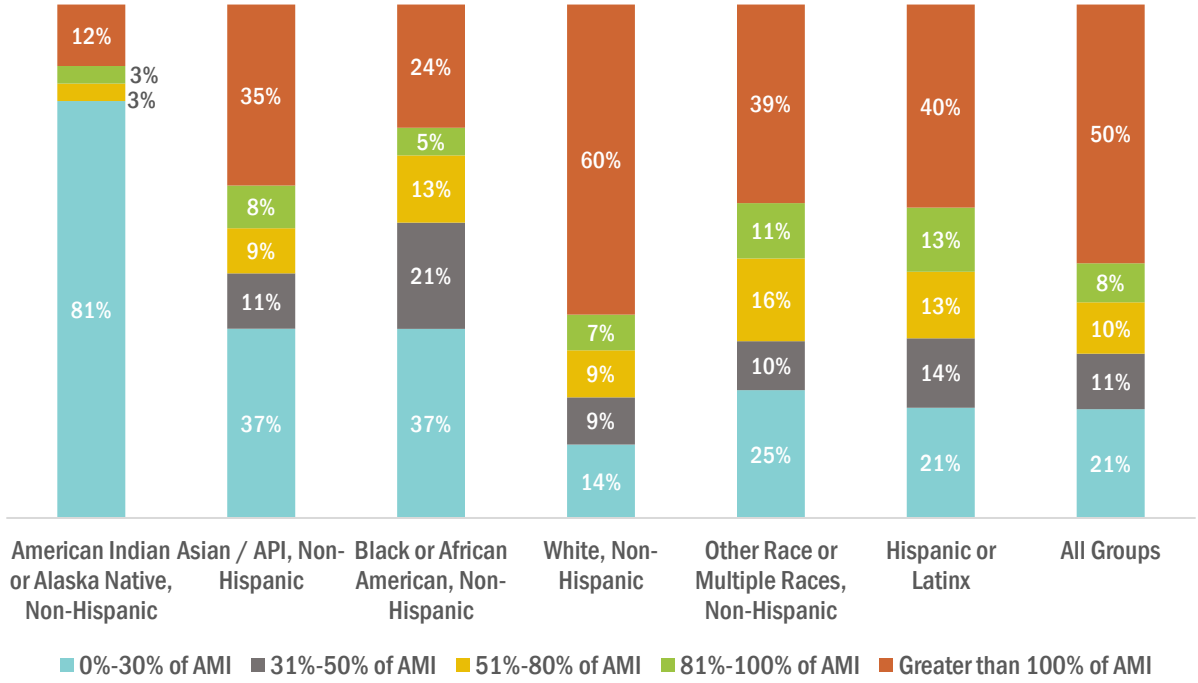
Note: Income groups in this table are based on HUD calculations for AMI for the Oakland-Fremont Metro Area (includes Alameda and Contra Costa County).

Figure 3.7: Households by Income Group (2017)



Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation 2013-2017 release).

Figure 3.8: Household Income by Race/Ethnicity (2017)



Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation 2013-2017 release).

Note: Income groups in this table are based on HUD calculations for AMI for the Oakland-Fremont Metro Area (includes Alameda and Contra Costa County).

3.3.3 EMPLOYMENT

The employment characteristics of residents can significantly influence their housing needs and choices. Factors such as the earning potential for various types of employment and the location of employment influence an employee's ability to find affordable housing within a reasonable distance of their workplace.

Employment within the City of Berkeley is dominated by educational and health services. Table 3.9: Top Ten Berkeley Employers (2020) shows the top employers within the City of Berkeley. The University of California, Berkeley is the City's largest employer, comprising 20.3 percent of the City's total employment and employing more workers than all of the other top ten employers combined.

While Table 3.9 illustrates the top employers located within the City of Berkeley, Table 3.10 and Figure 3.9 summarize the types of occupations held by Berkeley residents and the industries in which they work, whether or not their place of employment is located within Berkeley. However, there are notable similarities between Berkeley's top employers and the dominant industries and occupations held by Berkeley residents. The health and educational services industry employs the greatest proportion of Berkeley residents (43 percent). To a lesser extent, the health and educational services industry is also the top employer in Alameda and the Bay area, employing about 30 percent of workers. About 27 percent of Berkeley employees work in the financial and professional services industry, similar to Alameda County and the Bay area as a whole. The agriculture and natural resources, construction, information, manufacturing and wholesale, and retail industries each make up less than 10 percent of resident employment.

The majority (67 percent) of Berkeley residents are employed in management, business, science, and arts occupations (Figure 3.9). Once again, this is consistent with Berkeley's top employers, particularly the University and National Laboratory. The proportion of Berkeley residents employed in these types of occupations is significantly higher than in the County and the Bay area as a whole, where about 50 percent of workers are employed in management, business, science and arts occupations. About 15 percent of Berkeley residents have sales and office occupations, followed by service occupations (12 percent).

Table 3.9: Top Ten Berkeley Employers (2020)

Employer	Rank	Number of Employees	Percentage of Total City Employment
University of California Berkeley	1	13,750	20.3%
Lawrence Berkeley National Laboratory	2	3,773	5.6%
Sutter East Bay Medical Foundation/Hospitals	3	2,117	3.1%
City of Berkeley	4	1,579	2.3%
Berkeley Unified School District	5	1,302	1.9%
Bayer Corporation	6	1,033	1.5%
Kaiser Permanente Medical Group	7	742	1.1%

Siemens Corporation/Healthcare Diagnostics, Inc.	8	736	1.1%
Berkeley Bowl Produce	9	636	0.9%
Lifelong Medical Care	10	426	0.6%
Total		26,094	38.6%

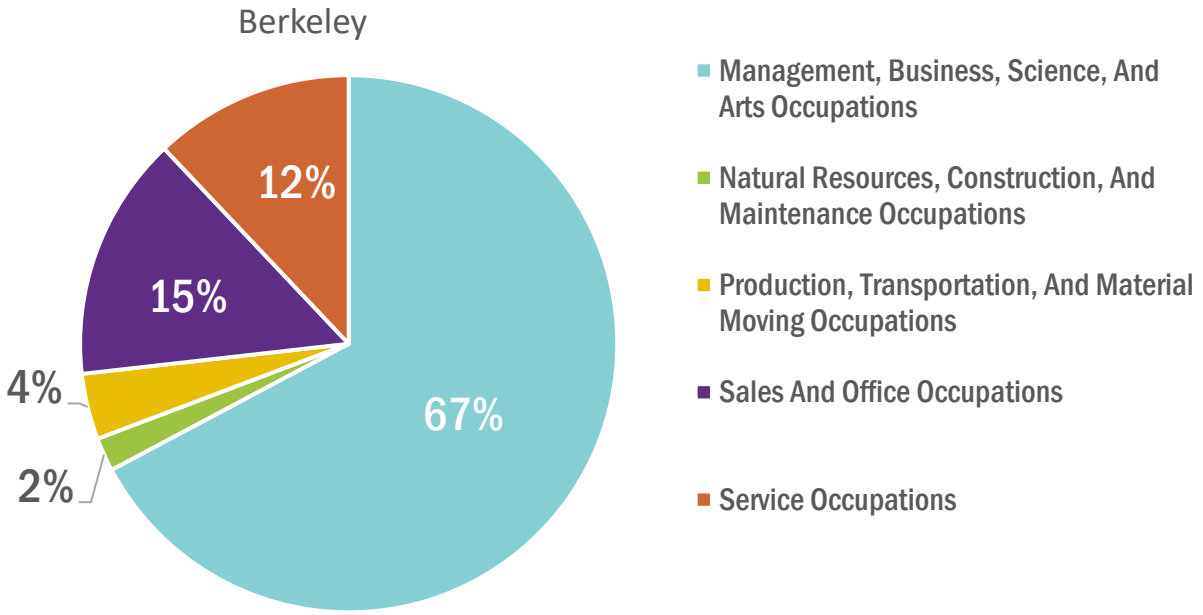
Source: City of Berkeley, Comprehensive Annual Financial Report for the Year Ended June 30, 2020.

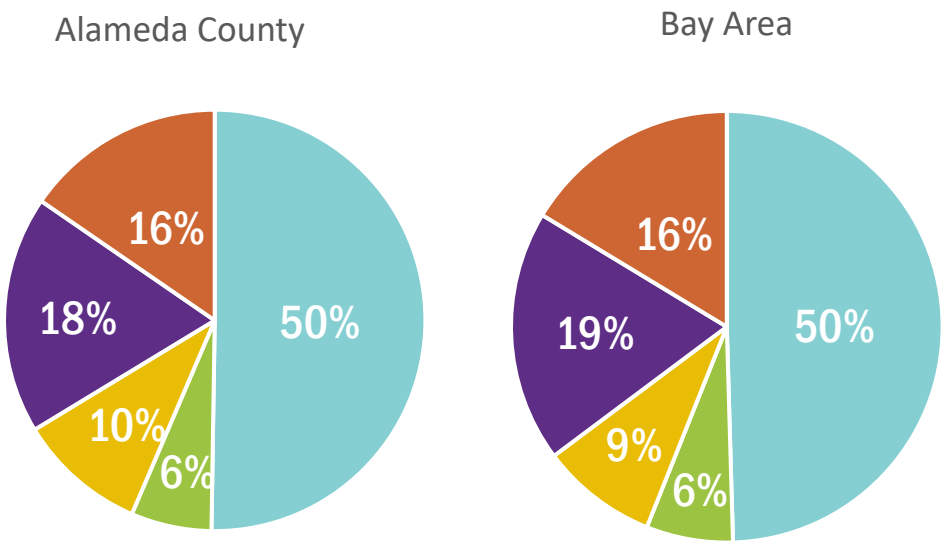
Table 3.10: Resident Employment by Industry for Berkeley, Alameda County, and the Bay Area (2019)

Industry	Berkeley		Alameda County (%)	Bay Area (%)
	(#)	(%)		
Agriculture & Natural Resources	143	0.2%	0.4%	0.7%
Construction	1,458	2.3%	5.3%	5.6%
Financial and Professional Services	17,281	27.3%	26.0%	25.8%
Health & Educational Services	27,369	43.2%	30.1%	29.7%
Information	3,177	5.0%	3.5%	4.0%
Manufacturing, Wholesale & Transportation	4,678	7.4%	17.4%	16.7%
Retail	4,055	6.4%	8.9%	9.3%
Other	5,161	8.2%	8.4%	8.2%
Total	63,322	100.0%	100.0%	100.0%

Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019))

Figure 3.9: Resident Employment by Occupation in Berkeley, Alameda County, and the Bay Area (2019)





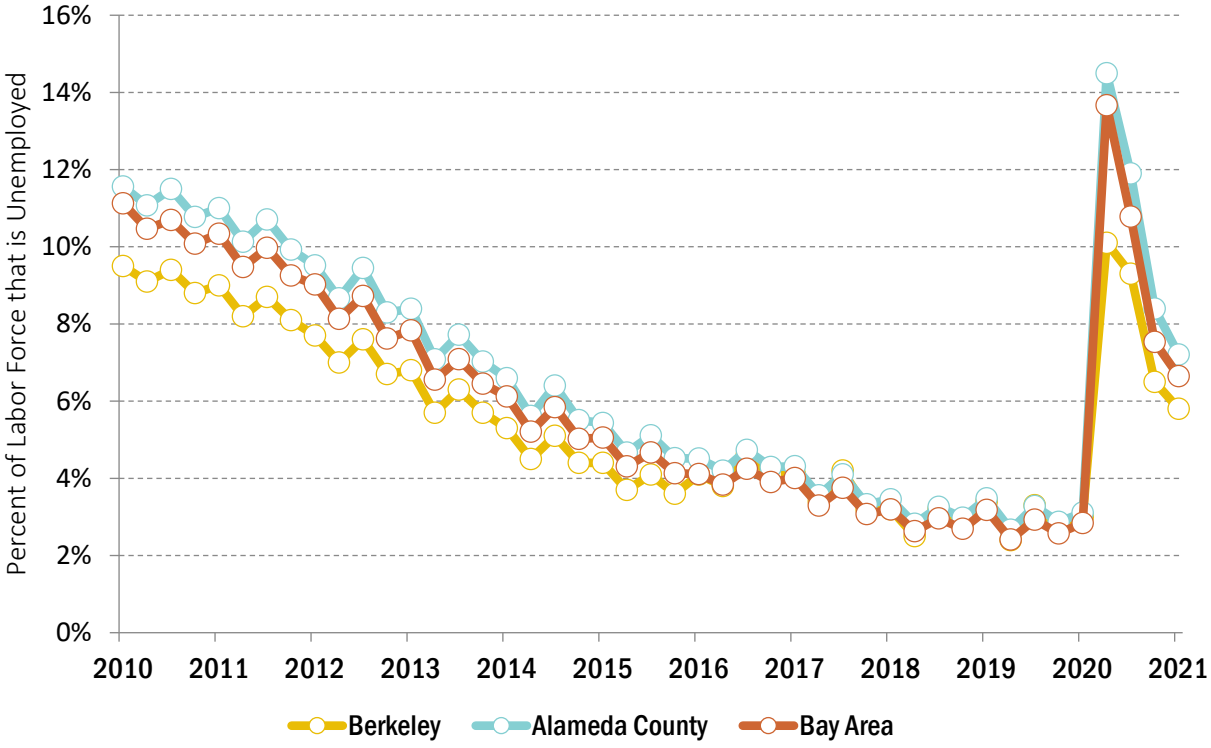
Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019))

3.3.4 UNEMPLOYMENT

The unemployment rate within a community is an indicator of the health of the economy as well as an indicator of the number of households with limited income and therefore, limited housing choices.

Figure 3.10 illustrates the unemployment rates for Berkeley, Alameda County, and the Bay area from 2010 to 2021. Unemployment rates were high in the early 2010s as the economy recovered from the Great Recession. Unemployment levels reached a ten-year low in 2019, below three percent; however, unemployment rates skyrocketed in the second quarter of 2020 due to the economic impact of the Covid-19 pandemic. Since then, unemployment has dropped steadily; however, rates continue to be higher than pre-pandemic levels.

Figure 3.10: Unemployment Rates in Berkeley, Alameda County, and the Bay Area (2010-2021)



Source: ABAG Housing Element Data Package (based on California Employment Development Department, Local Area Unemployment Statistics (LAUS), Sub-county areas monthly updates, 2010-2021).

Note: Unemployment rates for Berkeley are derived from larger-geography estimates. This method assumes that the rates of change in employment and unemployment are exactly the same in each sub-county area as at the county level. Since this assumption is untested, these data should be examined in broad terms, rather than focusing on exact percentage rates.

3.4 SPECIAL NEEDS POPULATIONS

Certain groups may face additional challenges in finding decent, affordable housing due to special circumstances. As defined by State Housing Element Law, the "special needs" groups include seniors, persons with disabilities, female-headed households with children, persons experiencing homelessness, farmworkers, and extremely-low income households. These groups are at a greater risk of experiencing housing-related issues, such as overcrowding or cost burden (expending greater than 30 percent of household income on housing expenses). Additionally, these special needs groups are not mutually exclusive and some households or individuals may fall into more than one special needs group. Table 3.11 summarizes Berkeley's special needs populations and households and each group is discussed in further detail in the following sections.

Table 3.11: Berkeley Special Needs Populations and Households

Special Needs Group[1]	Number of Persons/Households	Percent of Total Population/Households
Senior-Headed Households	12,495	27.6%

Seniors Living Alone	5,449	12.0%
Persons with a Disability	10,529	8.7%
Single-Parent Households	2,089	4.6%
Single Female-Headed Households with Children	1,555	3.4%
Large Family Households (5+ persons)	1,827	4.0%
Farmworkers[2]	132	0.1%
Persons Experiencing Homelessness	1,108	0.9%
Extremely Low-Income Households[3]	9,650	21.3%

Sources: American Community Survey, 5-Year Estimates (2015-2019); U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), based on 2013-2017 ACS; EveryOne Counts! 2019 Homeless Count and Survey.

Notes:

1. *All data is from the 2015-2019 ACS, except the following: Persons experiencing homelessness is from the EveryOne Counts! 2019 Homeless Count; Extremely Low-Income Households is from the CHAS dataset.*
2. *Farmworkers includes all persons employed in agriculture, forestry, fishing and hunting industries.*
3. *Extremely Low-Income Household data is based on the 2013-2017 ACS (most recent CHAS data available).*

3.4.1 PERSONS EXPERIENCING HOMELESSNESS

The most recent point-in-time homeless count for the City of Berkeley occurred in February 2022. In the initial data available for 2022, there were a total of 1,057 individuals experiencing homelessness residing within Berkeley, which is about 14 percent of Alameda County's total homeless population. The number of persons experiencing homelessness in Berkeley and Alameda County has increased steadily since 2015, though went down by 51 individuals in Berkeley in 2022 (see Table 3.12).

The characteristics of the homeless population, such as gender and household type, provide important insights into the needs of this group which can guide decisions related to the provision of services. In February 2022, about 24 percent of persons experiencing homelessness were sleeping in a shelter (emergency shelter, transitional housing, or safe haven) and about 76 percent were unsheltered (Table 3.13). The majority of unsheltered persons were sleeping either in a tent or on the street (67 percent) or in a vehicle (33 percent). In 2019, only five percent of the homeless population were persons in families, while the remaining 95 percent were single individuals.

Figure 3.11: Berkeley Homeless Population by Gender and Race (2019) provides information about the gender and race of Berkeley's homeless population in 2019. About two-thirds of Berkeley's homeless population is male. Notably, 57 percent of the homeless population is Black, although just eight percent of Berkeley's total population is Black (see Figure 3.3: Racial and Ethnic Composition of Berkeley and Alameda County).

Table 3.12: Homeless Population in Berkeley and Alameda County (2015-2022)

	2015	2017	2019	2022	
Berkeley	834	972	1,108	1,057	*Source: EveryOne Counts! 2022 Homeless Count and Survey*

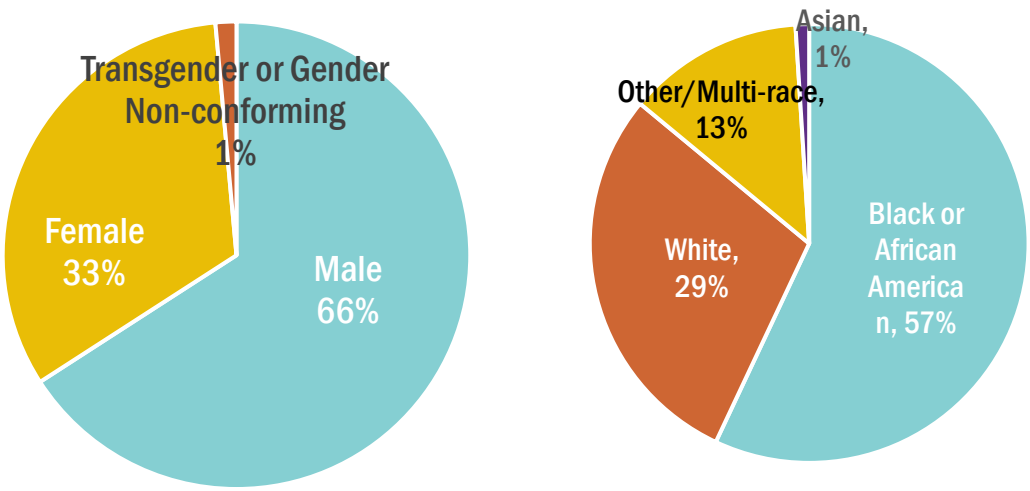
Alameda County	4,040	5,629	8,022	9,747	

Table 3.13: Berkeley Homeless Population by Location and Household Type (2022 and 2019)

	Number	Percent
Location (2022)		
Sheltered	254	24%
Unsheltered	803	76%
Tent/Street	535	67%
RV/Car/Van	267	33%
Abandoned Building	1	<1%
Household Type (2019)		
Persons in Families	51	5%
Single Individuals	1,057	95%

Source: EveryOne Counts! 2022 and 2019 Homeless Count and Survey

Figure 3.11: Berkeley Homeless Population by Gender and Race (2019)



Source: EveryOne Counts! 2019 Homeless Count and Survey

Resources for Persons Experiencing Homelessness

Berkeley is part of Alameda County's Continuum of Care (CoC) and has adopted the EveryOne Home Plan (the Strategic Plan for the CoC). The goals of the Plan are:

- Prevent homelessness and other housing crises;
- Increase permanent housing opportunities for homeless and high-risk households;
- Provide wrap-around services to ensure housing stability and quality of life;
- Measure success and report outcomes.

To that end, the North County Coordinated Entry System Housing Resource Center is located in Berkeley and conducts assessments to match homeless individuals to available services including shelters, transitional housing, and other services such as mental and physical health services and addiction counseling. As of 2020, the City provided 226 year-round shelter beds, 28 seasonal shelter beds, 20 transitional housing beds, and over 500 supportive housing units.

3.4.2 PERSONS WITH DISABILITIES

Individuals with disabilities often have special housing needs due to factors such as the need for accessibility, fixed low incomes or limited employment opportunities, and higher health care costs. According to the 2015-2019 American Community Survey, approximately nine percent of Berkeley's population has one or more disabilities. This is consistent with Alameda County as a whole, where approximately ten percent of the population has a disability.

Disabilities are most common among seniors and about 25 percent of the senior population has one or more disabilities (see Table 3.14). Table 3.15 provides information on the prevalence of various types of disabilities for the adult population as a whole and for the senior population. Cognitive difficulties are the most common disability type for both population groups, followed by ambulatory difficulties, and independent living difficulties. Individuals with ambulatory difficulties and/or self-care difficulties may require accessibility features in their home. Due to the age of Berkeley's housing stock, assistance with adaptation of older units is often needed. Cognitive difficulties are defined by the Census Bureau as difficulty remembering, concentrating, or making decisions due to a physical, mental, or emotional problem. Although a cognitive disability alone may not necessitate specific physical adaptations to the home, individuals with a cognitive disability may need access to additional mental health and social services.

Table 3.14: Persons with a Disability by Age Group (2019)

Age Range	Population with a disability	Total Population	% of Total Population	%of Population with a Disability
Under 18	384	15,157	2.5%	3.6%
18-64	5,855	88,740	6.6%	55.6%
65 or older	4,290	17,229	24.9%	40.7%
Total	10,529	121,126	8.7%	100.0%

Source: American Community Survey, 5-Year Estimates (2015-2019)

Table 3.15: Disability by Type (2019)

Disability Type	% of Adult Population (age 18+)	% of Senior Population (age 65+)
With a cognitive difficulty	4.0%	13.8%
With an ambulatory difficulty	3.7%	10.7%
With an independent living difficulty	3.2%	9.7%

With a hearing difficulty	2.2%	7.0%
With a self-care difficulty	1.9%	5.9%
With a vision difficulty	1.5%	4.3%

Source: American Community Survey, 5-Year Estimates (2015-2019)

Developmental Disabilities

Developmental disability is defined by State law as "a disability that originates before an individual attains 18 years of age, continues, or can be expected to continue, indefinitely, and constitutes a substantial disability for that individual…this term shall include intellectual disability, cerebral palsy, epilepsy, and autism."

Based on zip code-level data from the Department of Developmental Services, ABAG estimates that there are 440 individuals with developmental disabilities residing in Berkeley. About 63 percent of these individuals are adults and 37 percent are under age 18. The majority of persons with a developmental disability reside in their family home (68 percent) (see Table 3.16). Independent/supported living facilities are the second most common place of residence for persons with developmental disabilities at 22 percent.

Table 3.16: Residence Type of Persons with Developmental Disabilities (2020)

Residence Type	% of Individuals with a Developmental Disability
Home of Parent /Family /Guardian	68%
Independent /Supported Living	22%
Community Care Facility	4%
Other	3%
Intermediate Care Facility	2%
Foster /Family Home	1%

Source: ABAG Housing Element Data Package (based on California Department of Developmental Services, Consumer Count by California ZIP Code and Residence Type (2020))

Resource for Persons with Disabilities

Although many adults with developmental disabilities can live and work independently, group living environments can also provide an appropriate and supportive setting, particularly when an individual ages out of living in their family home. According to the Department of Social Services Community Care Licensing Division, there are three residential facilities for adults ages 18 to 59 within Berkeley with a combined capacity of 56 individuals. Additionally, there are four residential care facilities for seniors located in Berkeley, with a combined capacity to house 127 individuals. The Berkeley Municipal Code requires approval of a use permit for residential care facilities, the same process is required for other dwelling units in the residential zones. These requirements are discussed in further detail in the Constraints section of this Housing Element.

Several City programs assist homeowners with disabilities. The Home Modifications for Accessibility and Safety program operated by nonprofit providers completes home improvement projects to improve accessibility within the home for seniors and persons with disabilities. Similarly, low and moderate income households with a disabled member may apply for a zero interest loan for home improvements through the Senior and Disabled Home Improvement Loan Program. Additionally, homeowners may apply for a reasonable accommodation to get relief from zoning and building code requirements that hinder accessibility related improvements.

3.4.3 SENIORS

As Americans' life expectancy increases, seniors make up an increasing segment of the population. Berkeley's population ages 65 to 74 was the fastest growing age group between 2010 and 2019 and seniors ages 65 and over made up over 14 percent of the total population (see Table 3.2). Additionally, senior-headed households comprise nearly 28 percent of all Berkeley households. Table 3.17 summarizes the tenure and income level of senior households in Berkeley. There are significantly more owner households than renter households; however, renting senior households are much more likely to fall within the extremely low or very low income groups. Additional affordable, appropriately sized rental units are likely necessary to meet the housing needs of this group. Additionally, as previously noted, about one quarter of Berkeley seniors have one or more disabilities. Therefore, accessibility is another important factor in the provision of housing for Berkeley's seniors.

Table 3.17: Senior Households[1] by Tenure and Income Group

Income Group[2]	Owner occupied		Renter occupied	
	Number	Percent	Number	Percent
0%-30% of AMI	590	6.8%	1,945	50.6%
31%-50% of AMI	640	7.4%	540	14.0%
51%-80% of AMI	895	10.3%	330	8.6%
81%-100% of AMI	580	6.7%	240	6.2%
Greater than 100% of AMI	5,945	68.7%	790	20.5%
Totals	8,650	100.0%	3,845	100.0%

Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation, 2013-2017 release)

Notes:

1. *For the purposes of this table, senior households are those with a householder who is aged 62 or older.*
2. *Income groups are based on HUD calculations for Area Median Income (AMI) the Oakland-Fremont Metro Area (Alameda and Contra Costa Counties).*

Resources for Seniors

According to the Department of Social Services Community Care Licensing Division, there are four residential care facilities for seniors located in Berkeley, with a combined capacity to house 127 individuals.

In 2016, the City began the Age-Friendly Berkeley initiative (https://www.agefriendlyberkeley.org), which identified affordable housing and home modifications are priority issues. Currently, several City programs assist senior homeowners. The Home Modifications for Accessibility and Safety program operated by Rebuilding Together and the Center for Independent Living completes home improvement projects to improve accessibility within the home for seniors and persons with disabilities. Similarly, low and moderate income senior households may apply for a zero interest loan for home improvements through the Senior and Disabled Home Improvement Loan Program.

The City operates two senior centers, the North Berkeley Senior Center and the Henry Ramsey Jr. South Berkeley Senior Center to connect seniors to local resources and provide individualized assistance. The senior centers also operate a grab and go meal program available to all Berkeley residents over 60 that provides five frozen nutritious meals per week for a suggested donation of $15.

3.4.4 SINGLE-PARENT FAMILIES WITH CHILDREN

Single-parent households, in particular single female-headed households, tend to have a greater need for affordable housing, childcare facilities, and other supportive services due to lower per capita income and higher living expenses. According to the 2015-2019 American Community Survey, there are 2,089 single-parent households with children residing in Berkeley. The majority of these households (74 percent) are headed by single females. When compared to Alameda County as a whole, Berkeley has a lower proportion of single parent households. In Alameda County, single-parent households made up 6.8 percent of all households, compared to 4.6 percent in Berkeley.

The Census Bureau utilizes a federally defined poverty threshold that remains constant throughout the country. In 2021, the poverty level for a four-person household was $26,500 and about 14 percent of female-headed households with children were living below that threshold. However, it should be noted that the proportion of this household type needing additional assistance is probably much greater due to the high cost of living in the area. To that end, HCD's defined income limit for an extremely low-income four-person household in Alameda County was significantly higher than the federal poverty level at $41,100.

Resources for Single-Parent Families with Children

Single parent families with children can benefit from all programs that are intended to assist lower income households in Berkeley. One such program is the Section 8 voucher program operated by the Berkeley Housing Authority. However, this special needs group may benefit from the City's youth programs in particular. The City offers an affordable after school programs and youth leadership development programs at the James Kenney Community Center and MLK Jr. Youth Services Center. Scholarship opportunities are available for lower income households. The City also provides free meals to children in the summer in partnership with the State Department of Education.

3.4.5 LARGE HOUSEHOLDS

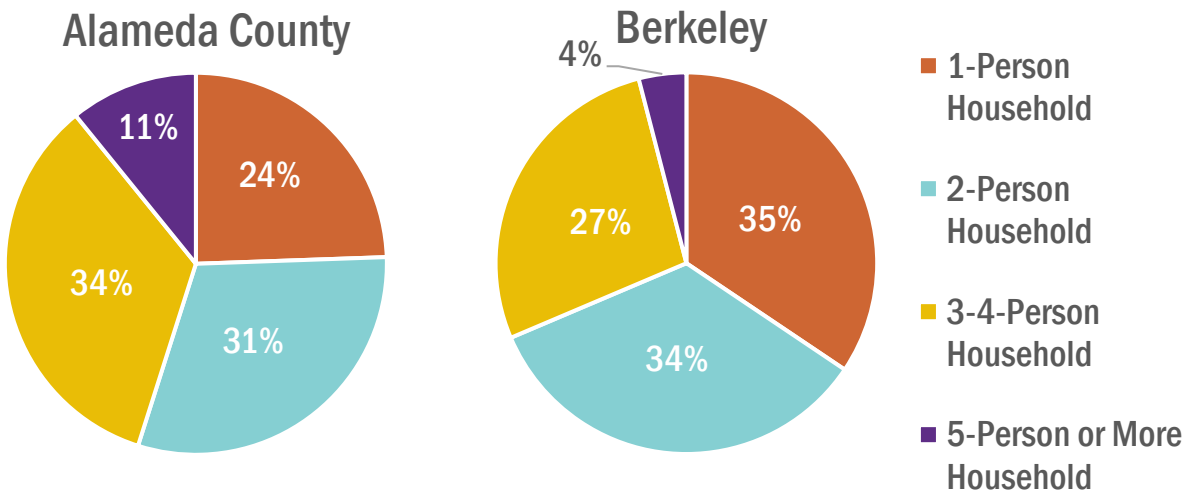
Large households are defined as households with at least five members. Large family households often include multiple children and/or extended family members, such as grandparents. Since

adequately sized housing units to serve the needs of large households are often limited, large households are considered a special needs group. Additionally, a lack of appropriately sized and affordable units can lead to large households living in overcrowded conditions.

Figure 3.12 illustrates households by size for Berkeley and Alameda County. Approximately four percent of Berkeley's households have five or more members (1,827 households). This is notably lower than the County, where 11 percent of households are large households. Berkeley has significantly more one-person households compared to the County, likely due to the presence of the University. According to the U.S. Census bureau, students living in on or off campus student housing facilities are counted "by the bed"; students in private off-campus residences that are not limited to students are counted by their occupancy as a separate living quarter.

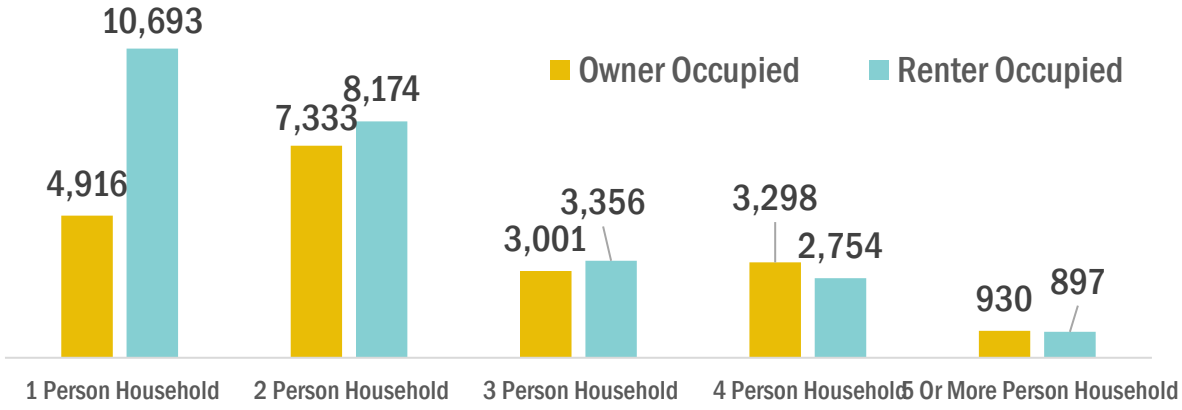
As shown in Figure 3.13, household tenure varies by household size. The number of large households that rent their home is similar to the number of large households that own their home, while owner occupancy is more prevalent among four-person households. For households consisting of three or fewer individuals, renting was more common than owner occupancy.

Figure 3.12: Household Size in Alameda County and Berkeley (2019)



Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019))

Figure 3.13: Berkeley Household Size by Tenure (2019)



Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019))

Resources for Large Households

Lower income large family households are eligible to participate in the City's affordable housing programs available to all lower income households. This includes the Section 8 voucher program operated by the Berkeley Housing Authority.

Although affordable units with three or more bedrooms are less common than smaller units, there are several housing projects within Berkeley that feature larger units. For example, the Savo Island Cooperative Homes project contains 22 three-bedroom units and 27 four-bedroom units which could accommodate larger families.

3.4.6 FARMWORKERS

Farmworkers are considered a special needs group because they tend to have lower incomes, disproportionately live in housing that is in poor condition and/or overcrowded, and are predominantly persons of color. There is no agricultural land in Berkeley; therefore, the farmworker population is low. According to the 2015-2019 American Community Survey, there were 132 workers employed in agriculture, forestry, and fishing industries in Berkeley, comprising about 0.1 percent of the City's population. According to the 2017 Census of Agriculture compiled by the U.S. Department of Agriculture, there were a total of 120 farms, employing 593 seasonal and permanent farmworkers in Alameda County. Among these farms, 35 farms employed 142 workers who worked fewer than 150 days a year. Only 11 farms employed migrant workers, with an estimated 34 migrant workers.

Resources for Farmworkers

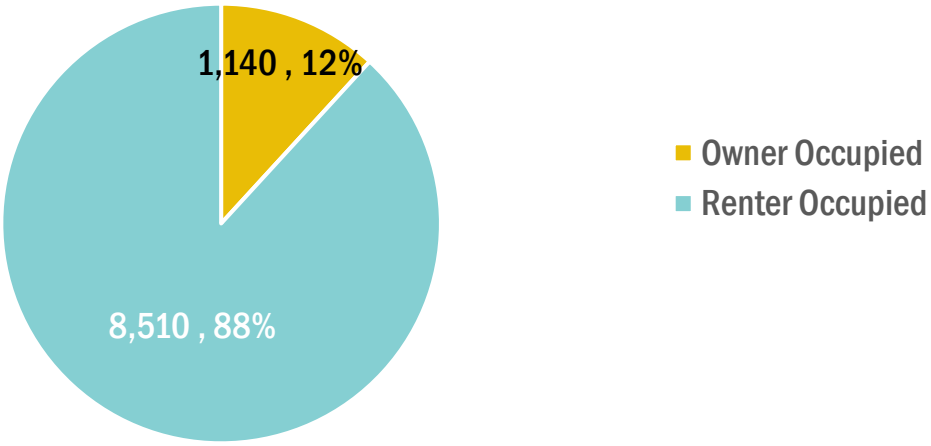
Since farmworkers make up such a small percentage of Berkeley's population, specific programs for this special needs group are not necessary. Farmworkers residing in Berkeley can access general housing programs and services available to all lower income households in the City.

3.4.7 EXTREMELY LOW-INCOME HOUSEHOLDS

Extremely low-income households are those making 30 percent or less of the area median income. For Alameda County, the HCD defined income limit for extremely low-income households ranged from $28,800 for a one-person household to $54,300 for an eight-person household in 2021. A total of 9,650 Berkeley households fall into this category, comprising 21 percent of all households residing in the City. As illustrated in Figure 3.7, the proportion of extremely low-income households is higher in Berkeley than in Alameda County, where 16 percent of households are extremely low-income.

The large majority (88 percent) of extremely low-income households rent their home (Figure 3.14). Therefore, high rents in the City are particularly burdensome to this special needs group. As discussed in greater detail in the Housing Problems section of this chapter, approximately 88 percent of extremely low-income households have a housing cost burden, meaning that over 30 percent of household income is spent on housing-related expenses (refer to Figure 3.20).

Figure 3.14: Extremely Low-Income Households by Tenure (2017)



Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation, 2013-2017 release)

Resources for Extremely Low-Income Households

The City has focused funding to address the needs extremely low-income households on programs that enable households and individuals living in poverty to attain self-sufficiency, support at-risk youth to succeed in school and graduate, and protect the health and safety of low income households. Training and job placement programs for low income, under-employed or unemployed residents include Inter-City Services employment training, Biotech Academy, the Bread Project, Rising Sun Center for Opportunity Green Energy Training Services, Berkeley Youth Alternatives, UC Theater Concert Careers Pathways, and YouthWorks.

Extremely low-income households with children can also benefit from youth and childcare programs offered by the City. The City offers an affordable after school programs and youth leadership development programs at the James Kenney Community Center and MLK Jr. Youth Services Center.

Scholarship opportunities are available for lower income households. The City also provides free meals to children in the summer in partnership with the State Department of Education.

3.5 HOUSING STOCK CHARACTERISTICS

Berkeley's urban landscape reveals a great deal about how the City was developed. Building styles, which are typically associated with a particular time period, vary from neighborhood to neighborhood and even from street to street. In some places, different stages of development are revealed by an occasional remnant Victorian, or by the area's general mixture of later styles. The early transportation hubs can still be detected by the evidence of commercial centers and building clusters from different decades.

Broadly speaking, the areas close to the University and Downtown had their initial construction in the 19th Century, though many of them were later substantially rebuilt. West Berkeley, and the village of Lorin in South Berkeley, also had their start in the 19th Century. The initial pattern was a response to the original transportation system of boats, streetcars, and trains. The areas in between remained largely open for some time and then filled in, especially in the first three decades of the 1900s. The expanded suburban development in the hills followed the opening of new streetcar lines, the 1906 earthquake, and ultimately the common use of the automobile.

Densities are greatest in the areas close to the University and Downtown, where there are multi-unit apartment buildings and large single-family homes converted to rooming houses or apartments. Density can also be found along the main arterials of the city in both older and new apartment buildings. The majority of the city is characterized by small lots with one to four units.

3.5.1 HOUSING GROWTH

According to the Department of Finance, there were 51,523 housing units in Berkeley in 2020. This represents a four percent increase from 2010 and a 10 percent increase since 2000 (see Table 3.18). Berkeley's housing growth rate is lower than that of Alameda County. In the past twenty years, there has been a 13 percent increase in housing units in the County.

Table 3.18: Housing Growth in Berkeley and Alameda County (2000-2020)

	2000	2010	2020	% Change 2010-2020	% Change 2000-2020
Berkeley	46,875	49,454	51,523	4.2%	9.9%
Alameda County	540,183	581,372	611,752	5.2%	13.2%

Sources: Decennial Census, 2000; California Department of Finance, E-5 series, 2010, 2020.

3.5.2 UNIT TYPE AND SIZE

As illustrated in Figure 3.15, detached single-family houses remain the most common housing type in Berkeley, comprising 41 percent of all units. However, when both small (2-4 units) and large (five

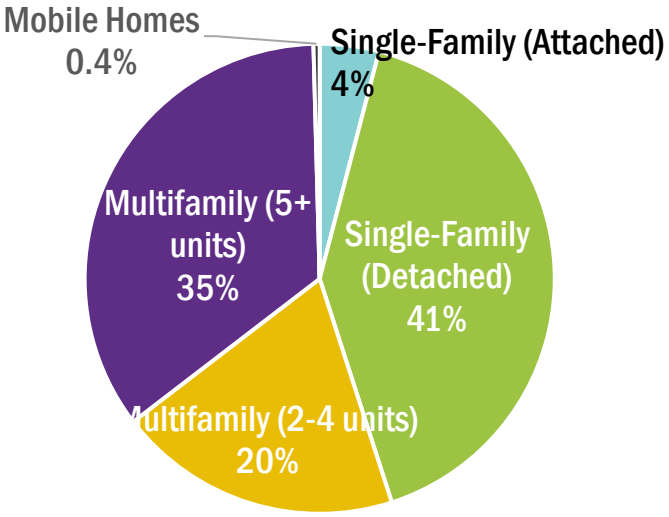
or more units) multifamily complexes are taken into account, multifamily units comprise 55 percent of the City's housing stock. There are 218 mobile home units in the City.

Table 3.19 summarizes the number of housing units by type in 2010 and 2020. The majority of new units constructed in the last ten years are part of large multi-family buildings containing five or more units. Overall, the number of multi-family units in the City increased by seven percent while the number of single family units increased by less than one percent.

Figure 3.16 provides information on the size of Berkeley's housing units. Two-bedroom units are the most common in the City, followed by three- to four-bedroom units. The majority of smaller units (studios, one-bedroom, and two-bedroom units) are occupied by renters. Conversely, the majority of larger units are owner occupied.

Figure 3.17 provides a comparison of housing units by number of bedrooms for Berkeley, Alameda County, and California as a whole. Berkeley has a larger proportion of smaller units with two or fewer bedrooms when compared to the County and the State. Units of two or fewer bedrooms comprise 65 percent of Berkeley's housing stock, while smaller units make up 49 percent and 45 percent of the County and State's housing stock, respectively. Similarly, larger units containing four or more bedrooms make up just 14 percent of Berkeley's housing stock, compared to 20 percent of Alameda County units and 21 percent of California units. Berkeley's unit sizes are generally consistent with the prevalence of smaller households, particularly single person households within the City.

Figure 3.15: Berkeley Housing Stock (Units) by Type (2020)



Source: ABAG Housing Element Data Package (based on California Department of Finance, E-5 series, 2020.)

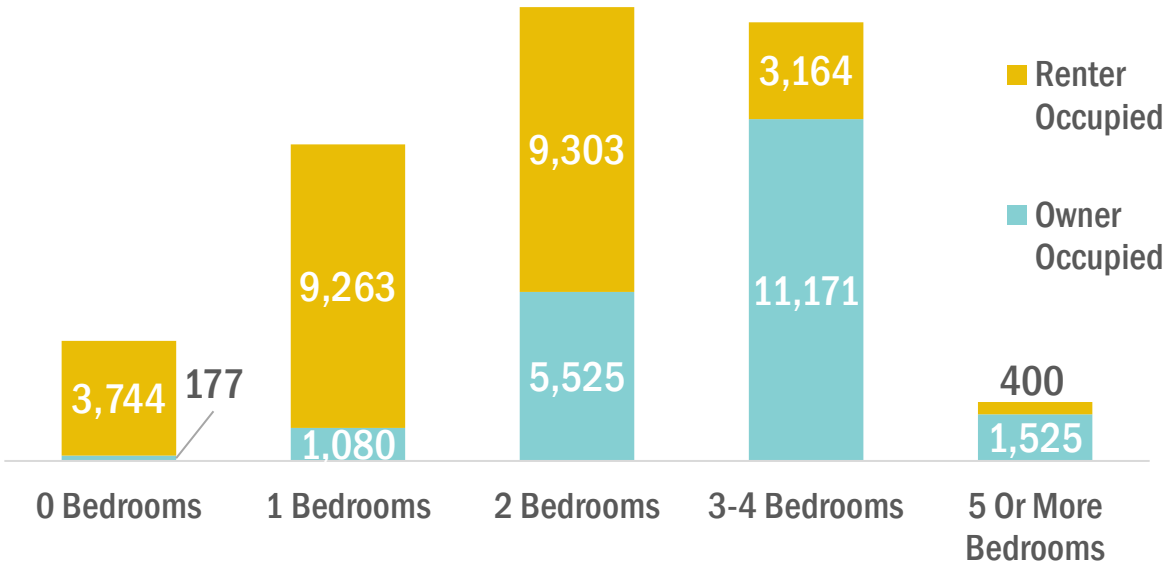
Table 3.19: Trends in Housing Types (2010-2020)

Building Type	2010	2020	Percent Change
All Single Family	22,984	23,202	0.9%
Single-Family (Attached)	2,060	2,096	1.7%

Single-Family (Detached)	20,924	21,106	0.9%
All Multifamily	26,252	28,103	7.1%
Multifamily (2-4 units)	9,980	10,075	1.0%
Multifamily (5+ units)	16,272	18,028	10.8%
Mobile Homes	218	218	0.0%
Totals	49,454	51,523	4.2%

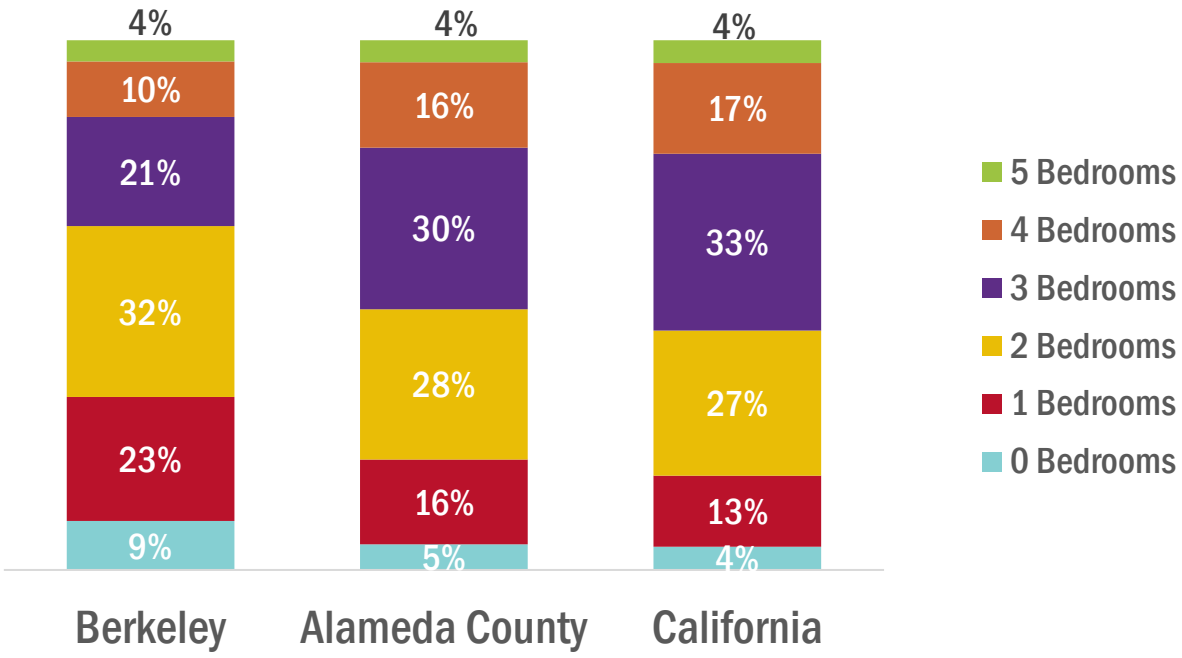
Source: ABAG Housing Element Data Package (based on California Department of Finance, E-5 series, 2010, 2020.)

Figure 3.16: Occupied Housing Units by Tenure and Number of Bedrooms (2019)



Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019))

Figure 3.17: Housing Units by Number of Bedrooms (2019)



Source: American Community Survey, 5-Year Estimates (2015-2019)

3.5.3 VACANCY RATES

A certain number of vacancies in a community is necessary to moderate housing costs, provide some level of choice for households seeking housing, and provide incentive to keep units in decent condition. Vacancy rates for rental properties are typically higher than owner occupied properties because rental units tend to turnover more frequently. A vacancy rate is considered to be healthy if it permits adequate choices and mobility among a variety of housing units. A healthy rate is considered to be 5-6 percent for rental units and 2-3 percent for owner occupied units.

According to the American Community Survey, vacancy rates have decreased over the last several years (see Table 3.20) and are well below optimal levels. The 2015-2019 American Community Survey estimates a vacancy rate of 0.3 percent for owner occupied units and 2.4 percent for rental units. Vacancy rates in Alameda County are higher than in Berkeley; however, they are also below healthy levels.

Table 3.21 provides insight into the types of vacancies that exist within the City. The largest vacancy type in Berkeley, Alameda County, and the Bay area is "other vacant" (55%, 44%, and 36%, respectively). The Census Bureau defines "other vacant" as units that do not fit into any other year-round vacant category. It is possible that short-term vacation rentals account for a significant subset of this category. The proportion of units for sale and units for rent are lower in Berkeley than in Alameda County and the Bay area.

Table 3.20: Vacancy Rates in Berkeley and Alameda County (2019)

Vacancy Rates	Berkeley	Alameda County

	2010-2014	2015-2019	2010-2014	2015-2019
Vacant Housing Units (% of Total)	7.6%	6.8%	6.0%	5.1%
Homeowner Vacancy Rate	0.9%	0.3%	1.3%	0.6%
Rental Vacancy Rate	3.8%	2.4%	3.9%	2.9%

Source: American Community Survey, 5-Year Estimates (2015-2019) Note: Overall vacancy includes units that are seasonally occupied units.

Table 3.21: Vacancy by Type (2019)

Vacancy Type	Berkeley		Alameda County (Percent)	Bay Area (Percent)
	Number	Percent		
For Rent	635	19%	26%	24%
For Sale	52	2%	6%	6%
For Seasonal, Recreational, or Occasional Use	397	12%	13%	22%
Other Vacant	1,827	55%	44%	36%
Rented, Not Occupied	299	9%	5%	6%
Sold, Not Occupied	112	3%	6%	7%

Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019)) Note: "Other Vacant" as defined by the Census Bureau is a housing unit that does not fit into any other year-round vacant category.

3.5.4 AGE OF HOUSING STOCK AND HOUSING CONDITION

The age of a community's housing stock can provide insight into the level of maintenance and rehabilitation needs. Generally, structures over 30 years old are likely to have significant rehabilitation needs which may include a new roof, foundation repairs, and new plumbing. Berkeley has a significant proportion of older units, with nearly half of all units constructed before 1939 (see Figure 3.18). Overall, 95 percent of Berkeley's housing stock will be over 30 years old by the end of this housing element planning cycle and 86 percent will be over 50 years old.

According to the 2014-2019 American Community Survey, the median year structure built for the City's housing stock is 1942. However, the City's owner occupied housing stock is significantly older with a median age older than 1939, compared to a median age of 1958 for renter occupied units. Regardless of tenure, rehabilitation and maintenance is an ongoing need to preserve the quality of the City's housing stock.

Lack of sufficient plumbing and kitchen facilities is another indicator of substandard housing condition. Although units without sufficient plumbing or kitchens are rare in Berkeley, renter households are more likely to reside in a unit with one of these issues. The 2015-2019 American Community Survey estimates that about 0.6 percent of owner occupied units and about 2.1 percent of renter occupied units lack sufficient kitchen facilities. Lack of sufficient plumbing is rarer, with 0.3 percent of owner occupied units and 1.2 percent of rental units lacking sufficient plumbing (Table 3.22).

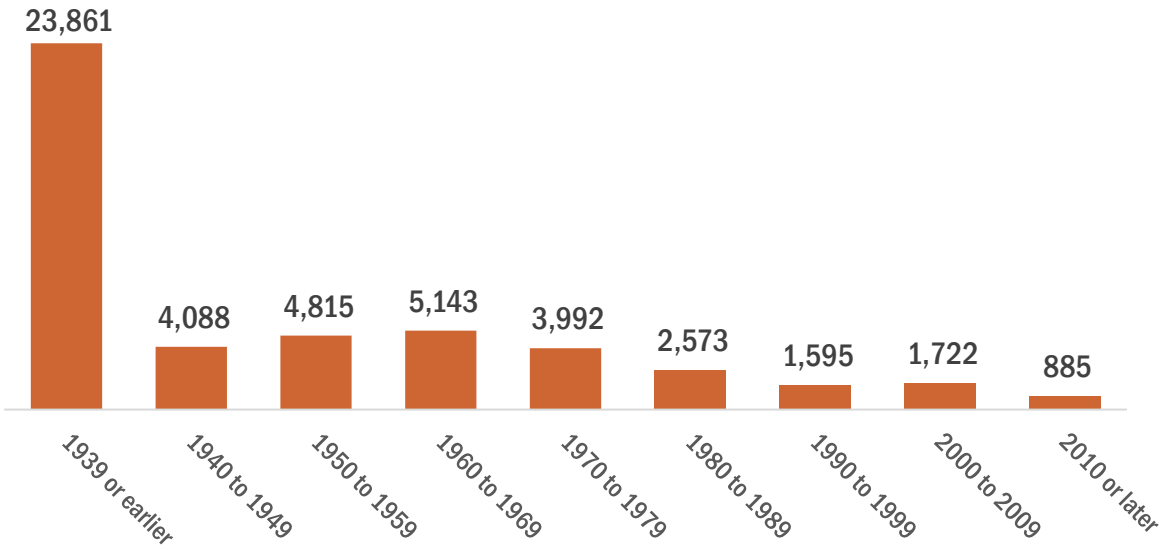
Local building and code enforcement divisions can also provide insight into the condition of housing units in the community, based on complaints filed, inspections, code violations, and other observations. Based on 2021 activity, there were a total of 303 code enforcement cases reported, of which 238 were resolved. The average number of days to resolve a case was 53 days. Approximately 15 to 18 percent of complaint-based code enforcement cases are identified as blight cases (approximately 35 cases in 2022), which suggests that there are potentially more units in need of rehabilitation or replacement. A more accurate number of housing units in need of rehabilitation is approximately between 1,000 to 2,500 units, or less than five percent of the City's total housing stock.

Table 3.22: Substandard Housing Issues by Tenure (2019)

	Owner Occupied Units		Renter Occupied Units	
Lack of Sufficient Kitchen Facilities	117	0.6%	606	2.1%
Lack of Sufficient Plumbing	58	0.3%	310	1.2%

Source: ABAG Housing Element Data Package (based on American Community Survey, 5-Year Estimates (2015-2019))

Figure 3.18: Housing Units by Year Structure Built (2019)



Source: American Community Survey, 5-Year Estimates (2015-2019)

3.5.5 HOUSING COSTS AND AFFORDABILITY

Housing costs have a significant impact on the prevalence of housing issues within a community. High housing costs in comparison to household income have a direct impact on the types of units a household can afford, whether they incur a housing cost burden, or whether they live in overcrowded conditions. This section discusses the cost of renting and homeownership in Berkeley. An affordability analysis is also included in this section. Additional information on housing problems such as cost burden and overcrowding, is included in the Housing Problems section later in this chapter.

Rent Stabilized Units

The City of Berkeley adopted a Rent Stabilization Ordinance in 1980, which limits annual rental increases for units built prior to 1980. According to the Rent Stabilization Board, there are approximately 19,414 rent stabilized units within the City of Berkeley as of March 2021. Since 2005, the annual adjustment for rents has been 65 percent of the percentage increase in the Consumer Price Index for the metropolitan area.

However, in compliance with the 1995 Costa-Hawkins Act, landlords are allowed to establish market rate rents when a unit is vacated and leased to a new tenant in units constructed before enactment of the law (known as "vacancy decontrol"). Once reoccupied, the annual rent increases are limited by the local jurisdiction's rent stabilization provisions. As shown in Table 3.23, vacancy decontrol has had a significant impact on the affordability of rent controlled units. The average rent ceiling for tenancies starting after 1999, when full implementation of the Costa-Hawkins Act began, is nearly two and a half times higher than units with tenancies starting before 1999.

Table 3.24 provides the median rents for new tenancies in rent stabilized units in 2000, 2010, and 2020. Median rents increased at a much greater rate between 2010 and 2020, when compared to the previous decade, with the cost of two-bedroom and smaller units outpacing increases in median income over the same time period. Median rents for new tenants in 2020 ranged from $1,750 for a studio apartment to $3,850 for a three-bedroom apartment.

The Ellis Act, first effective in 1986, gives property owners the right to remove apartment buildings from the rental market for development or repurposing. The term "Ellised" has been utilized to refer to a property owner's removal of a multifamily property from the rental market. The State does not require the owner to report on the reason a property has been Ellised. However, the Ellis Act does authorize local governments to place restrictions on properties that have been Ellised to ensure that this process is not abused. Berkeley has adopted these various restrictions in the Ellis Implementation Ordinance and has monitored compliance with the Ellis Act and Ellis Implementation Ordinance since their induction.

As of June 2020, 154 properties have been Ellised, totaling 457 units, since 1986.[1] According to the Rent Stabilization Board's data on Ellised properties, the majority of properties removed from the rental market contain just one or two units. Only three properties containing ten or more units have been removed from the rental market.

In September 2017, then Governor Brown signed into law AB 1505, also known as the "Palmer Fix", which restored the authority of local jurisdictions to require the inclusion of affordable housing in new rental housing projects. BMC 23.328 Inclusionary Housing currently requires that all residential housing projects, including rental, that result in a total of five or more dwelling units must include at least 20 percent of the total number of units as inclusionary. The units must be sold or rented to very low and/or low income households.

[1] City of Berkeley, Rent Stabilization Board, "Summary of Ellis Act Evictions (1986 – 6/1/2020)", October 2020.

Table 3.23: Average Rents for Pre- and Post-Costa-Hawkins Act Tenancies (2021)

Rent Stabilized Units	Number of Units	Percent of Units	Average Rent Ceiling (all units)	Average Rent Ceiling (1-BR units)
Tenancies Starting Before 1999	1,858	9.6%	$909	$829
Tenancies Starting 1999-2021	17,556	90.4%	$2,247	$1,948

Source: City of Berkeley, Rent Stabilization Board, "Market Medians: January 1999 through March 2021".

Table 3.24: Median Rents for New Tenancies in Rent Stabilized Units (2000-2020)

Number of Bedrooms	2000	2010	2020	% Change 2000-2010	% Change 2010-2020
Studio	$800	$950	$1,750	18.8%	84.2%
One-Bedroom	$1,100	$1,225	$2,085	11.4%	70.2%
Two-Bedroom	$1,500	$1,660	$2,895	10.7%	74.4%
Three-Bedroom	$1,980	$2,395	$3,850	21.0%	60.8%

Source: City of Berkeley, Rent Stabilization Board, "Market Medians: January 1999 through March 2021".

Market Rate Rental Units

Table 3.25 summarizes a survey of units listed for rent on Zillow in November 2021; therefore, it contains information for both market rate units and units that are subject to rent stabilization. As shown, median rents from the Zillow survey are significantly higher than the median rents for rent stabilized units listed in Table 3.24. Due to the limitations of the Ordinance, rent stabilized units are all within older buildings. The survey showed a significant proportion of units available for rent, particularly studios and one-bedrooms, were part of new large multifamily complexes. High rents in these new complexes drive up the median rent for smaller units. Larger units with three or more bedrooms are less common within the City, which may create difficulties for larger households to find affordable, appropriately sized units.

Table 3.25: Advertised Rents in Berkeley (November 2021)

Number of Bedrooms	Number of Units	Range		Median
		Low	High	
Studio	74	$959	$3,525	$2,950
One-Bedroom	179	$1,500	$4,145	$3,125
Two-Bedroom	129	$2,040	$6,193	$3,555
Three-Bedroom	29	$2,700	$11,900	$3,950
Four or More Bedrooms	11	$4,705	$16,850	$5,648

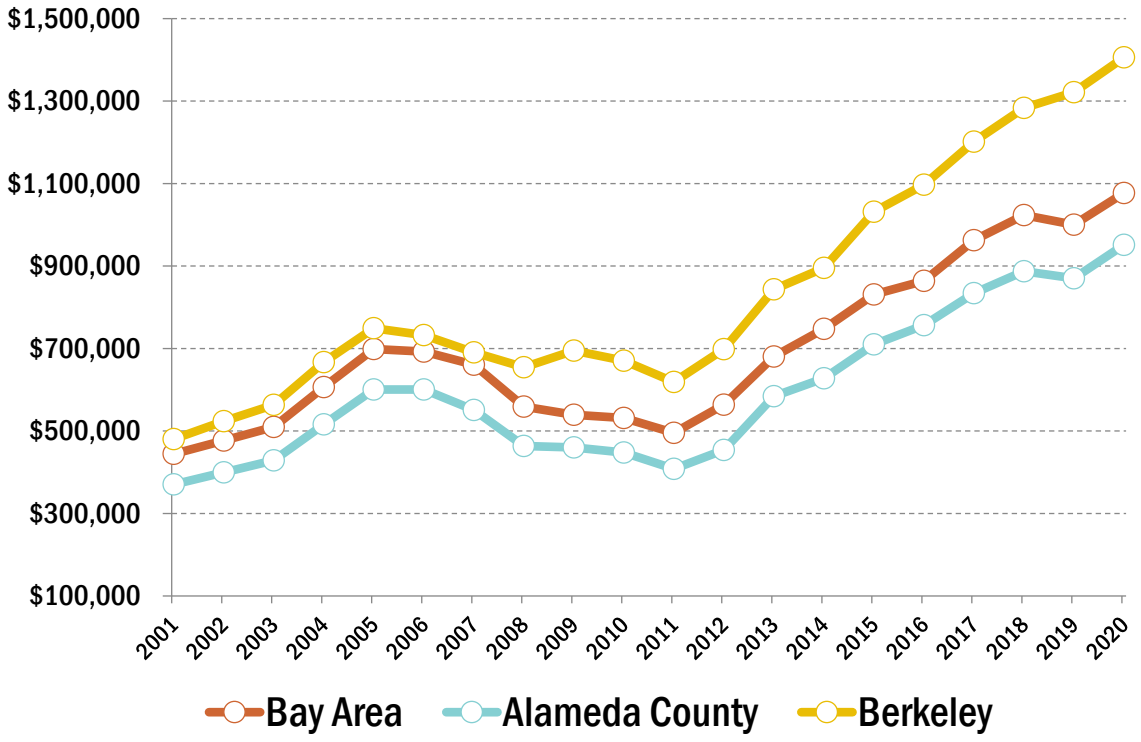
Source: Zillow.com listings of units for rent in Berkeley, accessed November 11, 2021.

Homeownership Market

Home values in this section are based on the Zillow Home Value Index (ZHVI). The ZHVI is a smoothed, seasonally adjusted measure of the typical home value and market changes across a given region and housing type. The ZHVI reflects the typical value for homes in the 35th to 65th percentile range. Figure 3.19 illustrates home values in Berkeley, Alameda County, and the Bay area for 2001 through 2020. Although values dropped slightly during the Great Recession, home values have increased steadily in all three geographies since 2011. Home values in Berkeley continue to be significantly higher than regional home values.

Between December 2010 and September 2021, there was a 129 percent increase in Berkeley home values. As shown in Table 3.26, the sharpest increase in home values occurred between 2010 and 2015. However, it should be noted that home values increased over 15 percent during the nine-month period between December 2020 and September 2021. In September 2021, the typical value for a single family home in Berkeley was over $1.6 million. The typical value for a condominium was $915,000.

Figure 3.19: Typical Home Values (2001-2020)



Source: ABAG Housing Element Data Package (based on Zillow.com, Zillow Home Value Index).

Note: This data includes all owner-occupied housing units, including both single-family homes and condominiums. The regional estimate is a household-weighted average of county-level ZHVI files, where household counts are yearly estimates from DOF's E-5 series

Table 3.26: Berkeley Home Values by Type (2010-2021)

	Home Value[1]	Percent Change

	Dec. 2010	Dec. 2015	Dec. 2020	Sept. 2021[2]	2010-2015	2015-2020	2020-2021
All Homes	$691,769	$1,057,613	$1,373,932	$1,586,269	52.9%	29.9%	15.5%
Single Family	$719,997	$1,102,257	$1,422,265	$1,642,326	53.1%	29.0%	15.5%
Condominium	$435,601	$647,001	$834,586	$914,967	48.5%	29.0%	9.6%

Source: Zillow.com, Zillow Home Value Index.

Notes:

1. *Zillow Home Value Index*
2. *Most recent data available*

Housing Affordability

The Department of Housing and Community Development (HCD) defines housing affordability as paying no more than 30 to 35 percent of the household's gross income (depending on income and tenure) on housing expenses. In addition to rent or mortgage payments, housing expenses include utilities, taxes, and insurance. Table 3.27 provides an estimate of affordable rents and home prices by income level, based on HCD's 2021 household income limits for Alameda County. These figures are general estimates only and based on conservative assumptions such as low down-payment and does not take into account the tax benefits of homeownership. These estimates can be compared to the typical rents and home values in Berkeley as discussed in the previous sections to provide a general picture of affordability.

Based on the home values presented in Table 3.26 and the affordable home prices presented in Table 3.27, lower income and moderate income households cannot afford to purchase a single family home or condominium in Berkeley.

As indicated in Table 3.24 median rents for new tenancies in rent stabilized units range from $1,750 for a studio to $3,850 for a three-bedroom rental unit. Based on Table 3.27, extremely low and very low income households cannot afford this level of rent without incurring a significant cost burden. Low, median, and moderate income households may be able to afford a rent stabilized unit with two or fewer bedrooms. Larger units with three bedrooms remain unaffordable, posing an issue for large households.

When the entire rental market is considered rather than rent stabilized units only (see Table 3.25), the median rents are unaffordable for all lower income and median income households. Moderate income households may be able to afford some units without incurring a cost burden; however, they may be smaller and result in overcrowded conditions.

Table 3.27: Housing Affordability Matrix (Alameda County, 2021)

	Annual Income Limits	Affordable Monthly Housing Costs	Rental Utility Allowance (2020)	Ownership Utility Allowance (2020)	Taxes, Insurance, HOA	Affordable Rent	Affordable Home Price
Extremely Low Income (0-30% AMI)							

1-Person (studio)	$28,800	$720	$186	$203	$252	$535	$69,971
2-Person (1 BR)	$32,900	$823	$222	$243	$288	$601	$76,988
3-Person (2 BR)	$37,000	$925	$274	$306	$324	$652	$77,811
4-Person (3 BR)	$41,100	$1,028	$349	$392	$360	$679	$72,705
5-Person (4 BR)	$44,400	$1,110	$392	$463	$389	$719	$68,126
Very Low Income (30-50% AMI)							
1-Person	$47,950	$1,199	$186	$203	$420	$1,013	$151,982
2-Person	$54,800	$1,370	$222	$243	$480	$1,148	$170,776
3-Person	$61,650	$1,541	$274	$306	$539	$1,268	$183,377
4-Person	$68,500	$1,713	$349	$392	$599	$1,364	$190,048
5-Person	$74,000	$1,850	$392	$463	$648	$1,459	$194,891
Low Income (50-80% AMI)							
1-Person	$76,750	$1,919	$186	$203	$672	$1,733	$275,321
2-Person	$87,700	$2,193	$222	$243	$767	$1,971	$311,673
3-Person	$98,650	$2,466	$274	$306	$863	$2,193	$341,833
4-Person	$109,600	$2,740	$349	$392	$959	$2,392	$366,062
5-Person	$118,400	$2,960	$392	$463	$1,036	$2,569	$385,037
Median Income (80-100% AMI)							
1-Person	$87,900	$2,198	$186	$203	$769	$2,012	$323,072
2-Person	$100,500	$2,513	$222	$243	$879	$2,291	$366,491
3-Person	$113,050	$2,826	$274	$306	$989	$2,553	$403,502
4-Person	$125,600	$3,140	$349	$392	$1,099	$2,792	$434,584
5-Person	$135,650	$3,391	$392	$463	$1,187	$3,000	$458,912
Moderate Income (100-120% AMI)							
1-Person	$105,500	$2,638	$186	$203	$923	$2,452	$398,445
2-Person	$120,550	$3,014	$222	$243	$1,055	$2,792	$452,356
3-Person	$135,650	$3,391	$274	$306	$1,187	$3,118	$500,288
4-Person	$150,700	$3,768	$349	$392	$1,319	$3,419	$542,077
5-Person	$162,750	$4,069	$392	$463	$1,424	$3,677	$574,970

Sources: 2021 HCD Income Limits; Alameda County Housing Authority Utility Allowance Schedule, 2021; Veronica Tam & Associates, 2021.

Assumptions:

1. *Income limits are the 2021 HCD limits for Alameda County.*

2. *Affordable housing costs are 30 percent of gross household income.*
3. *Utility costs are based on Alameda County Housing Authority Utility Allowance Schedule for 2021.*
4. *Taxes, insurance, private mortgage insurance, and homeowners association dues are calculated at 35 percent of monthly affordable cost.*
5. *Affordable home price assumes a 30-year fixed mortgage with a 3 percent interest rate and 10 percent down payment.*
6. *Taxes and insurance costs apply to owners only.*

3.5.6 UNITS AT-RISK OF CONVERSION TO MARKET RATE HOUSING

State Housing Element law requires the Housing Element to include an evaluation of the potential for currently deed-restricted affordable rental units to convert to market-rate housing within the next ten years, or from 2023 to 2033. This section includes an inventory of all deed-restricted rental housing in Berkeley, evaluates their potential for market-rate conversion, and presents potential options for preserving at-risk units.

Assisted Housing Inventory

There are over 2,300 deed restricted affordable rental units within the City of Berkeley. A complete listing of properties containing affordable rental units is contained in Appendix A. In compliance with the City's Inclusionary Housing Ordinance, all units constructed to fulfill inclusionary requirements are deed restricted to remain affordable in perpetuity and are at no risk of being converted to market-rate housing. Density bonus units are restricted for a term of 55 years. Therefore, projects that have both inclusionary units and density bonus units may have multiple affordability terms. Table 3.28 provides a listing of the publicly assisted rental units at risk of conversion to market rate housing over the next ten years (through 2033). A total of 3 projects (92 units) are at-risk for potential conversion to market rate units between 2023 and 2033. See also Appendix A Inventory of Publicly-Assisted Housing.

All three of the at-risk projects are reliant on project-based subsidies from the U.S. Department of Housing and Urban Development (HUD) that are currently renewable on an annual basis and do not have other known restrictions recorded on the property which would prevent conversion to market rate. These vouchers allow the project owner to collect HUD's Fair Market Rent, restrict occupancy to lower income residents, and assure that the resident will only be responsible for that portion of rent equal to 30 percent of their income. Because these vouchers are contingent on annual appropriations from the federal government, the vouchers must be renewed annually; therefore, the units are constantly "at risk" due to the possibility of federal policy changes. Additionally, all three properties are beyond their original affordability expiration date and the owners could decide not to renew their subsidy on any given year. However, over time, data and experience have shown that many owners continue to renew their contracts beyond the original expiration date, providing evidence that the link between affordability expiration date and conversion is not inevitable. This is particularly true for projects owned by mission-based housing nonprofit organizations. All three of these properties are owned and operated by nonprofit organizations and the City has no indication that the owners intend to convert the units to market rate; therefore, the risk of conversion to market-rate units is low.

Table 3.28: Units At-Risk of Converting to Market Rate

Name Address	# Affordable Units	Owner	Program	Affordability Expiration
Bonita House 1910-1912 Hearst St.	2	Bonita House Inc.	202	Annual Renewal
Lawrence Moore Manor 1909 Cedar St.	46	Satellite Affordable Housing Assoc.	236(J)(1) / 202	Annual Renewal
Stuart Pratt Manor 2020 Durant Ave.	44	Satellite Affordable Housing Assoc.	202	Annual Renewal
Total Units	92			

Preservation Options

There are a total of 92 units at-risk of converting to market rate within the next ten years. Preservation of at-risk units can be accomplished in a variety of ways, including provision of rental subsidies to tenants, facilitation of the transfer of units to nonprofit organizations or purchase of similar replacement units by nonprofit organizations, purchase of the affordability covenant, and new construction of replacement units.

Rent Subsidy. One potential option for preservation of at-risk units is to provide rent subsidies to tenants to cover the gap between the affordable rent and market rent. Assuming availability of funding, the City could provide a voucher to very low income households, similar to Section 8 Housing Choice Vouchers. The level of subsidy required is estimated to equal the market rent for a unit minus the housing cost affordable by a very low income household. Table 3.29 estimates the subsidies required to preserve housing affordability for the units within the three at-risk projects. Based on the assumptions utilized, over $2.1 million in rent subsidies would be needed annually, resulting in a need of $43 million in subsidies over a 20-year period.

Table 3.29: Estimated Rental Subsidies Required to Preserve At-Risk Units

Affordable Units	Bonita House	L. Moore Manor	S. Pratt Manor	Total All Projects
Studio	-	37	28	65
1-Bedroom	-	9	16	25
2-Bedroom	-	-	-	-
3-Bedroom	2	-	-	2
4-Bedroom	-	-	-	-
Total	2	46	44	92
Total Monthly Rent Income based on Affordable Housing Cost of Very Low Income Households	$2,728	$47,813	$46,732	$97,273

Total Monthly Market Rent	$7,900	$137,275	$132,600	$277,775
Total Monthly Subsidies Required	$5,172	$89,462	$85,868	$180,502
Total Annual Subsidies Required	$62,064	$1,073,544	$1,030,416	$2,166,024
Average Annual Subsidies per Unit	$31,032	$23,338	$23,419	$23,544
Average Monthly Subsidies per Unit	$2,586	$1,945	$1,952	$1,962

Sources: See Table 3.25 and Table 3.27.

Note: The following assumptions were used to estimate subsidies:

1. *Studio units were assumed to be occupied by a 1-person household; 1-bedroom units by a 2-person household; 2-bedroom units by a 3-person household; 3-bedroom units by a 4-person household; 4-bedroom units by a 5-person household*
2. *Affordable monthly rent for a very low income household is based on the 2021 AMI for Alameda County (found in Table 3.27).*
3. *Market Rent is based on median market rent as present in Table 3.25).*

Transfer of Ownership. Transfer of ownership from a private owner to a nonprofit housing organization is another potential way to preserve at-risk units. However, since all of the at-risk units within Berkeley identified in this analysis are already nonprofit owned, this is an unlikely option.

Extension of Affordability Covenant. In some cases, affordability can be preserved by providing financial incentives to the project owner to maintain the affordability of the project. For example, the City of Berkeley has historically utilized Housing Trust Fund loans to complete rehabilitation work on affordable units. As part of the loan, the City requires the owner to extend the affordability covenant for an additional 55 years, thereby preserving affordability of the units. This mechanism has been utilized to extend affordability in projects such as Lorin Station and Rosewood Manor.

Replacement Costs. Many factors contribute to the cost of developing new housing, including project location, density, size and number of units, and type of construction. Based on a report completed by Street Level Advisors[2], the total construction cost for a new affordable housing unit in Berkeley is approximately $700,000. Utilizing this estimate, approximately $64.4 million would be needed to construct new units to replace all the units at-risk during the planning period.

Preservation Cost Comparison and Resources. Based on past City practice, utilizing Housing Trust Funds for rehabilitation of older affordable housing developments in exchange to an extension of the affordability term is perhaps the most viable preservation option. This approach was utilized to successfully preserve units in Rosewood Manor, a property that was identified as at-risk of conversion in the 2015-2023 Housing Element.

Approximately $43 million would be required to provide rent subsidies for all at-risk units over a 20-year period. However, these buildings would likely need rehabilitation during that time period due to age and operating a rent subsidy program would require significant administrative resources, adding to the total cost. Based on an estimated cost of $700,000 per unit, it would cost over $64

[2] City of Berkeley, City Council Report (April 27, 2021 – Item 31), Attachment 1: Street Level Advisors, "Estimating the Need for Housing Subsidy for the Ashby and North Berkeley BART Stations".

million to construct 92 replacement units. However, factors such as labor and materials costs and land costs can fluctuate significantly.

There are several nonprofit organizations operating in Berkeley which own and/or manage affordable housing developments. The organizations include: Resources for Community Development, Satellite Affordable Housing Associates, BRIDGE Housing, Northern California Land Trust, and the John Stewart Company. The John Stewart Company and BRIDGE Housing are based in San Francisco while the other two organizations are based in Berkeley. In the event that the City was contacted by a property owner or received a Notice of Intent for the conversion of affordable units, the City would make contact with these organizations and others that have expressed interest in acquiring affordable rental housing.

Potential funding sources that may be used to acquire and/or rehabilitate at-risk housing include:

Federal	Community Development Block Grant (CDBG)
	HOME
	Housing Opportunities for Persons with AIDS (HOPWA)
	Low Income Housing Tax Credits
	Project Based Section 8
	Sections 202 and 811
State	Mental Health Services Act Housing Program
	Multifamily Housing Program
Local	General Funds
	Housing Trust Funds

3.6 HOUSING CHALLENGES

Factors including household income, market rents and home prices, available unit sizes, and household size can all contribute to cost burden and/or overcrowded conditions. This section discusses the prevalence of overcrowding and cost burden within the City of Berkeley.

The Comprehensive Housing Affordability Strategy (CHAS) dataset, released by the U.S. Department of Housing and Urban Development (HUD) is utilized in this section. The CHAS utilizes data from the American Community Survey (ACS) to provide information on housing problems, including cost burden and overcrowding. The most recent data available is derived from the 2013-2017 ACS.

3.6.1 HOUSING COST BURDEN

A household is considered to have a housing cost burden if it spends more than 30 percent of gross income on housing expenses. Housing expenses include rent or mortgage payments and utilities. For owner households, housing expenses also include taxes and insurance. Households with a cost burden may have trouble making rent, mortgage or utility payments, keeping up with home maintenance, or may have to forego other non-housing related necessities in order to keep up with

housing expenses. A household is considered as having a severe cost burden if housing expenses make up over 50 percent of the household's gross income.

As summarized in Table 3.30: Cost Burden in Berkeley, Alameda County, and the Bay Area (2017), 42 percent of all Berkeley households are cost burdened with 23 percent experiencing a severe cost burden. Cost burden is notably more prevalent among renter households, with over half of renter households paying more than 30 percent of their income to housing expenses.

When compared to the region, cost burden is more widespread in Berkeley than in Alameda County and the Bay area as a whole. A total of 37 percent of Alameda County households and 36 percent of Bay area households are cost burdened.

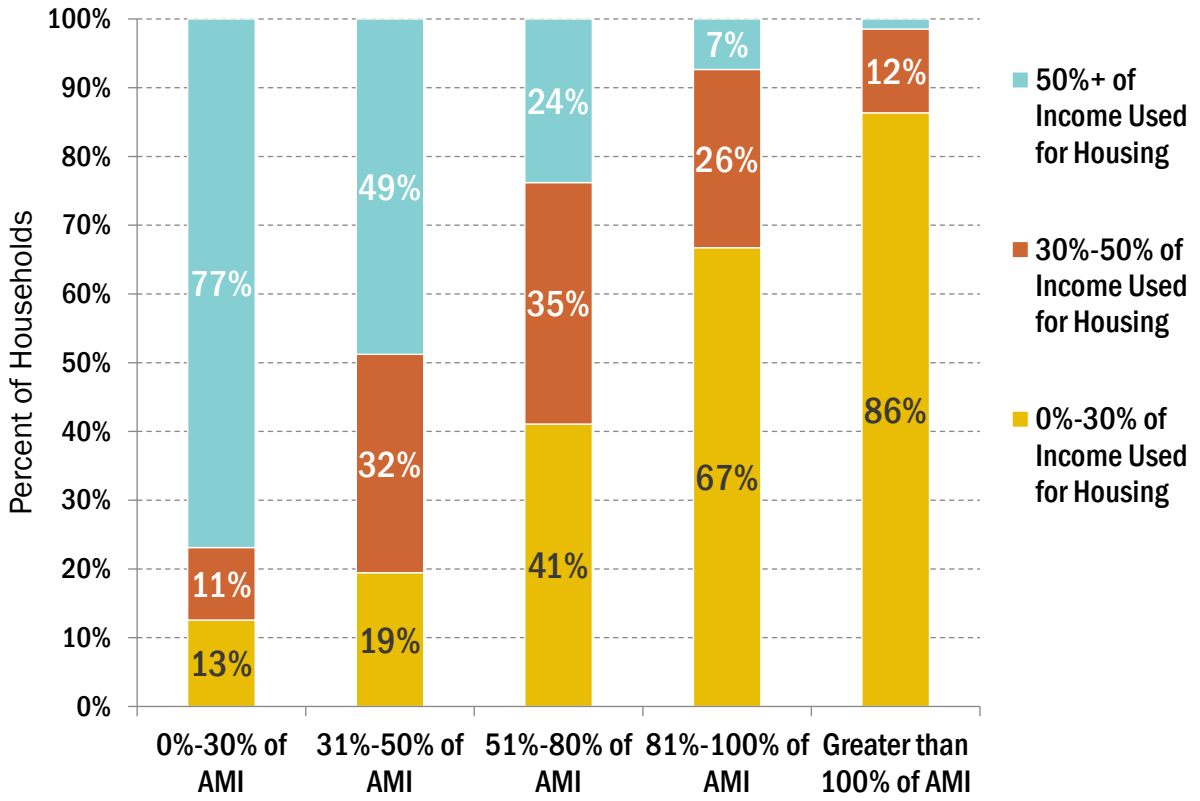
As expected, cost burden occurs most frequently for households in lower income categories (see Figure 3.20). Approximately 76.2 percent of lower income households (13,485 out of 17,705) pay over 30 percent of their income towards housing, including 78.5 percent of renter-occupied households (11,345 out of 14,455) and 65.5 percent of owner-occupied households (2,130 out of 3,250). A total of 87 percent of extremely low income households pay more than 30 percent of their income on housing costs, and 77 percent pay more than 50 percent of their income on housing costs. The proportion of households with a cost burden lessens as incomes increase. However, it is a prevalent issue impacting over half of lower income households, and one third of moderate income households.

Table 3.30: Cost Burden in Berkeley, Alameda County, and the Bay Area (2017)

	Cost Burden (>30% of Income Used for Housing)		Severe Cost Burden (>50% of Income Used for Housing)	
	# of Households	% of Households	# of Households	% of Households
Berkeley				
Owner Occupied	5,298	27%	2,398	12%
Renter Occupied	13,794	53%	8,182	32%
All Households	19,092	42%	10,580	23%
Region				
Alameda County	214,197	37%	96,579	17%
Bay Area	986,937	36%	447,802	16%

Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation, 2013-2017 release)

Figure 3.20: Cost Burden by Income Group (2017)



Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation, 2013-2017 release)

Overcrowding

As defined by HCD, overcrowding occurs when there is more than one person per room in a housing unit (including the living and dining rooms, but excluding bathrooms and kitchen). Severe overcrowding occurs when there is more than 1.5 persons per room. Overcrowding typically occurs when households cannot afford a housing unit that is the appropriate size or when larger units are not available in the market. Households then either rent a unit that too small or double up with another family in order to afford housing costs, resulting in overcrowding. Families that choose to live with extended family or in multi-generational living arrangements may also struggle to find units that are large enough at an affordable cost, particularly in a City like Berkeley where housing costs are high and there are fewer large units.

Overcrowding in less common in Berkeley than in the region. Just four percent of Berkeley households are overcrowded, which includes the UC student population, compared to almost eight percent in Alameda County and seven percent in the Bay area (Table 3.31).

As shown in Table 3.32, the proportion of lower income households living in overcrowded conditions is slightly higher than moderate and above moderate income households. Overcrowding impacts six percent of renter households, but just over one percent of owner households.

Table 3.31: Overcrowding in Berkeley, Alameda County, and the Bay Area (2017)

	Berkeley		Alameda County	Bay Area
	Number of Households	Percent of Households		
Total Overcrowded	1,813	4.0%	7.9%	6.9%
1.0 to 1.5 Occupants/Room	929	2.0%	5.0%	4.2%
>1.5 Occupants/Room	884	1.9%	2.8%	2.7%

Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation, 2013-2017 release)

Table 3.32: Overcrowding by Income and Tenure (2017)

	1.0 to 1.5 Occupants/Room	More than 1.5 Occupants/Room	Total Overcrowded
By Income Group			
0%-30% of AMI	3.3%	3.6%	6.9%
31%-50% of AMI	4.5%	1.4%	5.9%
51%-80% of AMI	1.6%	1.5%	3.2%
81%-100% of AMI	0.5%	1.6%	2.1%
Greater than 100% of AMI	0.8%	1.2%	2.0%
By Tenure			
Owner Occupied	0.9%	0.4%	1.3%
Renter Occupied	2.9%	3.1%	6.0%

Source: ABAG Housing Element Data Package (based on U.S. Dept. of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS), ACS tabulation, 2013-2017 release)

4 HOUSING CONSTRAINTS

This section of the Housing Element analyzes potential constraints to housing production in the City of Berkeley. State Housing Element Law requires the Housing Element to analyze two categories of potential constraints: governmental and non-governmental.

- **Governmental constraints.** May include factors such as local land use policies and zoning regulations, permitting procedures, and development and impact fees.
- **Non-governmental constraints.** May include construction and land costs, financing availability, physical constraints, and availability of infrastructure.

If constraints are identified, the City must take action or implement programs to remove or address them. As discussed in further detail below, the City strives to minimize constraints to development and implements numerous programs, policies, and procedures to address identified constraints.

4.1 GOVERNMENTAL CONSTRAINTS

Planning policies and zoning regulations establish rules for how land may be developed, including the uses allowed and the intensity of development. Although local ordinances and policies are typically adopted to protect the health, safety, and welfare of the community's residents, they may also result in constraints to the development of housing. Permit requirements, fees, and review procedures can also impact the cost, timeline, and approval certainty for residential development. This section discusses potential governmental constraints to housing development that may result from Berkeley's policies, procedures, and regulations.

4.1.1 GENERAL PLAN

The City of Berkeley last completed a comprehensive General Plan update in 2001. The Land Use Element of the General Plan guides the physical development of the City in conjunction with other Elements, including the Transportation Element, Urban Design and Preservation Element, and the Housing Element. A number of the policies and objectives of the Land Use Element support the production and ongoing maintenance of housing within the City. Specifically, the Land Use Element aims to increase the supply of affordable housing, encourage mixed-use development downtown and along commercial corridors, and increase resiliency to natural disasters.

The Land Use Element assigns land use classifications to areas throughout the City. Classifications describe the range of land uses and intensities allowed within an area. It is important to note that these intensity guidelines are not used as standards to determine intensity on a specific parcel, providing more flexibility in analysis of individual projects. In the commercial and mixed-use designations, intensity is expressed in terms of floor area ratio (FAR) rather than dwelling units per acre, providing additional flexibility. Table 4.1: General Plan Land Use Designations lists the general plan land use designations which allow for residential development, along with the range of building intensity. Berkeley has four residential land use designations in which residential development is the primary intended use. Residential development is also allowed within three of Berkeley's commercial

designations (Neighborhood Commercial, Avenue Commercial, and Downtown). The Mixed Use – Residential designation is intended to preserve areas of the City for light industrial uses while also allowing for residential development where appropriate.

Table 4.1: General Plan Land Use Designations

General Plan Land Use Designation	Density (units/acre) or Floor Area Ratio (FAR)
Low Density Residential	1-10 du/ac
Low Medium Density Residential	10-20 du/ac
Medium Density Residential	20 -40 du/ac
High Density Residential	40-100 du/ac
Neighborhood Commercial	FAR: <1 – 3
Avenue Commercial	FAR: <1 – 4
Downtown	FAR: <1 – 6
Mixed Use – Residential	FAR: 1 – 1.5

Note: These density and FAR guidelines are not used as standards to determine development intensity on a specific parcel.
Source: City of Berkeley, General Plan Land Use Element, 2001.

Berkeley's General Plan is not a governmental constraint to the development of housing. Residential development is encouraged through both the stated policies and objectives of the Land Use Element as well as the City's land use designations and associated development intensities. The City has approved several projects with a density of over 200 dwelling units per acre in recent years, which is further evidence that the policies of the General Plan do not constrain development.

4.1.2 ZONING ORDINANCE

The Zoning Ordinance is the primary tool by which the City implements the goals and policies of the General Plan. The City is currently in the process of completing a comprehensive Zoning Ordinance Revision Project. Phase 1 of the Project included amendments to improve the overall organization, formatting, and style of the Zoning Ordinance to make it more user friendly, clarify existing requirements, and lay the foundation for future substantive revisions. The changes included in Phase 1 became effective on December 1, 2021. Phase 2 of the Project is in progress and includes incremental updates to the City's processes and procedures. The City is also in the process of developing objective standards for multi-unit development (see next subsection for additional details). Unless otherwise noted, this section discusses the Zoning Ordinance as currently adopted without the planned amendments.

Berkeley's Zoning Ordinance provides for a diverse array of housing types, from single-family dwellings that are regulated by typical zoning standards to multiple-family buildings constructed at high densities along the City's commercial corridors.

Density and Development Standards

Nearly all of Berkeley's zoning districts allow residential development. The only districts that do not allow residential-only or mixed-use are the MU-LI, M, and MM zones located in West Berkeley that are developed with and planned for manufacturing uses. The majority of opportunities for residential development are within areas zoned for multi-family and mixed-use, and development of new single-family residences is not common, though it is allowed in most districts.

A summary of the City's development standards for residential and mixed-use projects are included in Appendix B of the Housing Element. For most zoning districts, residential development standards, such as lot size, setbacks, lot coverage, etc. are similar to standards in other nearby cities.

Density is a key factor in identifying potential constraints to development. In addition to development being limited by maximum density requirements, other development standards can have the effect of preventing projects from being built at the maximum allowable density. However, in Berkeley, the development standards of the Zoning Ordinance have not had this effect. The Zoning Ordinance largely does not rely on unit-per-acre density standards. Other development standards related to setbacks, lot coverage, and open space have not limited high density development within the City. Table 4.2 and Table 4.3 include a sampling of the densities for multi-family and mixed-use projects with ten or more units which have been entitled since 2015. As shown, the average density for multi-family projects is over 160 units per acre and over 200 units per acre for mixed-use projects, and density bonuses are common. A more detailed density analysis by zone is also included in Appendix C: Sites Inventory.

Table 4.2: Density of Multi-Family Projects (10 or more Units) Entitled 2015-2021

Address	Zone	Number of Units	Density (DU/A)	Density Bonus
3031 Telegraph	C-1	110	152	35%
1950 Addison	C-DMU	107	228	20%
2012 Berkeley	C-DMU	142	175	35%
2028 Bancroft	C-DMU	37	223	23%
2711 Shattuck	C-SA	22	169	-
2542 Durant	C-T	32	150	-
2597 Telegraph	C-T/R-2	14	53	35%
2000 Dwight	R-4	113	173	20%
Average Density			165	

Source: City of Berkeley, Planning Division, 2022

Table 4.3: Density of Mixed-Use Projects (10 or more Units) Entitled 2015-2021

Address	Zone	# Units	Density (DU/A)	Density Bonus
1717 University	C-1/R-2A	28	144	35%
2124-2126 Bancroft/2121-2123 Durant	C-DMU	50	212	25%
2072 Addison	C-DMU	66	281	-

2009 Addison St	C-DMU	45	188	-
1951 Shattuck	C-DMU	156	390	-
2352 Shattuck	C-DMU	204	189	25/35%
2176 Kittredge	C-DMU	165	165	-
2210 Harold	C-DMU	38	279	-
2000 University	C-DMU	82	571	35%
2099 M L K Jr.	C-DMU Buffer	72	257	35%
2023 Shattuck	C-DMU Core	48	600	35%
2001 Ashby	C-SA	87	144	35%
3000 Shattuck	C-SA	23	74	-
2628 Shattuck	C-SA	78	208	-
2701 Shattuck	C-SA	57	210	35%
2510 Channing	C-T	40	179	-
2556 Telegraph	C-T	24	98	-
2501 Haste	C-T	55	128	-
2580 Bancroft	C-T	122	183	35%
2590 Bancroft	C-T	87	289	35%
1740 San Pablo	C-W	51	163	35%
2100 San Pablo	C-W	96	157	-
2198 San Pablo	C-W	60	289	35%
3000 San Pablo	C-W	78	243	35%
2720 San Pablo	C-W	25	114	35%
1200 San Pablo	C-W	104	182	35%
739 Channing	MU-LI/M-UR	14	37	-
1601 Oxford	R-3	37	114	35%
2539 Telegraph	R-3/C-T	70	183	35%
Average Density			216	

Source: City of Berkeley, Planning Division, 2022

Parking

The City has taken significant steps to reduce constraints to development related to parking requirements in recent years. As of 2021, in the majority of the City, no parking is required for new residential development of any number of units. In addition, new residential projects with two or more dwelling units on a parcel have an off-street parking maximum if located within 0.25 miles of a

major transit stop, or along a transit corridor with service at 15-minute headways during peak periods. Developments on roadways narrower than 26 feet within the Hillside Overlay have minimal requirements due to the physical constraints of this area.

Table 4.4: Parking Requirements for Residential Uses

Land Use	Required Off-Street Parking
Residential Districts	
Dwellings, including Group Living Accommodations	None required. Exception: If located on a roadway less than 26' wide in the Hillside Overlay: -R-3, R-4, and R-5 (1-9 units): 1 space/unit -R-3, R-4, and R-5 (10+ units): 1 space/1,000 SF of gross floor area -All other Districts: 1 space/unit
Dormitories, Fraternity/Sorority Housing, Rooming & Boarding Houses, Senior Congregate Housing	None required. Exception: If located on a roadway less than 26' wide in the Hillside Overlay: 1 space/5 residents plus 1 space for manager
Commercial Districts	
Dwellings, including Group Living Accommodations	None required. Exception: If located on a roadway less than 26' wide in the Hillside Overlay: 1 space/unit
Hotel, Residential	None required
Mixed-Use (residential use only)	None required
Senior Congregate Housing	None required
Live/Work	If workers/clients are permitted in work area, 1 per first 1,000 sq. ft. of work area and 1 per each additional 750 sq. ft. of work area
Manufacturing Districts	
Dwellings/Group Living Accommodations	None required
Live/Work	MU-LI: 1 space/1,000 SF of work area where clients are permitted MU-R: 1 space/first 1,000 SF of work area where clients are permitted plus 1 space/each additional 750 SF of work area

Source: BMC Section 23.322.030

In order to encourage the most efficient use of space and promote transit use, the City has implemented maximum parking requirements for projects located within one quarter mile of a major transit stop or along a transit corridor with 15-minute headways during peak periods may not develop off-street parking at a rate higher than 0.5 spaces per unit.

Demolition Controls

Chapter 23.326 of the Zoning Ordinance codifies the city's Demolition Ordinance, which regulates the demolition of dwelling units in Berkeley. Demolition of dwelling units is subject to the use permit process and reviewed by the Zoning Adjustments Board (ZAB). Single dwelling units may be demolished so long as they were not removed from the rental market under the Ellis Act during the

preceding five years and there was no illegal tenant eviction. To demolish a building constructed prior to June 1980 with two or more dwelling units (i.e. subject to local rent control), one of the following findings is required:

- The building containing the units is hazardous or unusable and is infeasible to repair.
- The building containing the units will be moved to a different location within Berkeley with no net loss of units and no change in the affordability levels of the units.
- The demolition is necessary to permit construction of special housing needs facilities such as, but not limited to, childcare centers and affordable housing developments that serve the greater good of the entire community.
- The demolition is necessary to permit construction approved pursuant to this chapter of at least the same number of dwelling units.

Multi-unit buildings are also restricted where a building has been removed from the rental market under the Ellis Act during the preceding five years or "there have been verified cases of harassment or threatened or actual illegal eviction during the immediately preceding three years." Applicants for multi-unit buildings are also required to provide relocation benefits, including moving expenses and differential rent payments. In addition, displaced tenants are provided a right of first refusal to rent new units.

To mitigate the impact of the loss of housing caused by the demolition, the applicant is required to either provide permanent below market rent replacement units or pay an in-lieu fee. The City is reviewing the demolition ordinance to ensure compliance with State density bonus, SB 330, and other laws, and will amend the fee and replacement requirements accordingly. While the in lieu fee and unit requirements may add to the cost of development for projects which include demolition of existing units, they play an important role in preserving existing housing in the City, which tends to be more affordable than new.

Inclusionary Housing Ordinance

Inclusionary housing was originally adopted as City policy as part of the Neighborhood Preservation Ordinance in 1973. The inclusionary housing requirements ("Inclusionary Ordinance") originally took effect in February 1987 and have been revised in response to market conditions and various court decisions since that time. The current Inclusionary Ordinance is codified in Chapter 23.328 of the Zoning Ordinance.

The City's inclusionary requirements apply to rental and ownership projects that have a total of five or more units, though the requirements apply differently for each type. Applicants may choose to pay a fee in-lieu of constructing units on-site. The in-lieu fee amount for rental projects is set by Council resolution and in 2021 was $39,746 per unit if paid at issuance of certificate of occupancy or $36,746 if paid at building permit issuance (fees are also subject to an annual adjustment based on the California Construction Code Index). For rental projects, an affordable housing mitigation fee is applied; however, projects can incorporate affordable units as an alternative to paying the mitigation fee. Fees collected through the inclusionary program are deposited in the Housing Trust Fund to be

utilized for affordable housing development. New commercial developments are also required to pay an Affordable Housing Mitigation Fee, which is deposited into the Housing Trust Fund.

Although inclusionary requirements do increase the cost of market rate development, they are a key component in the City's efforts to increase the affordable housing supply in Berkeley. As of December 2021, there are a total of 530 affordable units within market rate developments as a result of this program. Additionally, a total of 1,376 affordable units have been developed with the assistance of Housing Trust Fund monies. Further, the continued level of residential development activity in the City, as evidenced by the projects listed in Table 4.2 and Table 4.3, indicates that the inclusionary program does not unduly constrain market rate development.

However, the City's various affordable housing requirements are complex and codified in multiple sections of the Municipal Code and numerous resolutions implement fee amounts and other aspects of the programs. In addition, in 2018, the California legislature passed AB 1505, effectively overturning the Palmer decision (2009) and allows for cities to combine rental and ownership requirements under a single inclusionary housing ordinance.

In an effort to update and consolidate the requirements, as well as ensure that they align with State law and City priorities, the City is in the process of considering potential amendments. The City's overarching goals for updating affordable housing requirements are:

1. Center racial and economic equity by reversing exclusionary zoning
2. Encourage a mix of units and fees
3. Continue Berkeley's legacy of value capture
4. Continue progress on housing goals
5. Work within the City's existing administrative capacity

Proposed amendments include: consolidating all affordable housing requirements into one Chapter, including inclusionary requirements for ownership, rental, live/work, and group living accommodations; establishing a per square foot in-lieu fee rather than the existing per unit basis and standardizing owner and rental fees; requirements to incentivize units for very low-income households; adding land dedication as a potential alternative to providing on-site units; providing an option to provide family-sized units; removing the exemption for most group living accommodations; reducing fees for small projects; and, other administrative changes to facilitate program implementation. Residential units that are constructed to qualify for a density bonus under Government Code §65915 that otherwise meets the City's proposed requirements for an "Affordable Unit" may also be counted towards the City's inclusionary requirement. These zoning amendments are anticipated to be completed in June 2023 (see Program 3 -Citywide Affordable Housing Requirements).

Landmarks Preservation Ordinance

The City first adopted a Landmarks Preservation Ordinance (LPO) in 1974. The LPO establishes the duties of the Landmarks Preservation Commission (LPC). The LPO gives the LPC authority to make landmark, structure of merit, and historic district designations, subject to appeal to the City Council.

The LPC also reviews permit applications for alteration, construction, or demolition of landmarks, structures or merit, and structures in historic districts, also subject to Council appeal.

Proposals for designation can be initiated by petition application or motion of the LPC itself, or by the City Council, Planning Commission, or Civic Arts Commission. Petition applications must be accompanied by the signatures of at least 50 Berkeley residents. From the time a site is initiated, the LPC has 70 days to open the public hearing and 180 days to act after the public hearing is closed. BMC Section 3.24.110 contains the criteria for site designation, which is briefly summarized below.

Landmarks and Historic Districts	Architectural merit Cultural value Educational value Historic value
Structures of Merit (SOM)	Contemporary of, or compatible with, related City Landmark Exemplar of design Historical Significance

Once a site is designated as a landmark or structure of merit, or as part of historic district, alterations to the exterior of the building are subject to design review by the LPC. The provisions of the designation, such as the character-defining features of the structure, are specified in the designation action by the LPC.

In cases where the site subject to initiation is also a site with a pending application for a development project, the landmark review may stay consideration of the development project review process. This could prevent the City from reviewing a project within an expedited timeframe. However, pursuant to the California Environmental Quality Act (CEQA), environmental review for cultural resources occurs whether a site is locally designated or not. In order to mitigate the uncertainty and delay that may result from the initiation of a site for local designation, the Berkeley Planning Department uses the following procedures to identify potential historic resources early in the project review process:

- Requires applicants for development to provide a cultural resources analysis for proposals that include substantial changes to structures that are more than 40 years old, consistent with the standard practices of the National Park Service and the State Historic Preservation Office.
- All applications to demolish a structure located in a non-residential district that is more than 40 years old are referred to the LPC for comment prior to consideration of the permit to demolish, in accordance with the Berkeley Municipal Code Zoning Ordinance.
- For sites subject to initiation, staff make every effort to facilitate the designation review process as efficiently as possible.
- Starting in 2007, the City staffed the LPC with a professional historic preservation planner. The planner provides the Commission with detailed recommendations on historic resource initiations and review of structural alteration permits.

For SB 330 preliminary applications, the City receives the project application and confirms the current local register status of the project site. If the proposal requires an LPC demolition referral per BMC 23.326.070, then the referral occurs and any local designation that may result cannot also result in conditions of approval that require preservation of the resource (notwithstanding the designation).

Density Bonus

State density bonus provisions have changed both frequently and significantly in recent years in order to further incentivize the use of this affordable housing tool. AB 1763 (2019) expanded the maximum density bonus and other provisions for projects with 100 percent affordable units, including the following:

- Up to 20 percent of the total units in an affordable project can be for moderate income households
- Density bonus of up to 80 percent required; however, no limitations on density are permitted for projects within ½ mile of a major transit stop
- Height increase of up to three additional stories or 35 feet

Additionally, AB 2345 (effective 2021) increased the maximum density bonus from 35 percent to 50 percent for projects that are not composed exclusively of affordable units.

Berkeley's density bonus provisions are contained in Chapter 23.330 of the Zoning Ordinance. The ordinance was last updated in 2019 and consistently references State law for specifics related to density bonus, incentives and concessions, and processes and procedures. In this way, the ordinance has remained compliant with changes to State law without necessitating repeated amendments. As evidenced by Table 4.2: Density of Multi-Family Projects (10 or more Units) Entitled 2015-2021and Table 4.3: Density of Mixed-Use Projects (10 or more Units) Entitled 2015-2021, density bonus is a commonly used tool in Berkeley residential development with over half of larger projects receiving a density bonus.

Developing at Assumed Densities

In summary, the City of Berkeley's land use controls do not present a barrier to residential development. As mentioned previously, the Zoning Ordinance largely does not rely on unit-per-acre density standards and use permits are commonly granted to exceed development standard limits.

As illustrated by Table 4.3: Density of Mixed-Use Projects (10 or more Units) Entitled 2015-2021 and by the Likely and Pipeline sites listed in Appendix C, Tables C-3 and C-6, Berkeley's development standards do not appear to constrain residential development. It is also important to note that the City has a 20 percent inclusionary requirement, and correspondingly, over 55 percent of applications under review and over 85 percent of anticipated pipeline (pre-application) projects currently utilize State Density Bonus and are afforded waivers and concessions to development standards.

While the City demonstrates a successful, and increasing, trend of residential projects constructed at or above maximum permitted development envelopes, Appendix C Sites Inventory conservatively assumes that opportunity sites will develop at the average baseline density (subtracting density

bonus) achieved for recently approved, under construction, and completed mixed-use and residential projects.

In order to demonstrate that the existing zoning standards do not constrain development at the assumed average baseline density for zones where lower and moderate income sites are represented, nine prototype projects are described below. The calculated densities for each of the nine prototype projects meet or exceed the assumed densities in the sites inventory. The calculated densities are derived from unit capacity assumptions based on minimum lot size (0.35 acres), average 900 gross square foot unit size, net lot coverage, and either number of stories or floor area ratio, whichever is more constraining. Averages are used where there is a range within the districts.

	Prototype Site Development Projects
1. Mid-Density Residential (R-2, R-2A, R-3)	
Lot Size (sf)	15,250
Lot Size (ac)	0.35
Lowest Maximum Coverage (%)	30%
Maximum Height (ft)	35
Maximum Stories	3
Maximum Floor Area Ratio	No max
Total Floor Area (sf) - (lot * coverage * stories)	13,725
Average Unit Size (sf)	900
Total Units	15
Calculated Density (units/acre)	*44*
Sites Inventory Maximum Assumed Density (units/acre)	*40*
2. Mid-High Density Residential (R-4)	
Lot Size (sf)	15,250
Lot Size (ac)	0.35
Lowest Maximum Coverage (%)	35%
Maximum Height (ft)	65
Maximum Stories	6
Maximum Floor Area Ratio	No max
Total Floor Area (sf) - (lot * coverage * stories)	32,025
Average Unit Size (sf)	900
Total Units	36
Calculated Density (units/acre)	*102*

Sites Inventory Maximum Assumed Density (units/acre)	*75*
3. High Density Residential (R-S, R-SMU)	
Lot Size (sf)	15,250
Lot Size (ac)	0.35
Min Ground Floor Setbacks (ft)	0 to 10
Min Upper Floor Setbacks (ft)	4 to 19
Net Coverage (%), with required setbacks	60%
Maximum Height (ft)	45
Maximum Stories	4
Maximum Floor Area Ratio	No max
Total Floor Area (sf) - (lot * coverage * stories)	36,600
Average Unit Size (sf)	900
Total Units	41
Calculated Density (units/acre)	*116*
Sites Inventory Maximum Assumed Density (units/acre)	*75*
4. Neighborhood Commercial (C-NS)	
Lot Size (sf)	15,250
Lot Size (ac)	0.35
Min Ground Floor Setbacks (ft)	0 to 10
Min Upper Floor Setbacks (ft)	0 to 16
Net Coverage (%), with required setbacks	50%
Maximum Height (ft)	35
Maximum Stories	3
Maximum Floor Area Ratio	No max
Total Floor Area (sf) - (lot * coverage * stories)	22,875
Average Unit Size (sf)	900
Total Units	25
Calculated Density (units/acre)	*73*
Sites Inventory Maximum Assumed Density (units/acre)	*50*
5. Corridor Commercial (C-C, C-DMU Corridor/Buffer, C-T, C-U, C-W)	

Lot Size (sf)	15,250
Lot Size (ac)	0.35
Min Ground Floor Setbacks (ft)	0 to 10
Min Upper Floor Setbacks (ft)	0 to 15
Net Coverage (%), with required setbacks	80%
Maximum Height range (ft)	35 to 75
Average Maximum Height (ft)	55
Average Maximum Stories	5
Average Maximum Floor Area Ratio	No max
Total Floor Area (sf) - (lot * coverage * stories)	61,000
Average Unit Size (sf)	900
Total Units	68
Calculated Density (units/acre)	*194*
Sites Inventory Maximum Assumed Density (units/acre)	*160*
6. South Area Commercial (C-SA)	
Lot Size (sf)	15,250
Lot Size (ac)	0.35
Min Ground Floor Setbacks (ft)	4 to 15
Min Upper Floor Setbacks (ft)	6 to 15
Net Coverage (%), with required setbacks	75%
Maximum Height range (ft)	36 to 60
Average Maximum Height (ft)	48
Average Maximum Stories	4.5
Average Maximum Floor Area Ratio	No max
Total Floor Area (sf) - (lot * coverage * stories)	51,469
Average Unit Size (sf)	900
Total Units	57
Calculated Density (units/acre)	*163*
Sites Inventory Maximum Assumed Density (units/acre)	*160*
7. Adeline Corridor (C-AC)	

Lot Size (sf)	15,250
Lot Size (ac)	0.35
Min Ground Floor Setbacks (ft)	No min
Min Upper Floor Setbacks (ft)	No min
Net Coverage (%), with required setbacks	100%
Maximum Height range (ft)	35 to 90
Average Maximum Height (ft)	63
Average Maximum Stories	6
Maximum Floor Area Ratio range	2.0 to 5.5
Average Maximum Floor Area Ratio	4.0
Total Floor Area (sf) - (lot * FAR * stories)	61,000
Average Unit Size (sf)	900
Total Units	68
Calculated Density (units/acre)	*194*
Sites Inventory Maximum Assumed Density (units/acre)	*160*
8. Downtown Outer Core (C-DMU Outer Core)	
Lot Size (sf)	15,250
Lot Size (ac)	0.35
Min Ground Floor Setbacks (ft)	No min
Min Upper Floor Setbacks (ft)	5 to 15
Net Coverage (%), with required setbacks	75%
Maximum Height range (ft)	75 to 120
Average Maximum Height (ft)	98
Average Maximum Stories	9
Average Maximum Floor Area Ratio	No max
Total Floor Area (sf) - (lot * coverage * stories)	102,938
Average Unit Size (sf)	900
Total Units	114
Calculated Density (units/acre)	*327*
Sites Inventory Maximum Assumed Density (units/acre)	*160*

9. Downtown Core (C-DMU Core)	
Lot Size (sf)	15,250
Lot Size (ac)	0.35
Min Ground Floor Setbacks (ft)	No min
Min Upper Floor Setbacks (ft)	5 to 15
Net Coverage (%), with required setbacks	75%
Maximum Height range (ft)	75 to 180
Average Maximum Height (ft)	128
Average Maximum Stories	10
Average Maximum Floor Area Ratio	No max
Total Floor Area (sf) - (lot * coverage * stories)	114,375
Average Unit Size (sf)	900
Total Units	127
Calculated Density (units/acre)	*363*
Sites Inventory Maximum Assumed Density (units/acre)	*160*

To further demonstrate that the City's current land controls do not constraint development, the City retained Street Level Advisors to perform a static pro forma analysis of the current housing development environment[3] as part of the effort to update the affordable housing requirements (Program 3 -Citywide Affordable Housing Requirements). The analysis included existing and proposed inclusionary fees, paired with existing development controls, to estimate the return on investment generated by prototypical rental and for-sale housing development in Berkeley. The February 2022 study found both base and density bonus projects to be feasible, particularly given no maximum density standard, no minimum parking requirement, the ability to pay partial in-lieu fees, and—for density bonus projects—waivers to the height standard. This allows developers to respond to rising construction costs with smaller units (higher density), no or minimal parking spaces, and additional heights on smaller lots.

The City is committed to ensuring a realistic development environment by conducting a follow-up development feasibility study by December 2025 (Program 3 -Citywide Affordable Housing Requirements) and anticipates making several zoning amendments to facilitate additional residential development in Berkeley, even though the existing zoning standards can accommodate the City's sixth cycle RHNA. Commonly requested waivers and/or concessions include height and setbacks. As a result, the City is in the process of creating multi-unit objective development standards,

[3] The February 2022 Financial Feasibility Analysis performed by Street Level Advisors used revenue and cost assumptions based on prior studies of prototypical residential development in Berkeley, comparable projects, and other market research.

which would include standards to increase development potential, including but not limited to, increasing building height, coverage, floor area ratio, and reducing setbacks and building separation, and allowing for more flexibility in the calculation and configuration of open space, particularly along transit corridors and in the highest resource neighborhoods (Program 33 -Zoning Code Amendment: Residential and Program 27 -Priority Development Areas (PDAs), Commercial and Transit Corridors).

The City is working with BART to comply with AB 2923 and has adopted new zoning standards for a mixed-use district to facilitate residential development at North Berkeley and Ashby BART. The new zoning will primarily permit housing and includes new standards for height, floor area ratio, and minimum density (Program 28 -BART Station Area Planning).

Development of objective standards for "missing middle" housing in the lower density residential zones is also in progress and anticipated to be completed by in 2023 (Program 29 -Middle Housing). As part of these amendments, the City is also considering allowing this type of development by-right.

4.1.3 PERMIT PROCESSING PROCEDURES

Local permit processing procedures have the potential to constrain development by lengthening the time it takes to gain project approval as well as impacting project approval certainty. Currently, the majority of new residential development in the City requires discretionary review through the use permit process. Multiple required use permits for a single project are processed concurrently. The Neighborhood Preservation Ordinance (NPO) was adopted in 1973. The NPO established the requirement for most new residential construction to obtain a use permit, as well as required the "non-detriment" finding for approval (see use permit discussion below). That said, the NPO has been superseded in part by subsequent adoption of the master plan and zoning updates mandated by the initiative, both of which can now be amended by ordinance.

Table 4.5 provides the processing times for the permit types required for various residential developments. All projects are reviewed for completeness at the staff level within 30 days of initial paid invoice, in compliance with the Permit Streamlining Act. Any subsequent resubmittals are also reviewed for completeness within 30 days. Processing times may vary based on the size and complexity of a project, the required CEQA pathway, the extent of required revisions and the applicant's responsiveness, and the length of time for an applicant to resubmit.

Table 4.5: Typical Permit Processing Times

Permit Type	Processing Time	Reviewing Body
Zoning Certificate	Over the Counter	Zoning Officer
Administrative Use Permit	2 to 8 months	Zoning Officer
Use Permit	6 to 24 months	Zoning Adjustments Board (ZAB)
Variance	Rarely approved	Zoning Adjustments Board (ZAB)
Design Review – Staff Level	2 months	Zoning Officer
Design Review – Design Review Committee	6 months	Design Review Committee (DRC)

Zoning Ordinance / General Plan Amendments	12 to 24 months	City Council
Tentative Parcel/Tract Map	3 to 6 months	City Manager/Planning Commission

Source: City of Berkeley, Planning and Development Department, 2022

As shown in Table 4.6: Permits Required, By Housing Type and Residential Zone and Table 4.7: Permits Required, by Housing Type and Commercial/Manufacturing Zone, both single-family and multi-family developments generally require use permit approval in Berkeley. However, due to the greater level of complexity, multifamily projects usually require a lengthier processing time (9 to 24 months) when compared to a single-family residence (6 to 12 months).

Consistent with SB 330, eligible housing development projects that require discretionary review and comply with applicable general plan and zoning standards are subject only to the development standards and fees that are in effect when the SB 330 Preliminary Application is submitted. Housing development projects include the following uses: residential-only, mixed-use where at least two-thirds of the square footage is designated for residential use, and transitional or supportive housing.

The City is in the process of creating objective development standards for multifamily developments (Program 33 -Zoning Code Amendment: Residential). These amendments are anticipated to be adopted in within the first three years of the 6th Housing Element cycle (2023-2025) and will streamline project review by providing clear, predictable expectations for buildable envelope and floor area. A by-right approval process is also being considered for smaller "middle housing" residential projects in single- and lower-density residential districts, which would further shorten permit processing times (Program 29 -Middle Housing).

Zoning Certificate

Zoning certificates are reviewed and approved ministerially by staff and the purpose is to confirm that a use or structure complies with the Zoning Ordinance objective standards and establishes a record of the initial establishment of a use or structure; therefore, the processing time for zoning certificate approval is minimal. The zoning certificate process is utilized for ADU applications, as well as community care facilities, emergency shelters, and live/work units under certain circumstances. For ADUs, a zoning certificate is approved as part of the building permit review workflow.

Use Permit / Administrative Use Permit

Use permits and administrative use permits (AUP) are discretionary permits intended to ensure that proposed developments do not adversely impact neighboring properties or the general public. Administrative use permits are reviewed and approved by the Zoning Officer and do not require a public hearing. Use permits require a public hearing before the Zoning Adjustments Board.

The required findings for approval are the same for use permits and administrative use permits, which are that the proposed project or use:

- Will not be detrimental to the health, safety, peace, morals, comfort, or general welfare of persons residing or visiting in the area or neighborhood of the proposed use; and

- Will not be detrimental or injurious to property and improvements of the adjacent properties, the surrounding area or neighborhood, or to the general welfare of the City.

Due to the public hearing requirement, the discretionary process creates the potential for projects to be scrutinized for their impacts on the surrounding neighborhood. The process also increases the overall project review time, particularly if multiple public hearings are necessary. That said, since the passage of SB 330 (2019), the City has processed all eligible housing development projects (e.g. residential or mixed-use with at least two-thirds of the square-footage residential; or transitional or supportive housing) under the five public hearing and meeting limits of Gov. Code §65905.5(a), regardless of whether an SB 330 pre-application has been filed for the eligible project.

Additionally, in accordance with the Housing Accountability Act (HAA), all proposed applications are reviewed for compliance with applicable objective general plan and zoning standards (Gov. Code §65589.5(j)). The City does not deny permits, nor reduce project density, based on subjective findings. The City may only deny the project or approve it with a reduced density if the decision is based on written findings supported by substantial evidence that:

1. The development would have a specific adverse impact on public health or safety unless disapproved, or approved at a lower density; and
2. There is no feasible method to satisfactorily mitigate or avoid the specific adverse impact, other than the disapproval, or approval at a lower density.

To date, the City has not denied a project or reduced its density under HAA. In addition, the City is in the process of creating residential objective development standards (Program 33 -Zoning Code Amendment: Residential) as well as amending permit processes (Program 34 -Permit Processing) which will reduce entitlement and permit processing timelines and increase certainty for applicants.

CEQA Determinations

For CEQA determinations, the City reviews all applications according to the procedures in the Berkeley Municipal Code Section 23.404.030.E, which is consistent with Public Resource Code sections 21080.1 and 21080.2. Once an application is deemed complete, staff recommends the appropriate level of environmental review within 30 days. For complete projects that are categorically exempt from CEQA, staff indicate the exemption recommendation in the 30-day completeness letter. For projects that are *not* categorically exempt from CEQA or if the impacts of the project are not known, or if any anticipated significant impacts of the project can be mitigated to "less-than significant," an initial study will be prepared. The Zoning Officer (for AUP's) or the Zoning Adjustments Board (for UP's) make the final determination of whether a project has a significant effect on the environment. When a project is exempt from CEQA, the review authority makes the required findings for CEQA exemptions which results in the determination, and approves or disapproves the project at the same meeting, complying with the Permit Streamlining Act's timeline in Gov. Code Section 65950(a)(5).

Information about the status of project applications, particularly once an application has been deemed complete, has often not been readily available to the public including the determination that a CEQA exemption is recommended to the decision-making body. Therefore, changes in the City's

permit processing with regard to the availability of information about pending project applications have been added to Program 34 - Permit Processing.

In response to concerns that the permit process was a constraint, the Planning Department hired Zucker Systems in order to improve customer service to the Berkeley community. The final report was issued in May 2017. As described below, the City has taken many steps to improve the development review process with the specific intent to provide more direction and certainty to applicants.

To provide greater responsiveness to customers and applicants, the City implemented the following changes:

- **Timely Communication**. Return all phone calls and emails within 24/48 hours.
- **Plan Check Backlog**. Work to reduce plan check backlog, then set reliable baselines.
- **Minor Plans Reviews**. Assign to Permit Service Center (PSC) Plans Examiner to provide faster review for clients with simple projects.
- **AUP Timelines**. Using Accela permit software, reduce AUP process timelines and allows for ongoing monitoring and reporting of performance.
- **Customer Handouts**. Update all handouts to be more clear and germane, and make them easily available. Provide customers with clear and accessible resources to learn about specific building permit application requirements for themselves.
- **Minimum Application Checklists**. Provide customers with clear understanding of what applications must include, so they can submit without undue time spent or unnecessary visits to the PSC.

An applicant can request and pay for expedited processing of a Use Permit. By outsourcing some of the project review work, this allows staff resources to be re-allocated fairly among all projects, meet the requirements of the Permit Streamlining Act, and also provide an opportunity for faster review.

Design Review

Design review ensures that exterior changes to mixed-use and non-residential buildings largely comply with the City of Berkeley Design Guidelines, which are intentionally generalized and projects are not expected to respond to every guideline. Design reviews are limited in scope to issues of building and site design only (e.g. placement on lot and landscaping, *not* developable building envelope) and conducted concurrently with land use review processes.

Design review is required for:

- Projects in all non-residential zones;
- Mixed use and community and institutional projects in the R-3 district within the Southside Plan area; and
- Commercial, mixed-use, and community and institutional projects in the R-4, R-SMU, and R-S districts (BMC Section 23.406.070).

Redesign of the interface between a new building and the adjacent neighbors can mitigate land use conflicts inherent in the transition between medium-density residential neighborhoods and high-density mixed-use buildings. For this reason, design review is important in an urban city that encourages citizen participation, as well as excellence in building and site design.

Staff level review. For projects requiring a Zoning Certificate or an AUP, the Zoning Officer may add conditions of approval related to project design, and projects are reviewed for conformance with the conditions during issuance of the building permit. Staff level review must be completed within 60 days of the date the application is deemed complete (BMC Section 23.406.070(I)).

Design Review Committee. For projects requiring ZAB approval, design review is conducted by the Design Review Committee (DRC), which is an advisory subcommittee of the ZAB and not an approval body. In this case, a preliminary design review is held prior to the ZAB making a decision on the Use Permit and is typically completed within the time frame of Use Permit preparation and review processes. Design review must be completed within 60 days of submittal of complete final Design Review plans or within the time limit required by the Permit Streamlining Act, whichever is less (BMC Section 23.406.070(I)).

Under recent legislation, the City limits the total number of public hearings and meetings to five, which include DRC meetings, so the City has further streamlined the project review process and closely coordinates the various review bodies, making sure that there is one hearing reserved for possible appeal to the City Council. As mentioned in previous sections, the City is in the process of creating residential objective development standards (Program 33 -Zoning Code Amendment: Residential) as well as amending permit processes (Program 34 -Permit Processing).

State Streamlining

Under the 5th Cycle Housing Element reporting period (2015-2023), the City of Berkeley has made insufficient progress toward its very low and low income RHNA and is subject to SB 35 streamlining provisions for projects that include at least 50 percent affordability. SB 35 requires that eligible projects be reviewed for compliance and consistency with the City's objective standards and are not subject to discretionary processes, such as CEQA environmental review and public hearings. Eligible projects with 150 units or fewer must be approved within 90 days and projects with more than 150 units must be approved within 180 days. Since 2018, 4 projects have been approved through SB 35 ministerial approval.

In addition, AB 1397 requires that 5th cycle opportunity sites re-used in the 6th cycle and identified to accommodate lower income units (Very Low-Income and Low-Income) be subject to by-right approval if projects include 20 percent affordable units for lower income households on-site. As shown in Appendix C: Sites Inventory, AB 1397 streamlined review will be applied to 13 opportunity sites with an estimated capacity of 1,215 lower income units, primarily located along Berkeley's commercial corridors adjacent in transit-rich locations.

4.1.4 PROVISION FOR A VARIETY OF HOUSING TYPES

State Housing Element Law requires local jurisdictions to identify adequate available sites through appropriate zoning and development standards to encourage the development of a variety of housing types for all economic segments of the population as well as housing types that serve special needs groups such as persons with disabilities, farmworkers, and persons experiencing homelessness. The City of Berkeley Zoning Ordinance allows for a wide variety of residential uses in its residential zones as well as its commercial zones. Table 4.6 and Table 4.7 summarize the permit requirements for various residential uses in each zone. The Zoning Ordinance currently requires a discretionary use permit for the majority of residential development in Berkeley. The use permit process is discussed in further detail in the Permit Processing section of this Chapter. The remainder of this section includes further discussion on various housing types, their permit requirements, and any other specific standards that apply to them.

Table 4.6: Permits Required, By Housing Type and Residential Zone

Housing Type	R-1	R-1A	ES-R	R-2	R-2A	R-3	R-4	R-5/R-S/ R-SMU
Single-family Detached	UP	UP	UP	UP	UP	UP	UP	UP
Duplex	NP	UP	NP	UP	UP	UP	UP	UP
Multi-family	NP	NP	NP	UP	UP	UP	UP	UP
Accessory Dwelling Units[1]	ZC	ZC	NP	ZC	ZC	ZC	ZC	ZC
Community Care Facilities[6]	ZC/UP[3]	ZC/UP[3]	ZC/UP[4]	ZC/UP[3]	ZC/UP[3]	ZC/UP[3]	ZC/UP[3]	ZC/UP[3]
Emergency Shelters	NP	NP	NP	NP	NP	NP	ZC/UP[5]	ZC/UP[5]
Senior Congregate Housing	NP	NP	NP	NP	ZC/AUP/ UP[2]	ZC/AUP/ UP[2]	ZC/AUP/ UP[2]	ZC/AUP/ UP[2]
Mixed-Use Projects	NP	NP	NP	UP	UP	UP	UP	UP
Group Living Accommodations	NP	NP	NP	NP	NP	UP	UP	UP
ZC=Zoning Certificate, AUP=Admin. Use Permit, UP=Use Permit, NP=Not Permitted								

Source: Berkeley Municipal Code, 2022.

Notes:

1. *Provided ADU/JADU complies with BMC Section 23.306.*
2. *ZC required for change of use (6 or fewer residents); AUP required for change of use (7 or more residents); UP required for new construction (any number of residents). See BMC Section 23.302.070.H).*
3. *ZC required for change of use; UP required for new construction.*
4. *ZC required for change of use from a legally established single family dwelling; maximum of 6 residents. All others prohibited.*
5. *Permit required based on number of beds. See BMC Section 23.308.020.*
6. *Community Care Facilities include residential care facilities and supportive housing.*

Table 4.7: Permits Required, by Housing Type and Commercial/Manufacturing Zone

Housing Type	C-C/C-N/ C-E/C-NS/ C-T/C-SO/ C-AC/C-DMU	C-U	C-SA	C-W	MU-LI	MU-R
Single-family Detached	UP	UP[1]	UP	UP	NP	UP[2]
Duplex	UP	UP[1]	UP	UP	NP	UP[2]
Multi-family	UP	UP[1]	UP	UP	NP	AUP/ UP[2,3]
Accessory Dwelling Units[4]	ZC	ZC	ZC	ZC	NP	ZC
Community Care Facilities[5]	AUP	AUP	AUP	ZC	NP	ZC[6]
Emergency Shelters	ZC/UP[7]	ZC/UP[7]	ZC/UP[7]	ZC/UP[7]	NP	NP
Single Room Occupancy Units	UP	UP1	UP	UP	NP	NP
Senior Congregate Housing	ZC/AUP/UP[8]	ZC/AUP/ UP[8]	ZC/AUP/ UP[8]	ZC/AUP/ UP[8]	NP	ZC/AUP/UP[8]
Live/Work Units	ZC	ZC	UP	AUP/UP[9]	AUP/UP[10]	AUP/UP[10]
Mixed-Use Projects	UP	UP[1]	ZC/UP[11]	ZC/AUP/ UP[12]	NP	AUP/ UP[2,3]
Group Living Accommodation	UP	UP[1]	UP	UP	NP	UP[2]
ZC=Zoning Certificate, AUP=Admin. Use Permit, UP=Use Permit, NP=Not Permitted						

Source: Berkeley Municipal Code, 2022.

Notes:

1. *Residential uses must be part of a mixed-use development within University Avenue Node Areas; outside of Node Areas exclusively residential projects are permitted with a use permit.*
2. *UP required within 150' of M or MM district or a construction product manufacturing or primary product manufacturing use. See BMC Section. 23.206.090.B.8.*
3. *AUP required for 3-4 units; UP required for 5 or more units. See BMC Section 23.206.090.B.7. For mixed use projects see also Section 23.206.090.B.9.*
4. *Provided ADU/JADU complies with BMC Section 23.306.*
5. *Community Care Facilities include residential care facilities and supportive housing.*
6. *Change of use only. New construction of a community care facility is not permitted.*
7. *Permit required based on number of beds. See BMC Section 23.308.020.*
8. *ZC required for change of use (6 or fewer residents); AUP required for change of use (7 or more residents); UP required for new construction (any number of residents). See BMC Section 23.302.070.H).*
9. *AUP required when project has 9 or fewer live/work units and does not involved conversion of an existing dwelling unit. All other live/work projects require a use permit. See BMC Section 23.312.030.C.3.*
10. *Permit required dependent on floor area, number of units, and other factors. See BMC Section 23.312.030.D.*
11. *ZC required for projects under 5,000 square feet in gross floor area with only residential above ground floor, provided the project complies with applicable standards. Use permit required for all other mixed-use projects. See BMC Section 23.204.100.B.4.*
12. *Permit required dependent on project size and other factors. See BMC Section 23.204.140.B.2.*

Single Family Housing

As defined by the Berkeley Zoning Ordinance, a single-family dwelling is a building designed for and occupied exclusively by one household. Detached single family housing is permitted with approval of a use permit in all residential zones and all commercial zones within the City.

Mobile homes or manufactured homes, as defined in the Berkeley Zoning Ordinance and consistent with State law, are considered dwelling units if they are mounted on a permanent foundation and connected to all utilities. Therefore, mobiles homes intended for single family occupancy are subject to the same permit requirements and development standards as conventional single-family housing.

Multi-Family Housing

Multi-family housing developments of three or more units are permitted with a use permit in Berkeley's multi-family residential zones (R-2, R-2A, R-3, R-4, R-5, R-S, and R-SMU) and all commercial zones. In the MU-R zone, smaller multi-family projects of three to four units are permitted with an administrative use permit provided they are not within 150 feet of the M or MM zones or a manufacturing use. Multi-family projects with five or more units in the MU-R zone or those not meeting the distance requirements described require use permit approval. The Zoning Ordinance also allows duplexes with use permit approval in all zones where larger multi-family projects are permitted. Additionally, duplexes are permitted with a use permit in the R-1A zone.

The City is actively working on proposed amendments to the Zoning Ordinance which would allow for by-right development of "missing middle" multi-unit residential projects in the lower density residential zones to encourage a mix of unit types and affordability in the lower density zones (R-1, R-1A, R-2, R-2A, and MU-R). See Program 29 -Middle Housing.

Mixed-Use Development

The Zoning Ordinance defines mixed-use residential as "a development project with both residential and non-residential uses which are either 1) located together in a single building; or 2) in separate buildings on a single site of one or more contiguous properties."

Mixed-use residential developments are permitted with a use permit in all zones that allow multi-family residential uses (R-2, R-2A, R-3, R-4, R-5, R-S, and R-SMU). A use permit is also required for mixed-use development within the majority of the City's commercial zones. However, in the C-SA zone, mixed-use projects can be approved administratively with a zoning certificate if they have less than 5,000 square feet of gross floor area and the residential component is located above the ground floor.

In the C-W zone, certain mixed-use projects can be approved administratively. Mixed-use projects less than 5,000 square feet in size are subject only to zoning certificate approval. Additionally, projects which are less than 20,000 square feet and where the retail space comprises 15-33 percent of the gross floor area can also be approved with a zoning certificate. Projects that are 5,000 to 9,000 square feet in size can be approved with an administrative use permit. All other mixed-use projects in the C-W zone are subject to use permit approval.

Accessory Dwelling Units

The State legislature has passed numerous bills in recent years with the goal of facilitating the development of accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs). These bills, including AB 68, AB 587, AB 881, and SB 13, limit how local jurisdictions can regulate ADUs and JADUs with provisions related to development standards, application and approval process, and fees.

The City's provisions related to ADUs are located in Chapter 23.306 of the Berkeley Zoning Ordinance and were most recently updated in 2022. ADUs and JADUs which comply with the standards set forth in State law are permitted with zoning certificate approval on any lot with at least one existing or proposed dwelling unit. Chapter 23.306 states that the purpose is to implement California Government Code Sections 65852.2 and 65852.22 and ensures that the City's provisions are compliant with State law and will remain in compliance even if the Legislature makes changes to ADU regulations.

Group Living Accommodations

The Berkeley Zoning Ordinance defines group living accommodations as "a building or portion of a building designed for or accommodating a residential use by persons not living together as a household. This use includes dormitories, convents and monasteries, and other types of organizational housing, and excludes hospitals, nursing homes and tourist hotels. Group living accommodations typically provide shared living quarters without separate kitchen or bathroom facilities for each room or unit. Residential hotels and senior congregate housing are separately defined types of group living accommodations each with their own permit requirements." Note that student housing that is not available for rent to non-students may be considered noninstitutional group quarters and is not counted towards meeting the City's RHNA.

With the University of California located within the City, group living accommodations are an important housing type in Berkeley. Group living accommodations are permitted with a use permit in all of the City's commercial zones. Additionally, they are allowed with use permit approval in the R-3, R-4, R-5, R-S, and R-SMU.

Single Room Occupancy (SRO)

Single room occupancy (SRO) units are small units intended for occupancy by a single individual and differ from studio apartments or efficiency units in that they may have shared kitchen or bathroom facilities. SRO units provide an affordable housing option for extremely low income or formerly homeless individuals because they are typically rented on a monthly basis and do not require a rental deposit.

The Berkeley Zoning Ordinance permits SRO units within residential hotels. Residential hotels are defined by the Zoning Ordinance as "a type of group living accommodations which provides room for rent for residential purposes, including single residential occupancy (SRO) rooms." Residential hotels are permitted with approval of a use permit in all of the City's commercial zones.

Emergency Shelters

SB 2 (2007) requires local jurisdictions to identify at least one zone where emergency shelters are permitted by right if adequate capacity in existing shelters is not sufficient to serve the population in

need of emergency shelter. This determination is based on the number of individuals experiencing homelessness identified in the most recent point in time count.

In 2019, the State Legislature passed AB 139, which limits the development and performance standards that a local jurisdiction can impose on emergency shelters. Local provisions can only impose standards that apply to other commercial or residential uses in the same zone along with the following standards:

- Maximum number of beds;
- Sufficient parking to accommodate all staff, provided that this standard does not require more parking for shelters than other residential or commercial uses in the same zone;
- Size and location of onsite client waiting and intake areas;
- Proximity to other shelters, provided that shelters are not requires to be more than 300 feet apart;
- Length of stay;
- Lighting;
- Provision of onsite management; and,
- Securing during operating hours.

Chapter 23.308 of the Berkeley Zoning Ordinance contains the City's regulations pertaining to emergency shelters. The City permits emergency shelters ministerially by-right with approval of a zoning certificate in several zones based on the number of beds provided in the facility, as shown in Table 4.8: Emergency Shelter Permit Requirements by Zone. Shelters with 60 or fewer beds are permitted by right in the C-DMU zone. Within all other commercial zones, facilities with 25 or fewer beds are permitted by right. Additionally, shelters with 15 or fewer beds are permitted by right within the R-4, R-5, R-S, and R-SMU zones. In addition to underutilized sites identified in the sites inventory, some of the existing older hotels/motels largely located along the University Avenue corridor and commercial surface parking that are not included in the City's sites inventory, may be repurposed or redeveloped to emergency shelters.

The C-DMU zone spans over 168 acres on 265 parcels, including 35 sites identified for 5.2 acres in the sites inventory, and one existing hotel site (2045 University) located outside of the sites inventory. The C-DMU zone allows for 100 percent coverage, no lower story setbacks, and building heights of 50 to 180 feet depending on location. The C-DMU zone is located in the highest transit accessible area of the City, and is within walking distance to ample services (e.g., the Dorothy Day House at 1931 Center, Berkeley Food and Housing Project at 2140 Dwight). These characteristics indicate the feasibility for either redevelopment or potential conversion of existing structures to shelter use in this zone.

Furthermore, the commercial zoning districts encompass approximately 1,900 parcels, including 96 sites identified for 33.4 acres in the sites inventory. The majority of the other commercial zones located close to services and major transit (C-C, C-U, C-W, C-T, C-AC) allow for 90 to 100 percent coverage for mixed-use residential uses, no minimum setbacks when adjacent to other commercial districts, and maximum heights of 36 to 90 feet depending on location. All of the commercial districts

are proximate to transportation and services, being located along major corridors that either currently contain and/or allow a wide range of service uses. For example, the C-AC zone is located along the South Shattuck corridor, which is served by AC Transit local, all-nighter and transbay lines, as well as the Ashby BART station. Further east, the C-T and C-C zones located along the Telegraph corridor are served by several AC Transit lines and are within walking distance to services such as Bay Area Community Services (2809 Telegraph), Suitcase Clinics (2407 Dana and 2236 Parker), Bonita House (1802 Fairview) and the Berkeley Drop-In Center (3234 Adeline). Within the western portion of the City, the C-W zone is located along the San Pablo transit corridor, as well as the North Berkeley BART station, and is located within walking distance of the Women's Daytime Drop-in and North County Housing Resource Center (2218 Acton Street), as well as the West Campus Pool at 2100 Browning, a City-operated drop-in shower program.

Based on the 2019 Point-in-Time Count, an estimated 1,108 homeless persons are located in Berkeley. At 200 square feet per bed, 1,108 beds could be accommodated in multiple facilities totaling approximately 221,600 square feet of floor area to accommodate the City's estimated unsheltered need. The shelters can be accommodated in one or a combination of the following locations:

- In C-DMU, where building heights of 50 to 180 feet are permitted, multiple sites that accommodate five stories totaling approximately 1 acre and containing up to 60 beds each.
- In transit-rich commercial zones, where building heights of 36 to 90 feet are permitted, multiple sites that accommodate three stories totaling approximately 2 acres and containing up to 25 beds each.

Outside of the sites inventory, the commercial zoning districts contain 22 surface parking parcels on 5 acres, as well as several hotels/motels located along the University Avenue corridor that can be converted to emergency shelters via adaptive reuse:

- C-W District hotels/motels: 920, 975 University
- C-U District hotels/motels: 1175 (split zoned with R-4), 1619, 1761, 1820, 2045 University.

Therefore, the City has complied with the requirements of SB 2 by providing opportunities for the by right development of emergency shelters in various zones throughout the City, particularly throughout higher density residential and commercial districts which are located close to services and major transit.

As demonstrated in Appendix C: Sites Inventory, the City has many underutilized commercially designated properties where emergency shelters are permitted by right. Furthermore, adaptive reuse of existing structures is another option for establishing shelter facilities without redevelopment of the properties. The City has sufficient properties in these zones to accommodate its unsheltered homeless.

Table 4.8: Emergency Shelter Permit Requirements by Zone

Zones	Permit Required
Residential Zones - R-4, R-5, R-S, R-SMU	
15 beds or fewer	Zoning Certificate

More than 15 beds	Use Permit
Commercial Zones	
C-C, C-U, C-N, C-E, C-NS, C-SA, C-T, C-SO, C-W, C-AC	
25 beds or fewer	Zoning Certificate
More than 25 beds	Use Permit
C-DMU	
60 beds or fewer	Zoning Certificate
More than 60 beds	Use Permit

Source: Berkeley Municipal Code, Table 23.308-1

For larger emergency shelters approval of a use permit is required, as indicated in Table 4.8. In addition to the required findings for approval for all use permits, the Zoning Adjustments Board must also make the following required findings specifically for emergency shelters:

1. A larger shelter facility will help meet the City's goals pertaining to emergency housing of the homeless;
2. The circumstances of the subject property make the larger facility appropriate; and,
3. Design features will minimize impacts on the surrounding area.

Separate from the permit approval process, shelter providers are required to conduct a community meeting for a proposed shelter after providing notification of the meeting to owners and occupants within a 100-foot radius of the proposed shelter location (BMC Section 23.308.030.A.9). However, the purpose of the community meeting is informational and does not impact the decision of the Zoning Officer or Zoning Adjustments Board to approve or deny an application.

The development and performance standards for emergency shelters are contained in Section 23.308.030.A of the Zoning Ordinance. The City's requirements include the following:

- A client intake area equal to one-quarter of the area provided for client beds. The area may be multi-use.
- Shower and restroom facilities.
- Lighting shall be provided in all exterior areas and must be directed in a manner that does not cast light onto neighboring properties.
- Provision of on-site management during all hours of operation and at least one hour before and after facility operation hours.
- Preparation and implementation of a Shelter Safety and Management Plan which addresses aspects of shelter operations, including staffing levels, security, procedures for client queuing and enforcement of rules, and others.

There are no parking requirements for emergency shelters and the provision of vehicle and/or bicycle parking is stated as optional (BMC Section 23.308.030.A.5.g). The City's standards are in compliance with AB 139 and therefore, do not constrain the development of emergency shelters within the City.

With the most recent changes to State law regarding emergency shelters, the City will identify commercial zones where emergency shelters are permitted by right depending on size. AB 2339 makes two changes to Housing Element law. AB 2339 provides that the sites identified for emergency shelters must be in areas where residential uses are permitted or are otherwise suitable, thus prohibiting local governments from situating shelters in industrial zones or other areas disconnected from services. The law also seeks to ease constraints on the development of emergency shelters by requiring that any development standards applied to emergency shelters be "objective." This Housing Element includes an action to evaluate the City's compliance with AB 2339 and if modifications may be necessary (see Program 31 -Zoning Code Amendment: Special Needs Housing).

Low Barrier Navigation Centers

AB 101 (2019) defines "low barrier navigation centers" and requires local jurisdictions to permit them by right in zones that allow mixed-use development and nonresidential zones that permit multifamily uses, provided the facility meets certain standards. Per AB 101, a low barrier navigation center is "a Housing First, low-barrier, service enriched shelter focused on moving people into permanent housing that provides temporary living facilities while case managers connect individuals experiencing homelessness to income, public benefits, health services, shelter, and housing." Housing First refers to an overall approach to serving individuals experiencing homelessness where a decent, safe place to live is provided before addressing any other barriers or factors that may have resulted in the person's homelessness. Low barrier shelters may also provide additional flexibility, such as allowing partners to share living space or allowing pets.

In addition to requiring local jurisdictions to permit low barrier navigation centers by right in certain areas, AB 101 requires jurisdictions to act on applications for these facilities within a specified timeframe. The provisions of AB 101 are effective through the end of 2026, at which point they are repealed. Low barrier navigation centers are not addressed in the Berkeley Zoning Ordinance. Therefore, the Housing Programs chapter of this Housing Element includes a Zoning Ordinance amendment to permit low barrier navigation centers as required by AB 101 (see Program 31 -Zoning Code Amendment: Special Needs Housing). In the meantime, the city applies the law in a manner that supersedes local zoning.

Transitional and Supportive Housing

Pursuant to State law (SB 2 of 2007 and SB 745 of 2013), transitional and supportive housing are residential uses that shall only be subject to the same permitting requirements and development standards as other residential dwellings of the same type in the same zone.

The Zoning Ordinance defines transitional housing as follows:

> *From Health and Safety Code Section 50675.2: Any dwelling unit or a Group Living Accommodation configured as a rental housing development, but operated under program requirements that call for the termination of assistance and recirculation of the assisted units to another eligible program recipient at some predetermined future point in time.*

The Zoning Ordinance does not specifically identify transitional housing as a use in the Allowed Uses table for the residential or commercial zones (BMC Tables 23.202.1 and 23.204-1). However, based

on the definition above, the Zoning Ordinance permits transitional housing in the same manner as the housing type in which it is located (i.e., single-family home, multi-family residence, or group living accommodation). Therefore, the City's requirements pertaining to transitional housing are compliant with State law and do not constrain their development.

Supportive housing is included in the definition of community care facility, which is allowed in the residential and commercial zones. In all zones where multifamily and mixed-uses are permitted, applications for supportive housing facilities which involve the creation of a new facility or conversion of an existing dwelling unit(s) are permitted by-right with zoning certificate approval.

AB 2162 (2018) introduced new regulations to facilitate the development of supportive housing. For cities with a population of less than 200,000, supportive housing projects with 50 or fewer units must be permitted by right in all zones where multifamily and mixed-use residential development is permitted, provided the project meets other specified criteria. Additionally, local jurisdictions may not require parking for supportive housing projects located within one half mile of a public transit stop. Reviewing the Zoning Ordinance and making necessary amendments to comply with AB 2162 (GOV §65651) has been included in Program 31 -Zoning Code Amendment: Special Needs Housing. In the meantime, the city applies the law in a manner that supersedes local zoning.

Employee and Farm Employee Housing

The Employee Housing Act (Health and Safety Code Section 17021.5) requires local jurisdictions to consider employee housing providing accommodations for six or fewer employees as a single-family structure with a residential land use designation. The Berkeley Zoning Ordinance allows unrelated individuals to live together as a household, but does not include any specific provisions related to employee housing; therefore, an implementation program proposes to make necessary Zoning Ordinance amendments to address employee housing (see Program 31 -Zoning Code Amendment: Special Needs Housing).

The City's Zoning Ordinance does not identify farm worker housing separately as a permitted use. There is no agricultural land located in Berkeley and the 2015-2019 American Community Survey estimated just 132 workers employed in agriculture, forestry, and fishing industries residing in the City. According to the 2017 Census of Agriculture compiled by the U.S. Department of Agriculture, there were a total of 120 farms, employing 593 seasonal and permanent farmworkers in Alameda County. Among these farms, 35 farms employed 142 workers who worked fewer than 150 days a year. Only 11 farms employed migrant workers, with an estimated 34 migrant workers. Therefore, specific zoning regulations for farmworker housing are not necessary.

4.1.5 HOUSING FOR PERSONS WITH DISABILITIES

Individuals with disabilities may have special housing needs related to restricted mobility, the ability to care for oneself, and the ability to live independently. State law requires the Housing Element to analyze the City's zoning regulations, permitting procedures, and building codes to identify any potential constraints to the development of housing for persons with disabilities.

Definition of Family

Zoning Ordinance definitions of "family" or "household" may constrain the development of housing for persons with disabilities, specifically group homes or care facilities, when they limit the number of members of a family or household or require that family or household members be related. The Berkeley Zoning Ordinance definitions for "family" and "household" are provided below. The Zoning Ordinance does not provide a separate definition for family, and instead references the definition for household.

The definition for household is not restrictive based on relation or number of household members and, while it states that household arrangements are "usually characterized" by shared living expenses and single leasing contracts, the City does not require a single lease or rental agreement nor does the City monitor and enforce shared living expenses. Therefore, the Zoning Ordinance definitions do not limit communal, inter-generational, or other forms of caregiving household arrangements and do not constrain the development of housing for persons with disabilities.

> *Family. See Household.*
>
> *Household. One or more persons, whether or not related by blood, marriage or adoption, sharing a dwelling unit in a living arrangement usually characterized by sharing living expenses, such as rent or mortgage payments, food costs and utilities, as well as maintaining a single lease or rental agreement for all members of the household and other similar characteristics indicative of a single household*

However, the City will simplify the definition of "Household" to be characterized by one or more persons with common access and use of all living, kitchen, and eating areas, while maintaining distinction from other residential arrangements such as Dormitory or Group Living Accommodation (see Program 31 -Zoning Code Amendment: Special Needs Housing).

Residential Care Facilities

The State Lanterman Developmental Disabilities Services Act (Lanterman Act) requires that licensed residential care facilities serving six or fewer individuals be treated as residential uses and permitted by right in all zones where residential use is permitted. Berkeley Zoning Ordinance Section 23.502.020 (Defined Terms) includes residential care facilities in the definition for community care facility. These definitions are compliant with state law and are provided below:

> *Residential Care Facility. See Community Care Facility.*
>
> *Community Care Facility. A state-licensed facility for the non-medical care and supervision of children, adolescents, adults or elderly persons. This use includes community care facilities as defined in California Health and Safety Code (H&SC) Section 1500 et seq, residential care facilities for the elderly (H&SC Section 1569 et seq.), facilities for the mentally disordered or otherwise handicapped (California Welfare and Institutions Code Section 5000 et seq.), alcoholism or drug abuse recovery or treatment facilities (H&SC Section 11834.02), supportive housing (California Government Code Section 65582), and other similar facilities. This use excludes medical care institutions, skilled nursing facilities, nursing homes, foster homes, family day care homes, child care facilities, and transitional housing.*

Section 23.202.040(A) includes the permit requirements for community care facilities, including residential care facilities, in the residential zones. Conversion of an existing dwelling into a community care facility is permitted through the zoning certificate process, regardless of the number of residents the facility serves. If a facility serves more than six people, the community care facility requires approval of a use permit, which is the same review procedure applied to other residential development.

There are no specific development standards that apply to community care facilities that do not also apply to other residential development in the same zone, except for parking. The parking requirement for community care facilities in the residential and manufacturing zones is one space per two non-resident employees. There are no parking requirements specific to community care facilities located in commercial zones.

Reviewing the Zoning Ordinance and making necessary amendments to comply with AB 2162 (GOV §65651) has been included in Program 31 -Zoning Code Amendment: Special Needs Housing. In the meantime, the city applies the law in a manner that supersedes local zoning.

Reasonable Accommodation

In some circumstances, development standards which may otherwise be acceptable may constrain the development of housing for persons with disabilities. For example, wheelchair access to a dwelling may not be able to be constructed without a ramp encroaching into the front yard setback. In such cases, state and federal law require local jurisdictions to provide relief from specific requirements or standards to accommodate the needs of persons with disabilities.

The City of Berkeley first added reasonable accommodation procedures to the Zoning Ordinance in 2001. Section 23.406.090 contains the application and review requirements for reasonable accommodations. Applications for reasonable accommodations are reviewed by the Zoning Officer is, unless the reasonable accommodation application is submitted concurrently with another permit application reviewed by the Zoning Adjustments Board (ZAB). Under these circumstances, the reasonable accommodation is reviewed by the ZAB. There is no required fee to apply for a reasonable accommodation and independent accommodation requests are processed within 45 days of receiving the application.

The review authority considers the following factors in the approval findings:

1. Need for the requested modification.
2. Alternatives that may provide an equivalent level of benefit.
3. Physical attributes of and proposed changes to the property.
4. Whether the requested modification would impose an undue financial or administrative burden on the City.
5. Whether the requested modification would constitute a fundamental alteration of the City's zoning or subdivision regulations.
6. Whether the requested accommodation would result in a concentration of uses otherwise not allowed in a residential neighborhood to the substantial detriment of the residential character of that neighborhood.

7. Any other factor that may have a bearing on the request.

The City supports equal access to housing for persons with disabilities and promotes reasonable accommodations to property owners (see Program 17 -Accessible Housing). Since 2012, the City has received eight requests for reasonable accommodations and all have been approved.

Building Codes

The City of Berkeley is adopting—and enforcing—the 2022 California Building Code (CBC) including local amendments. The City actively enforces CBC provisions that regulate access and adaptability of buildings to accommodate persons with disabilities. The City has adopted no local amendments to the CBC which constrain development of housing for persons with disabilities.

4.1.6 PLANNING AND DEVELOPMENT FEES

Cities charge permits fees to recover the costs associated with reviewing and processing applications for development. Cities also charge impact fees, which are intended to mitigate the impact of a development on local facilities or infrastructure. Common examples of impact fees include school fees and utility connection fees.

Berkeley's planning fee schedule was last updated in May 2022. State law requires that these fees are true cost recovery fees and may not exceed the cost to the City to review and process the permit. As part of fee schedule updates, the City reviews the staff time and other resources necessary to process permits to ensure that fees are set at an appropriate level in compliance with state requirements. Table 4.9 shows a comparison of planning fees for Berkeley, Fremont, and Richmond. As shown, all three cities are in a similar range for use permit fees. Berkeley's fees for design review are generally lower than Fremont and Richmond.

Table 4.9: Comparison of Planning Fees for Berkeley, Fremont, and Richmond

Permit Type	Berkeley	Fremont	Richmond
Administrative Use Permit	$1,840-$5,520[6]	$4,600	$2,112
Use Permit	Tier 1: $5,520 Tier 2: $5,520[1]	$7,000	A/C[2] ($5,000 deposit)
Variance (Tier 1)	$3,680	$4,000	A/C[2] ($3,500 deposit)
Zone Change/Zoning Amendment	A/C[2] ($9,200 deposit)[3]	Amendment: $9,360 Rezone: $10,000	A/C[2] ($13,000 deposit)
General Plan Amendment	A/C[2] ($9,200 deposit)[3]	$16,000	A/C[2] ($13,000 deposit)
Design Review			
Staff Level	$1,840-$3,680[5, 6]	$4,000	$2,376
Design Review Committee	$2,760-$5,520[5, 6]	$20,000	A/C ($4,400-$15,00 deposit)[6]
Environmental			

Initial Study/Negative Declaration	$5,520[4]	$5,400	30% of consultant contract cost
Environmental Impact Report	$9,200[4]	$5,400	30% of consultant contract cost

Sources: City of Berkeley, Land Use Planning Fees, Effective July 1, 2022; City of Fremont, Planning Division, 2022; City of Richmond, Planning Division Fee Schedule, Effective August 20, 2020.

Notes:

1. *Base fee. Staff time in excess of 24 hours charged at rate of $230/hr.*
2. *A/C = Actual Cost*
3. *Excess staff time charged at $230/hr.*
4. *Or, at City's discretion, cost of consultant contract plus $200/hr. for staff time for contract management*
5. *Base fee, excess staff time charged at $230/hr.*
6. *Where a cost range is given, the cost generally increases as project size/complexity increases based on defined thresholds.*

Since some fees are based on project valuation (i.e. building permit fees) and some are charged on a per unit or per square foot basis, it is difficult to generalize the total fees which apply to residential projects. Therefore, Table 4.10 provides a comparison of the applicable fees for several recent developments. 2035 Blake was entitled prior to the current affordable housing fee and 1950 Addison provided four very low income units on site and paid a pro-rated in-lieu fee. 2628 Shattuck provided no on-site affordable units and paid the full inclusionary fee amount.

Table 4.10: Fee Comparison for Sample Single-Family, Multi-Family, and Mixed-Use Development

	Single Family Residential	Multi-family Residential	Mixed-Use Residential	Mixed-Use Residential
Project Details and Assumptions				
Address	455 Vincente	1950 Addison	2628 Shattuck	2035 Blake
Certificate of Occupancy Issue Date	10/26/17	10/16/17	7/16/21	BP Issued 8/10/17
Building Permit Valuation	$470,000	$16,649,000	$11,106,567	$15,800,000
Sq Ft/unit	2,758	970	703	1020
Units	1	107	89	82
Value per sq. ft.	$476.42	$721.52	$996.26	$686.38
Value per unit[1]	$1,313,974	$700,000	$700,000	$700,000
Full value	$1,313,974	$74,900,000	$62,300,000	$57,400,000
Full sq ft (incl. parking)[2]	2,758	128,308	73,024	106,873
Building Permit Fees				
Plan Check and Filing Fees	$6,809	$238,170	$162,923	$234,380
Fire & Life Safety / Fire Plan Check Fees	$726	$25,642	$17,501	$25,510
Traffic Plan Check Fee	$864	$102,959	$62,509	$97,440

Building, Plumbing, Electrical, Mechanical Permit Fees	$10,935	$407,176	$266,374	$370,243
State Fees[3]	$2,570	$90,746	$62,216	$88,488
Zoning Certificate	$360	$360	$460	$360
Community Planning Fee	$519	$18,316	$12,221	$17,382
Technology Fees	$519	$18,934	$13,300	$18,420
Sustainable Development Fee	$622	$21,979	$14,665	$20,858
Subtotal	$23,924	$924,282	$612,168	$873,081
Planning Fees[4]				
Use Permit	$16,780	$19,261	$14,075	$25,939
Design Review	-	$3,684	$3,734	$4,550
Subtotal	$16,780	$22,945	$17,809	$30,489
Impact Fees				
Art	N/A	Provided on site	$88,879	$126,400
Affordable Child Care[5]	N/A	N/A	N/A	N/A
Affordable Housing – Commercial[5]	N/A	N/A	N/A	N/A
Affordable Housing Mitigation	N/A	$1,260,000	$2,720,952	$760,000
SOSIP (Downtown only)	N/A	$231,492	N/A	$189,673
Schools	N/A	$361,252	$218,822	$218,822
Sewer Connection Fee	$3,536	$193,117	$191,590	$182,911
Subtotal	$3,536	$3,305,861	$5,941,195	$2,237,807
Total Project Fees	$44,240	$4,230,143	$6,553,363	$3,110,888
Total Fees Per Unit	$44,240	$39,534	$73,633	$37,937

Source: City of Berkeley, Building and Safety Division, 2022

Notes:

1. *For SF: Zillow Spring 2021 median home price. For MF, based on following analysis: City of Berkeley, City Council Report (April 27, 2021 – Item 31), Attachment 1: Street Level Advisors, "Estimating the Need for Housing Subsidy for the Ashby and North Berkeley BART Stations".*
2. *Assume 350 sq. ft. per parking space.*
3. *State of California fees include: Title 24: Energy Fee; Title 24: Disabled Access Fee; SMIP Fee; and, Building Standards Fee.*
4. *Fees associated with environmental review were not included because infill housing is often exempt from CEQA.*
5. *The Affordable Child Care and Affordable Housing – Commercial fees apply to commercial development, including the commercial component of mixed-use developments. However, the threshold for these fees is net new commercial square footage of 7,500 sq. ft. or more. Neither mixed use project included in the Table meets this threshold; therefore, the fee does not apply.*

Impact Fees

The City of Berkeley charges several impact fees to ensure that new residential development pays its fair share of funding for its impact to the City's services, facilities, and infrastructure. Residential development in Berkeley is subject to the following impact fees:

1. **Public Art.** Public art requirements apply to multifamily residential projects of five or more dwelling units. Projects must include on-site publicly accessible art valued at 1.75 percent of the construction cost. Alternatively, applicants can pay an in-lieu fee equal to 0.80 percent of the construction cost. Projects where at least 60 percent of units are affordable are exempt from public art requirements.
2. **Street, Open Space and Improvement Plan (SOSIP) Fee.** The SOSIP fee applies to the Downtown area only and is intended to ensure that new development contributes to the street and open space needs and demands of additional residents and businesses. The fee applies to all development greater than 1,000 square feet and is calculated at $2.23 per square foot of new residential use.
3. **Affordable Housing Mitigation Fee (AHMF).** As previously discussed, projects can reduce or eliminate their AHMF obligation by providing up to 20 percent affordable units within the project.

In addition to the fees listed above, Berkeley has an Affordable Child Care fee and Affordable Housing Linkage fee which apply to commercial development. These fees also apply to the commercial portions for mixed-use projects.

As part of ongoing efforts to improve and consolidate the City's affordable housing requirements, amendments to impose on-site affordable housing requirements with an in-lieu fee alternative (rather than a mitigation fee) are proposed for both rental and ownership projects. Additionally, changing the fee from a per unit basis to a per square foot basis is proposed. See also HP-3 Citywide Affordable Housing Requirements. This proposal is supported by a 2019 fee comparison analysis conducted by Street Level Advisors, which compared fees amongst Berkeley and a number of other jurisdictions. The study also compared Berkeley's fees as they applied to various housing products (i.e., microunit projects versus large units). One notable finding was that projects consisting of higher density microunits were paying a significantly higher proportion of total construction costs in fees when compared to a lower density project with the same square footage. Changing the affordable housing in-lieu fee to a per square foot fee basis should help to address this issue. Initially, the fee is proposed to be set at $45 per gross residential square foot and would be adjusted annually based on change to an established index, such as the California Construction Cost Index. This change is anticipated to be considered by the City Council for adoption in Summer 2022.

In addition to City fees, fees are charged by outside agencies that provide services within Berkeley, including school fees charged by the Berkeley Unified School District and sewer connection fees charged by the East Bay Municipal Utility District. The City of Berkeley does not have control over the fees charged by outside agencies.

4.1.7 BUILDING CODES AND ENFORCEMENT

The City of Berkeley's Building and Safety and Code Enforcement Divisions is adopting the 2022 California Building Standards Code together with local amendments with an effective date of January 1, 2023. When development plans are submitted for plan check, they are reviewed by the Building

and Safety Division for compliance with the CBC. Inspections at various milestones throughout project construction ensure that the project is built according to the approved plans.

The City has adopted several local amendments to the CBC. Most notably, the City has incorporated additional restrictions for structures within the City's designated fire hazard zones, including limitations on roofing materials, requirements for spark arrestors on appliances using solid fuel, and undergrounding of utilities. While these requirements may add to the cost of construction of residential units, they are necessary to help mitigate the risk of damage by wildfire in these areas.

Building code enforcement is handled primarily on a complaint-basis by building inspectors; neighborhood complaints are handled by the City's Code Enforcement staff. In addition, housing inspectors respond to housing code complaints initiated by Berkeley tenants or by other City programs; however, if substandard conditions pose an immediate threat to the health and safety of the tenant, they are referred to the City's Building Official for immediate follow up. City policy is to resolve residential code violations without displacing residents whenever possible; however, when tenants must move, the Municipal Code requires the owner to provide relocation assistance.

In accordance with State law, the City also enforces statutory and code restrictions related to Fire Protection Plans and vegetation management.

4.1.8 DEVELOPMENT REVIEW TRANSPARENCY

The City of Berkeley strives to be transparent in its development review process by providing as much information as possible related to the City's regulations, processes, procedures, and fees on the City website. The Municipal Code (including Zoning Ordinance), application forms, fee schedules, and other information are all readily available for viewing on the website.

The City uses the Accela permitting system, which facilitates not only internal routing and plan check review, but also has an externally facing Accela Citizen Access (ACA) portal where applicants can submit online and community members can search for project status and download project materials and correspondences. The City's Building Eye interactive mapping page links to Accela building and planning permit data to show the spatial location of recent projects.

Table 4.11: Development Information Provided on Berkeley's Website

Information	Link
General Plan	https://berkeleyca.gov/your-government/our-work/adopted-plans/general-plan
Zoning Ordinance	https://berkeley.municipal.codes/BMC/23
Zoning Map	https://berkeleyca.gov/city-services/community-gis-portal?config=config_PlanningandProperty.json
Forms / Applications	https://berkeleyca.gov/construction-development/permits-design-parameters/permit-types/permit-forms
Planning Fee Schedule	https://berkeleyca.gov/sites/default/files/2022-02/Fee%20Schedule%20Residential%202013.pdf
Other Adopted Plans	https://berkeleyca.gov/construction-development/land-use-development/general-plan-and-area-plans

Accela Citizen Access	https://aca.cityofberkeley.info/CitizenAccess/Welcome.aspx
Building Eye	https://berkeley.buildingeye.com/

4.1.9 ON- AND OFF-SITE IMPROVEMENTS

Berkeley is a highly urbanized community where most on- and off-site improvements are already in place, such as sewer, water, and utility lines. Typical on- and off-site improvements which may be required for new development on infill sites include improvements to the adjacent traffic signals and sidewalks and sanitary sewer and storm water connections. In cases where water or wastewater infrastructure may need to be enlarged or repaired to accommodate new construction, developers are responsible for paying the direct costs of improvements. Although requirements for on- and off-site improvements do add to the overall cost of development, they are necessary to ensure provision of vital infrastructure services to residents. Based on the recent proposals submitted and entitled citywide for a range of housing types—see Figure 5.1: Residential Development – Entitlements and Buildings Permits (2018-2021)—the City's site improvement requirements do not create an undue constraint on development.

4.2 NON-GOVERNMENTAL CONSTRAINTS

Non-governmental constraints include those caused by market conditions, environmental hazards and limitations, and infrastructure operated by outside agencies.

4.2.1 INFRASTRUCTURE CONSTRAINTS

The availability of infrastructure and services to meet new demands created by new residential development is another potential constraint to housing development. Although Berkeley is highly urbanized with most of the necessary infrastructure in place, increases in demand along with capacity and supply factors are monitored and analyzed to ensure adequate provision of services in the future.

The East Bay Municipal Utility District (EBMUD) provides water and wastewater treatment for all properties located within Berkeley. The primary water source for the EBMUD water system is the Mokelumne River and the Mokelumne Aqueduct conveys this water to local storage and treatment facilities in the EBMUD service area. EBMUD completed development of a revised Water Supply Management Program (WSMP) 2040 in April 2012[4], which is the District's plan for providing water to its customers through 2040. According to the WSMP, EBMUD's water supplies are estimated to be sufficient during the planning period (2010-2040) in normal and single dry years. The WSMP 2040 emphasizes maximum conservation and recycling, with a total of 50 mgd of future supply to be

[4] East Bay Municipal Utility District, Water Supply Management Program 2040. https://www.ebmud.com/water/about-your-water/water-supply/water-supply-management-program-2040

provided from those two strategies. EBMUD's Urban Water Management Plan 2020 (UWMP)[5] concludes that EBMUD has, and will have, adequate water supplies to serve existing and projected demand during normal years, and may require significant customer water use reductions and supplementing supplies—which are in the planning phases—during multi-year droughts. While the number of accounts within EBMUD's service area has increased steadily since 1970, the average daily water demand remains relatively stable outside of drought periods, and dropped significantly due to rationing during drought periods.

In addition, EBMUD's 2020 Water Shortage Contingency Plan[6] provides an analysis of water demand, including water supplies for fire suppression, and supplies over the next 30 years. While the analysis is for EBMUD's entire service area and does not provide a breakdown for the City of Berkeley, it provides helpful information on the availability of water through the 2023-2031 planning period. According to the Plan, water demand for the service area was 181 million gallons per day (MGD) in 2020. The total projected demand for EBMUD's service area is 190 MGD in 2030 and 194 MGD in 2035. Based on the Base Condition Scenario analyzed, EBMUD will have sufficient supply to meet demand over this time period.

For wastewater treatment, Berkeley is within EBMUD's Special District No. 1 and is served by EBMUD's largest wastewater treatment plant which is located in Oakland. According to EBMUD's 2020 Urban Water Management Plan[7], wastewater treatment demand for Special District No. 1 is projected to be 56 MGD in 2030 and 58 MGD in 2035, well below the treatment plant's capacity of 168 MGD. Development under the proposed Housing Element period is estimated to generate 765,688 gallons of wastewater per day. This will be within the remaining capacity of EBMUD's Main Wastewater Treatment Plant (MWWTP) and therefore the plant's existing wastewater treatment capacity would be sufficient to accommodate the anticipated residential development.

While adequate water supply and wastewater treatment capacity is available for the 2023-2031 planning cycle, SB 1087 (2006) further prioritizes the development of affordable housing by requiring service providers to grant priority to development that includes housing affordable to lower income households.

Pacific Gas & Electric (PG&E) provides electrical and gas service for the City. New construction in Berkeley is required to be designed without natural gas infrastructure per the City's Natural Gas Prohibition adopted in 2019. As of Jan 1, 2020, the State of California began requiring solar on newly constructed low-rise residential buildings (single family homes, duplexes, and townhouses of 3 stories or less, including ADUs) through the 2019 California Building Standards Energy Code (also known as the Energy Code or Title 24, Part 6).

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[5] East Bay Municipal Utility District, Urban Water Management Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan

[6] East Bay Municipal Utility District, Water Shortage Contingency Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/

[7] East Bay Municipal Utility District, Urban Water Management Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/

In addition, Berkeley adopted local amendments (also known as a reach code) to the Energy Code which requires the installation of solar PV systems on the "solar ready zone" required by the Energy Code. As a result, Berkeley also currently requires solar PV systems on newly constructed hotel/motels and high-rise multifamily buildings with 10 habitable stories or fewer, and nonresidential buildings with 3 habitable stories or fewer. These requirements also have exceptions as described in Title 24, Part 6, Section 110.10. Berkeley's adoption of these solar PV system requirements is in the reach code, Berkeley Energy Code, BMC Chapter 19.36.

Building codes are updated every three years, with increasing energy efficiency requirements. The 2022 Energy Code will expand solar and introduce battery storage standards to new high-rise multifamily (apartments and condos).

4.2.2 ENVIRONMENTAL CONSTRAINTS

Geologists warn repeatedly of the high risk of a major earthquake in the San Francisco Bay Area, including the northern section of the Hayward Fault that runs through the Berkeley Hills east of the University of California. The effects of a strong earthquake along any portion of the Hayward fault would severely affect the area. The Housing Element includes policies and programs to mitigate the risk of damage to existing units (see Seismic Preparedness Programs). The Berkeley Hillside area is the most vulnerable to seismic impacts and landslides. However, no multifamily development is currently permitted in this area and the amount of vacant land is limited; therefore, seismic hazards are not a significant constraint to development in the Hillside area. In addition, portions of the ground along Berkeley's western edge, including west of the railroad tracks, could liquefy in a major quake. Additionally, all new development, including single family and multifamily units, are subject to the stringent requirements of the CBC related to seismic safety.

Some areas of the City (near the waterfront and near Codornices Creek) are within the 100-year floodplain. Chapter 17.12 of the Berkeley Municipal Code contains the City's Flood Zone Development Ordinance, which complies with FEMA flood plain management requirements. None of the areas within the 100-year floodplain are zoned for high density residential development; therefore, flooding is not a significant constraint to residential development in the City.

Fires are a significant threat in the wildland urban interface (WUI) in the hillside communities along the City's eastern border. The City has implemented a comprehensive strategy[8] to mitigate Berkeley's WUI fire hazard, which includes annual property inspections, more restrictive local building code amendments, vegetation management and defensible space, improvement of access and evacuation routes, and infrastructure improvements to support firefighting efforts.

Two areas of the City have particular environmental or physical constraints which make them unfeasible for new housing development. The waterfront area west of Interstate 80 has been designated for open space and low-density waterfront-oriented commercial development. Housing

[8] City of Berkeley, 2019 Local Hazard Mitigation Plan. https://berkeleyca.gov/safety-health/disaster-preparedness/local-hazard-mitigation-plan

development is not environmentally feasible in this area due to a combination of environmental sensitivity and seismic/soil stability problems in an area composed mostly of landfill materials.

The Panoramic Hill area, designated as the Environmental Safety-Residential District (ES-R) on the Zoning Map, has significant constraints due to its proximity to the Hayward Fault and vegetated wildlands, limited vehicular access, inadequate water pressure, and steep slopes. After a two-year moratorium on construction, in 2010 the City passed an ordinance prohibiting any new residential units in this district until the City Council has adopted a specific plan in compliance with all applicable law that shows the proposed distribution, location, and extent of land uses in the ES-R zone and the location and extent of the public facilities and services required to serve the land uses described in the Panoramic Hill Specific Plan (the Plan). There is no specified timeline for development of the Plan. However, there are only 14 vacant lots affected by the building prohibition, a negligible percentage of housing production opportunities citywide.

The City of Berkeley is a highly urbanized community. The majority of sites included in the Housing Element sites inventory are infill sites. Existing uses on site are also consistent with the trend of redevelopment into residential and mixed use projects. In selecting sites to be included in the inventory, locations with site design constraints such as irregular shapes or utility easements were eliminated, or only included if opportunities for lot consolidation exist to create a buildable site.

No major environmental conditions that would preclude redevelopment were identified. As mentioned earlier, all residential development and retrofits, including identified sites, within existing seismic zones would be required to meet the stringent seismic building codes. In addition, the City implements, and supports, a number of programs to address seismic preparedness (see Program 22 -Seismic Safety and Preparedness Programs).

In addition, redevelopment of gas stations into other uses has proven to be a trend as fuel efficiency and prevalence of electric/hybrid vehicles has continued to impact the financial viability of older gas stations. One example is 2176 Kittridge Street, which received its entitlement in 2020 and is currently under construction to redevelop, in part, a one-story former gas station, carwash, and convenience store into a mixed use building with 165 units. Another example is 3000 Shattuck, also an existing gas station and smog inspection site, where the City received an expanded permit application in 2022 to increase from the previous 2017 entitlement for 23 units to a mixed-use building with 156 new units utilizing a 50% State Density Bonus. The need for remediation does not usually constrain their redevelopment.

4.2.3 MARKET CONSTRAINTS

Cost and Availability of Land

The cost of land is a significant contributor to the overall cost of housing. Land values fluctuate with market conditions and have generally been increasing since the Great Recession, and substantially increasing since 2012. The City of Berkeley has little vacant land, particularly land that is appropriate for higher density development. An informal survey of vacant land listed for sale on Zillow and Loopnet in January 2022 found three vacant lots for sale within hillside areas of east Berkeley at a price per square foot ranging between $30 to $40. Due to the physical constraints of this area, these

lots would not be appropriate for multi-family development. Vacant lots within higher density areas of the City are very rare and are sometimes advertised with approved entitlements, adding to their list price. The majority of sites in areas zoned for high density development are infill sites that may have existing structures, further adding to the cost of development. For example, one 0.24-acre lot with an existing triplex is entitled for 11 condominium units and listed for $190 per square foot (1915 Berryman St.). Another listing for a 0.3-acre vacant lot indicates that it is in the entitlement process for 66-units and has a list price of $420 per square foot (1201 San Pablo Ave.). As shown in Appendix C: Sites Inventory, lot consolidation and infill small lot development at high density is the primary strategy for housing development.

The cost per square foot of land varies greatly in the City and lots located in denser areas, with more development potential, can cost significantly more. However, the per-unit land cost is directly impacted by density. Higher density allows the cost of land to be spread across more units and ultimately reduces the per unit cost. While land costs are high, the densities permitted in the City's high density residential and commercial districts allow a developer to distribute this cost amongst a greater number of units.

Construction Costs

The cost of construction, including labor and materials, has a significant impact on the overall cost of new housing units and can be a significant constraint to development. According to a report by the Terner Center for Housing Innovation[9], construction costs for apartment buildings in the Bay Area are the highest in the State and have increased more dramatically than costs statewide. Construction costs in the Bay Area increased 119 percent between 2008 and 2018, compared to an increase of 25 percent statewide. According to the Report, construction costs for apartment buildings in the Bay Area averaged $380 per square foot in 2018, compared to about $225 per square foot statewide. Higher wages for construction related jobs in the Bay Area, along with a lack of construction workers that can afford to live in the region due to the high cost of living, may contribute to higher costs in the region.

The Terner Center Report also found that construction costs are an average of $48 per square foot higher for affordable housing projects, when compared to mixed affordability and market rate projects, likely due to prevailing wage, local hire, and other requirements.

Timing

Many factors outside of the local jurisdiction's control can constrain the timing between project approval and when the developer requests building permits. Potential reasons for a delay between these milestones include inability to secure financing for construction or availability of design professionals to complete construction documents or make corrections. For projects with two or

[9] Raetz, H., Forscher, T., Kneebone, E., & Reid, C. (2020). (rep.). The Hard Costs of Construction: Recent Trends in Labor and Materials Costs for Apartment Buildings in California. Berkeley, CA: University of California.

more units approved over the previous planning cycle, the average time between project entitlement and building permit issuance was 604 days. For larger projects, the average is about three years.

Based on this average time lapse, the City's strategy for meeting its Regional Housing Needs Assessment (RHNA) assumes only projects entitled since 2018 would proceed to issuing building permits (see Appendix C: Sites Inventory). Older entitlements are likely to require resubmittal sometime in the future with product types that would more appropriately reflect the current market conditions. Monitoring measures will be put into place to assess development progress throughout the 6th cycle – see Program 36 -Adequate Sites for RHNA and Monitoring.

Density

In some regions, market factors such as the demand for a single-family product or larger high-end condominiums can lead to properties being developed below the maximum allowable density. However, due to high land and construction costs in Berkeley, paired with 20 percent inclusionary requirements, projects are typically developed at high densities and density bonuses are common. As mentioned previously, over 55 percent of applications under review and 85 percent of anticipated pipeline (pre-application) projects currently utilize State Density Bonus. In addition, none of Berkeley's higher density residential districts (R-3, R-4, R-5, R-S, R-SMU) have a maximum density standard. Only one commercial district has a maximum density standard: C-AC has maximum densities of 120 to 250 units per acre depending on affordability levels.

Developments are largely regulated by form, which ensures that density itself is not a constraint to development. Actual base densities (subtracting out density bonus units) from projects entitled in the current planning period (2015-2023) largely exceeded the density assumptions made in the 5th cycle RHNA by zoning district. For example, in the Downtown Plan Area (C-DMU zone), Southside Plan Area (C-T, R-SMU), and Commercial Corridors (C-SA, C-C, C-U, C-W), the average base densities of actual projects were all higher than assumed in the 5th cycle.

Where actual development trends demonstrated a lower density than previously assumed, primarily in neighborhood commercial districts (C-N, C-E, C-NS, C-SO), the 6th cycle Housing Element reduces the assumed density to reflect a lower realistic yield. Sites in the neighborhood commercial districts are typically smaller and under separate ownership, and therefore more constrained. In addition, projects in neighborhood commercial districts are typically infill or smaller additions to existing structures, which would characteristically yield a lower density.

For projects located in high density residential and commercial zones entitled over the previous planning cycle, the average density was 183 units per acre. As mentioned in Section 4.1.2 Zoning Ordinance (Cumulative Impact), commonly requested waivers and/or concessions include height and setbacks. As a result, the City is in the process of creating multi-unit objective development standards and proposing minimum density standard to ensure adequate baseline capacity to meet RHNA targets and achieve Housing Element compliance (Program 33 -Zoning Code Amendment: Residential). The City is also evaluating zoning and development standards to accommodate housing capacity and growth on transit and commercial corridors, particularly in the highest resource neighborhoods (Program 27 -Priority Development Areas (PDAs), Commercial and Transit Corridors).

Availability of Financing

The City of Berkeley does not vary greatly from other communities with regard to the availability of home financing. The Great Recession and impacts to the housing and mortgage industry had the effect of limiting the availability for real estate loans and increasing the rate of foreclosure for some time.

At present, mortgages are generally available for qualified buyers. Table 4.12 provides information on home mortgage applications for the Oakland-Berkeley-Livermore MSA. In 2020, 69 percent of purchase loan applications were approved and 10 percent were denied. The denial rate was highest for home improvement loans at 33 percent.

In a housing market such as Berkeley's, the down payment requirement may be a greater obstacle to homeownership for many households. With condominium values over $900,000 in Berkeley, a household would need to save $90,000 to provide a 10 percent down payment.

Table 4.12: Home Mortgage Application Data for the Oakland-Berkeley-Livermore MSA/MD (2020)

Loan Type	Total Applications	Percent Approved	Percent Denied	% Withdrawn/ Incomplete
Conventional Purchase	253,916	69%	10%	20%
Government Backed Purchase	18,190	62%	12%	26%
Home Improvement	8,890	51%	33%	16%
Refinance	165,588	69%	9%	22%
Total	446,584	69%	10%	21%

Source: www.ffiec.gov, Home Mortgage Disclosure Act (HMDA) data for Oakland-Berkeley-Livermore MSA/MD, 2020.

5 HOUSING RESOURCES

This chapter summarizes the sites inventory and strategies to meet the RHNA and the City's state policies, including housing programs and measurable actions for implementation.

5.1 SUMMARY OF LAND AVAILABLE FOR HOUSING

5.1.1 REGIONAL HOUSING NEEDS ALLOCATION

The Regional Housing Needs Allocation (RHNA) is a key tool for local governments to plan for anticipated growth. The RHNA quantifies the anticipated need for housing within each jurisdiction for the eight-year period. Communities then determine how they will address this need through the process of updating the Housing Element of the General Plan.

Under state law, regional councils of governments are required to develop housing needs plans for use by local governments in their Housing Element updates. The regional housing needs analysis is derived from the statewide growth forecast, which is then allocated to regions, counties, and cities. The statewide determination is based on population projections produced by the California Department of Finance and the application of specific adjustments to determine the total amount of housing needs for the region. The adjustments are a result of recent legislation that sought to incorporate an estimate of existing housing need by requiring the State Department of Housing and Community Development (HCD) to apply factors related to a target vacancy rate, the rate of overcrowding, and the share of cost-burdened households. The new laws governing the methodology for how HCD calculates the RHND resulted in a significantly higher number of housing units for which the Bay Area must plan compared to previous RHNA cycles. The RHNA for Bay Area jurisdictions was adopted by the Association of Bay Area Governments (ABAG) in December 2021.

The 6th cycle Housing Element for the ABAG region covers an eight-year planning period from January 31, 2023 through January 31, 2031. However, the RHNA uses June 30, 2022 as the baseline for projection. Specifically, the RHNA projection covers from June 30, 2022 through December 15, 2030, an 8.5-year period. For the purpose of assessing adequate sites for RHNA, state law allows jurisdictions to credit units approved, entitled, permitted, and under construction, that are not expected to become available ("finaled") until after June 30, 2022. For the purpose of reporting accomplishments in the Housing Element APR, only permitted units are credited as RHNA accomplishments.

For the 2023-2031 Housing Element, ABAG has assigned the City of Berkeley a RHNA of 8,934 units. This RHNA is divided into four income categories. The sections below assess the City's progress and strategies toward meeting its RHNA. Detailed information is provided in Appendix C to the Housing Element.

Table 5.1: City of Berkeley RHNA for 2023-2031

Berkeley	Extremely /Very Low	Low	Moderate	Above Moderate	Total

RHNA	2,446	1,408	1,416	3,664	8,934
% Total	27.4%	15.8%	15.8%	41.0%	100.0%

The RHNA does not include the extremely low category. It is estimated to be ½ of the very-low-income need, per Government Code §65583.a.1. The total very-low-income RHNA is 2,446; therefore, 1,223 units are designated as extremely-low-income and 1,223 units are designated as very-low-income. However, the sites inventory purposes, no separate accounting is required for the extremely low income category.

Source: ABAG 6th Cycle Final RHNA Allocation Plan, adopted December 2021. Note, ABAG's methodology for calculating the Regional Housing Need Determination (region-wide) included a population adjustment of -169,755 total persons to reflect the Department of Finance projections for persons in dormitories, group homes, institutes, military, etc. that do not require residential housing.

5.1.2 PROJECTED ACCESSORY DWELLING UNITS (ADUS)

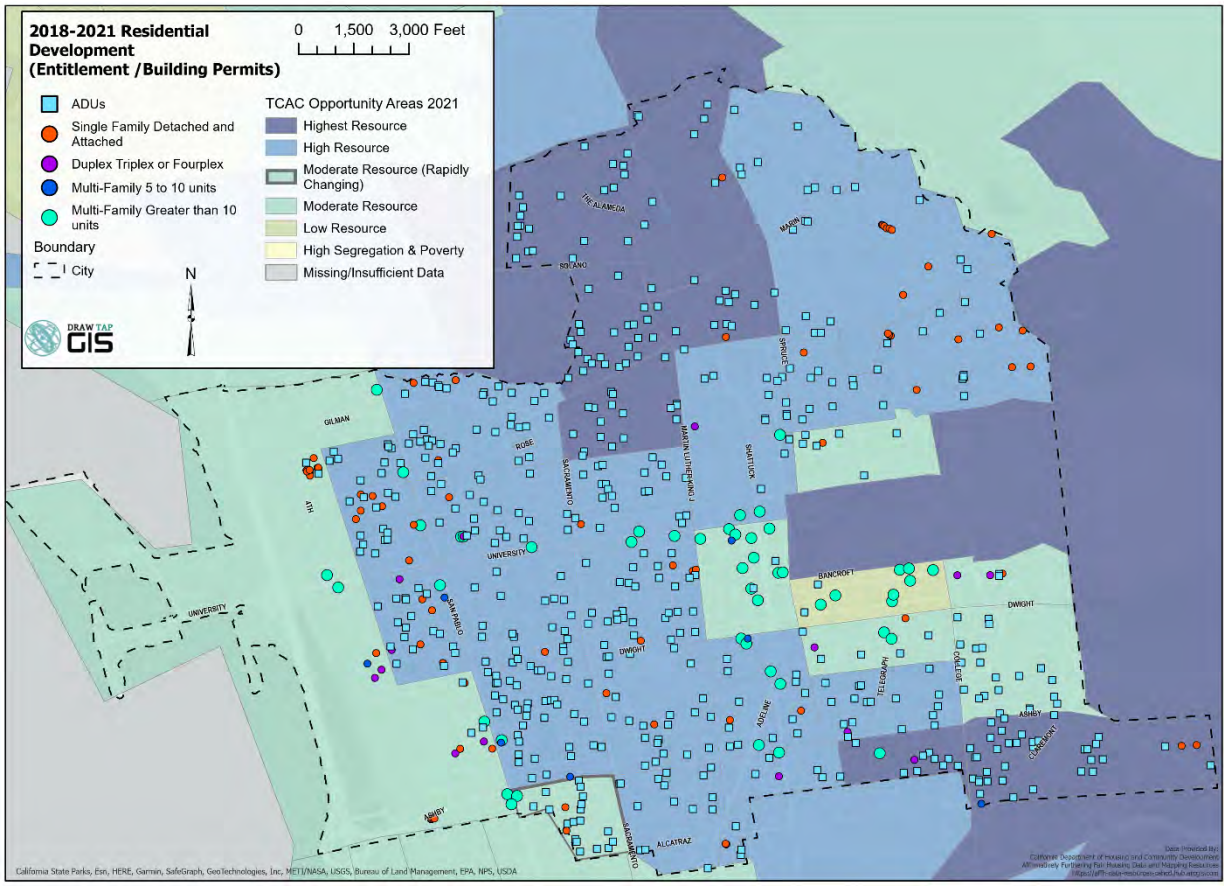
Pursuant to State law, the City may credit potential ADUs to the RHNA requirements by using the trends in ADU construction to estimate new production. Between 2018 and 2021, the City issued 419 building permits ADUs with an average of 105 ADUs per year over this period. Specifically, ADU permit activities accelerated significantly within the last two years.

Figure 5.1 shows approved entitlements and building permits in the City from 2018 to 2021, including ADUs in high resource areas, of which 17 percent of ADU permits were in the Hillside Overlay zone. Of the 419 ADU permits, only one project within the Hillside Overlay (0.2 percent of all ADUs permitted) contained both an ADU and a JADU. In addition, there is no specific prohibition of ADUs in the ES-R district. In 2008, in consideration of urgent life safety issues, the City of Berkeley established that no new dwelling unit of any kind may be established in the ES-R until the City adopts a new specific plan for the area that addresses issues including emergency access, routes of egress, geologic risks, and other risk factors related to the natural environment and public infrastructure (BMC section 23.202.070).

In February 2022, the City revised its ADU ordinance to limit the number of units allowed per lot in the Hillside Overlay District to one ADU or JADU to balance the construction of accessory units with regulating based on the "adequacy of water and sewer service, and the impacts of traffic flow and public safety." (Gov. Code 65852.2) The City will be reassessing its vulnerabilities with a 2024 update to the Local Hazard Mitigation Plan and as part of a comprehensive Safety, Land Use, and Environmental Justice Element update in 2026 (see Program 27 -Priority Development Areas (PDAs), Commercial and Transit Corridors).

Assuming this trend continues, with a 28.5 percent reduction to conservatively account for the City's revised 2022 ADU ordinance in the Hillside Overlay District, the City expects to produce around 75 ADUs per year or 600 ADUs over the eight-year planning period. Based on the ADU rent survey conducted by ABAG, the affordability distribution of ADUs in the region is: 30 percent very low income; 30 percent low income; 30 percent moderate income; and 10 percent above moderate income. Therefore, the 600 ADUs projected for January 2023 through January 2031 can be allocated toward the RHNA as follows: 180 very low income; 180 low income; 180 moderate income; and 60 above moderate income.

Figure 5.1: Residential Development – Entitlements and Buildings Permits (2018-2021)



5.1.3 BART STATION SITES

The City of Berkeley is working collaboratively with the Bay Area Rapid Transit District (BART) to convert surface parking lots at two of the City's three BART stations (Ashby and North Berkeley) into transit-oriented development. The City and BART have signed an MOU on the potential development of these lots and the entities are actively working together to release RFQs for private developers for each station. The BART station RFQ for North Berkeley has been issued and interviews of five developers is underway in October 2022. The Ashby station RFQ will be issued in 2023 when additional development parameters have been defined.

BART's development of these parcels is permitted under AB 2923, which allows BART to enable TOD through land-use zoning on BART-owned property in collaboration with local jurisdictions. Each station can accommodate up to 1,200 units and the expectation is that 35 percent of these units will be affordable and the Very Low and Low income categories. The mechanism holding these units affordable is the City's financing and the Memorandum of Agreement (MOA) between the City and BART approved in June 2022. The MOA includes specific requirements about affordability of the future housing units. See also Program 4 -Housing Trust Fund and Program 28 -BART Station Area Planning. This Housing Element takes a more conservative approach in its estimate for what is

expected to be constructed during the eight-year planning period and assumes 600 units at each station (Table 5.2: BART Station Sites).

Table 5.2: BART Station Sites

Station	Extremely /Very Low	Low	Moderate	Above Moderate	Total
North Berkeley	105	105	0	390	600
Ashby	105	105	0	390	600
Total	210	210	0	780	1,200

5.1.4 LIKELY SITES

While the 6th cycle Housing Element planning period covers from January 31, 2023, through January 31, 2031, the RHNA projection period begins June 30, 2022. Housing units that have been entitled for construction but do not receive a Certificate of Occupancy until after June 30, 2022 can be credited towards the 6th cycle RHNA. In total, the City has approved 2,101 units (133 very low, 166 low, 9 moderate, and 1,793 above-moderate) since 2018 that are expected to be constructed during the 6th Cycle planning period.

The affordability of the units was determined based on the affordability specified on the project proposal as approved by the City. See Appendix C: Sites Inventory for a list of these projects. Of the 2,101 units in the 48 Likely Sites, 13 sites are reused from the 5th Cycle, accounting for a total of 866 anticipated units (79 very low, 33 low, 9 moderate, 745 above moderate).

The City conducted an analysis of 47 permitted projects between 2018 and 2021 and found the average time between entitlement and permit issuance to be approximately three years to accommodate the preparation of construction documents and time needed for securing financing for higher density residential and mixed-use projects.

5.1.5 REMAINING RHNA

Accounting for projected ADUs, units at the Ashby and North Berkeley BART stations, and entitled projects, the City has a remaining RHNA of 5,033 units (1,923 very low income; 852 low income; 1,227 moderate income; and 1,031 above moderate income units). The City must identify adequate sites capacity for this remaining RHNA.

Table 5.3: Remaining RHNA

Station	Extremely / Very Low	Low	Moderate	Above Moderate	Total
RHNA	2,446	1,408	1,416	3,664	8,934
Projected ADUs	180	180	180	60	600
BART Station Sites	210	210	0	780	1,200
Entitled Projects since 2018	133	166	9	1,793	2,101

Subtotal	523	556	189	2,633	3,901
Remaining RHNA	1,923	852	1,227	1,031	5,033

5.1.6 AVAILABILITY OF LAND TO ADDRESS REMAINING RHNA

Government Code Section 65583.2(c) requires that local jurisdictions determine their realistic capacity for new housing growth by means of a parcel-level analysis of land resources with the potential to accommodate residential uses. The analysis of potential to accommodate new housing growth considered physical and regulatory constraints, including lot area and configuration, environmental factors (e.g., slope, sensitive habitat, flood risk), allowable density, existing density, building age, and improvement-to-land ratio among others. In addition, parcels owned by the University of California were not included since college and university student housing may be considered noninstitutional group quarters and not a housing unit for purposes of meeting RHNA, particularly facilities that are not available for rent to non-students.

Prepared with the Infill-First strategy in mind, the housing sites inventory for the 2023-2031 planning period demonstrates that new housing growth in the City of Berkeley over this eight-year period will largely conform to these patterns. The 6th Cycle Sites Inventory is made up of two types of sites:

- **Pipeline Sites.** These pending projects include applications submitted for entitlement or building permit and are currently under review. Pipeline sites also include anticipated projects based on pre-application submittals ("pre-app") and expressed developer interest. Affordability levels reflect proposed project plans to the extent they are known; where affordability levels are unknown at this time, all units have been placed in the above moderate income category.
- **Opportunity Sites.** Include vacant or underutilized sites with near-term potential for residential or mixed-use development, including some sites used in the 5th cycle Housing Element but remain available for development.

Full lists of the sites are available in Appendix C, in Table C-6: Pipeline Sites-Applications Under Review or Anticipated and Table C-10: Opportunity Sites-No Rezone Required

The housing sites inventory includes both vacant and nonvacant (underutilized) land with the potential for additional housing during the 6th Housing Element cycle. The analysis of nonvacant properties included only those properties with realistic potential for additional development or "recycling", in light of:

- Existing uses on the site;
- Prevailing market conditions;
- Recent development trends over the past decade;
- Expressed interests in housing development from property owners or developers; and
- Regulatory and/or other incentives to encourage recycling or intensification of existing development.

The sites inventory assumes that sites between 0.35 acres and 10 acres whose zoning allows 30 units per acre or more are feasible for lower income units. The City of Berkeley has smaller parcel sizes compared to other jurisdictions and affordable housing projects have been developed on sites smaller than 0.5 acre. Appendix C, Table C-8: Affordable Housing Projects on Sites Smaller than 0.5 acre lists some of the affordable housing projects that are on sites smaller than 0.5 acre. Specifically, these projects average to a small lot size of only 0.25 acre. As a conservative assumption, only parcels or sites (groups of parcels with common ownership) that are larger than 0.35 acre are considered adequately sized for lower income housing.

Based on the 2002 General Plan, plans adopted since 2002, objective criteria, and local knowledge used to identify available sites with near-term development potential pursuant to State adequate sites standards, combined with units from pending projects, the City's sites inventory offers capacity for approximately 11,100 units, excluding the two BART sites. This capacity can fully accommodate the City's remaining RHNA of 5,033 units for the 6th cycle without rezoning. Importantly, this excess capacity means the City is also able to satisfy the needs of different income categories, as more fully discussed below.

The City estimated development potential for opportunity sites by calculating the average baseline density (without density bonus) achieved for recently approved, under construction, or completed mixed-use and residential projects by zoning district. A detailed sites inventory and explanation of the methodology and assumptions for estimating the development capacity is provided in Appendix C.

Table 5.4: Summary of 6th Cycle Opportunity Sites to Accommodate Remaining RHNA

Project Status	Units by Income Category				
	Extremely / Very Low	Low	Moderate	Above Moderate	Total
Pipeline Sites: Applications under Review	84	29	11	1,424	1,548
Pipeline Sites: Anticipated Applications (pre-app)	353	113	30	2,567	3,063
Opportunity Sites: Vacant	37	36	36	213	322
Opportunity Sites: Underutilized	1,571	1,557	1,831	1,208	6,167
Total Capacity	2,045	1,735	1,908	5,412	11,100

5.1.7 SUMMARY OF RHNA STRATEGIES

Overall, the City is able to accommodate its RHNA, with a 26 percent buffer for the lower income RHNA and a 48 percent buffer for the moderate income RHNA, and a 68 percent buffer to accommodate the overall RHNA. Identifying a larger buffer in the City's sites inventory ensures that the City is able to comply with SB 166 (Not Net Loss Law) – see also Program 36 -Adequate Sites for RHNA and Monitoring.

While the City is not required to rezone or up-zone to meet its RHNA, as a pro-housing community, the City is pursuing a rezoning project to increase its residential capacity. The rezoning programs are described in Section 5.4 Housing Programs within this chapter.

Table 5.5: Summary of RHNA Strategies

Project Status	Units by Income Category				
	Extremely /Very Low	Low	Moderate	Above Moderate	Total
RHNA	2,446	1,408	1,416	3,664	8,934
Likely Sites	313	346	189	1,853	2,701
ADU Trend	180	180	180	60	600
Entitled Projects	133	166	9	1,793	2,101
Pipeline Sites	647	352	41	4,771	5,811
BART Sites	210	210	---	780	1,200
Applications under Review	84	29	11	1,424	1,548
Anticipated Projects (pre-applications)	353	113	30	2,567	3,063
Opportunity Sites	3,201		1,867	1,421	6,489
High Priority (>0.5 acre)	2,225		338	340	2,903
Medium Priority (0.35-0.5 acre)	976		345	248	1,569
Low Priority (<0.35 acre)	0		1,184	833	2,017
Total Capacity (Likely + Pipeline + Opportunity)	4,859		2,097	8,045	15,001
Surplus	*1,005*		*681*	*4,381*	*6,067*
% Buffer over Remaining Lower Income RHNA	*26%*		*48%*	*120%*	*68%*

AB 725 requires that at least 25 percent of a jurisdiction's moderate and above moderate income RHNA be satisfied on sites that can accommodate at least four units. The City of Berkeley satisfies its RHNA for all income categories primarily through high density residential uses and therefore fully complies with AB 725.

5.1.8 AFFIRMATIVELY FURTHERING FAIR HOUSING (AFFH)

A detailed analysis of the City's fair housing issues and assessment of how the sites inventory meets the criteria for AFFH—including identification of goals and actions—is provided in Appendix E.

Key findings of the sites inventory AFFH analysis include:

- **Income Level.** Approximately 55 percent of all RHNA units are located in LMI tracts where more than 50 percent of households are low or moderate income. A larger proportion of above moderate income units (57.8 percent) and moderate income units (59.7 percent) are in LMI

areas compared to lower income units (49.1 percent), indicating the City's RHNA strategy does not disproportionately place lower income units in LMI areas.

- **Race/Ethnicity**. The City's RHNA strategy reflects the overall composition of Berkeley, including zoning districts, and does not exacerbate existing segregation conditions related to race or ethnicity. Most RHNA units are located in block groups where between 41 percent and 80 percent of the population belongs to a racial or ethnic minority group; approximately 47 percent of Berkeley residents are non-white (see Section 3.2.3 Racial and Ethnic Composition). There are no RHNA units in block groups with racial/ethnic minority populations exceeding 81 percent.
- **Persons with Disabilities.** The City's RHNA strategy distributes units throughout Berkeley, but areas where higher density housing is feasible, especially West and South Berkeley, tend to have larger populations of persons with disabilities. Of the 33 tracts in the City, 13 (39.4 percent) have populations of persons with disabilities exceeding 10 percent. Topographically, South and West Berkeley is flatter compared to the Northeast and Eastern parts of the City, and also is in proximity to several major transit lines and street corridors, which supports accessibility for persons with disabilities.
- **Familial Status.** Approximately 48 percent of income units are in tracts where 60 to 80 percent of children live in married couple households compared to only 31 percent of moderate income units and 43 percent of above moderate income units. Another 37 percent of lower income units, 48 percent of moderate income units, and 39 percent of above moderate income units are in tracts where only 40 to 60 percent of children live in married couple households, since tracts with lower populations of children tend to correlate with zoning districts where high density housing is more feasible. In Berkeley's RHNA sites inventory, there are also more lower income units in tracts where more than 40 percent of children live in single-parent female-headed households. The addition of housing units in these tracts, specifically lower income units, will increase housing opportunity for current residents.

Figure 5.2: Residential Sites Inventory

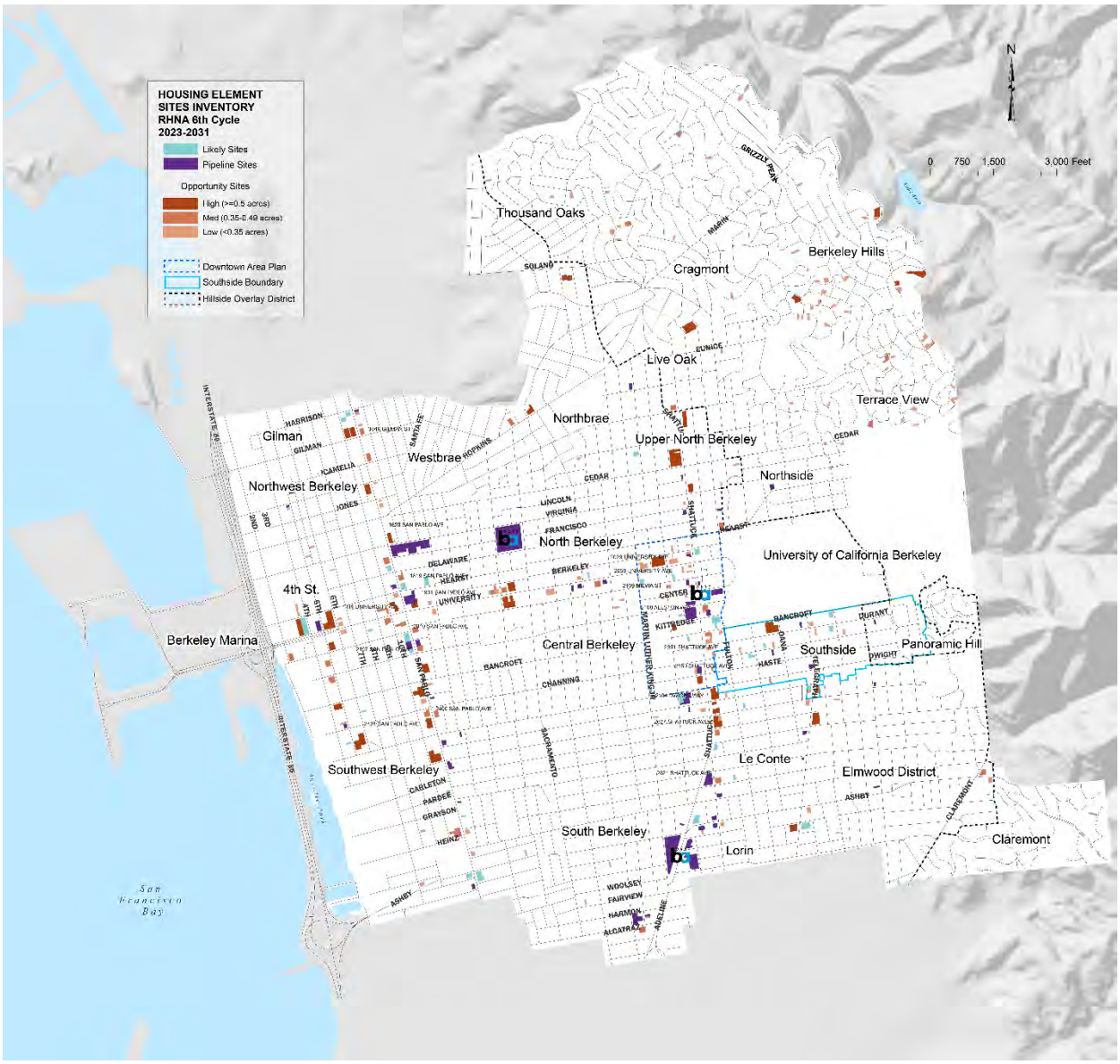


Figure 5.2: Residential Sites Inventory is a map showing the parcels identified for Likely, Pipeline, and Opportunity Sites.

The Likely Sites are shaded blue and represent projects that have been entitled since 2018. A table with a list of the Likely Sites is available in a table format in Appendix C, Table C.3 Likely Sites - Entitled Projects since 2018.

The Pipeline Sites are shaded purple and represent development applications which are currently under review or anticipated based on pre-application submittals. A table with a list of the Pipeline Sites is available in a table format in Appendix C, Table C-6 Pipeline Sites - Applications Under Review or Anticipated. For purposes of the sites inventory analysis, the two BART sites are considered "Pipeline Sites" because the City and BART have signed a Memorandum of Understanding (MOU) agreement on the development of these lots and are actively working together to select potential developer teams for the two sites.

The Opportunity Sites are shaded red, with darker red for sites in categories High (greater than or equal to 0.5 acres), medium red for Medium (0.25 to 0.49 acres), and light red for Low (less than 0.35 acres). A table with the list of the opportunity sites is available in a table format in Appendix C, Table C-10: Opportunity Sites – No Rezone Required.

5.2 RESOURCES FOR HOUSING PROTECTION, PRESERVATION, AND PRODUCTION

5.2.1 RENT STABILIZATION BOARD

The Berkeley voters passed the Rent Stabilization and Good Cause for Eviction Ordinance in 1980 (Berkeley Municipal Code, Chapter 13.76). In 1982, the voters passed a Charter Amendment establishing an elected Rent Stabilization Board (Berkeley Charter, Article XVII, section 121). From 1980 to 1998 rents in units built prior to 1980 were controlled permanently, so that the rent did not change when a tenant moved out and new tenants moved in. Since the Costa-Hawkins Rental Housing Act went into full effect in California in 1999, landlords have been able to establish initial rents for new tenancies at whatever price the market will bear (Civil Code sections 1954.50 through 1954.535). Under the law, the initial rent for new tenancies is not controlled but subsequent rent increases are controlled. This system is usually called "vacancy decontrol" although it is really "vacancy decontrol, recontrol." The law also removed single-unit properties first re-rented after 1996 from rent control, including single-family houses and most condominiums.

The Rent Stabilization and Good Cause for Eviction Ordinance provides a stable housing environment for tenants while assuring that landlords are able to receive a fair return on their investment. It assures tenants in rent stabilized units that once they move in their rents will not drastically increase, a situation similar to that of homeowners who are protected from rapid cost increases by the state property tax limitation and fixed-rate mortgages. Annual rent increases (the Annual General Adjustment or AGA) are set at 65 percent of the increase in the Consumer Price Index and landlords can apply for individual rent adjustments if the increases they receive through tenant turnover and the AGA are not sufficient to provide them with the legally required rate of return. The ordinance also protects tenants from arbitrary evictions through a system of eviction controls and twelve defined just causes for eviction. Good cause for eviction requirements apply to virtually all rental units, including those built after 1980, condominiums and single-family houses.

The good cause for eviction provisions of the ordinance govern nearly the entirety of the approximately 27,000 rental units in Berkeley, while the rent stabilization provisions apply to approximately 21,000 units in multi-family properties built before 1980. About 19,000 of these units are required to register at any given time and the other 2,000 units are temporarily exempt. The most common reason for temporary exemption is that the unit is rented to a tenant who participates in either the Section 8 Portable Voucher or Shelter Plus Care programs. Permanently exempt units include those built after 1980 and most single-family and condominium units.

Vacancy decontrol took effect during the "dot.com" boom in the mid-90s, which rapidly increased rents and home prices throughout the Bay Area and peaked in 2001. From 2001 to 2004 market rents in Berkeley declined somewhat and then began to rise again. By 2008 the market rents for registered units in Berkeley had increased beyond the 2001 peak levels. After the 2008 financial crisis, market rents decreased slightly and then remained stable through 2011. Beginning in 2012, rents in Berkeley began a steady increase, making new highs each year from 2012 to 2018. Overall, market rents for units subject to rent control increased by over 70% in units with between 0-3

bedrooms. Rents in Berkeley began to show signs of stabilizing in 2019, and then declined in 2020 by between 1.45 percent and 6 percent, due to the fallout from the Covid-19 pandemic and associated shelter in place orders.

Approximately 90 percent of registered rental units have had a new tenancy since 1999 while 10 percent have long-term tenants. The approximately 1,800 tenant households that have remained in place since the beginning of vacancy decontrol are usually paying a rent that is significantly below current market rates.

The Rent Board engages in public education about the importance of the rent stabilization and good cause for eviction ordinance and works to educate both tenants and landlords about their respective rights and responsibilities under the law. Rent Board counselors typically provide information to landlords and tenants at between 40 to 50 different events each year, but outreach events have been reduced to online webinars due to Covid-19 safety concerns. Over the course of the year Rent Board counselors generally had more client contacts with property owners and property managers than with tenants.

The Rent Board monitors foreclosures to ensure tenants are notified that they do not have to move simply because a financial institution has taken over ownership of the property and works with owners to help them stave off foreclosure by informing the lending institution that they will not be able to simply evict all the tenants and vacate the property but rather will need to take on the responsibility of property management. In addition, SB 1079, signed into law in 2020 and funded through the state's Foreclosure Intervention and Housing Preservation Program, provides loans to tenants, nonprofits and community land trusts to purchase foreclosed properties. The Rent Board monitors all filings by owners evicting tenants on the grounds that they are going out of the rental business to ensure that the owners make the required relocation payments and follow all the notice requirements of state and local laws.

The Berkeley City Council adopted the Ronald V. Dellums Fair Chance Access to Housing Ordinance (BMC Chapter 13.106) in 2020. The Ordinance prohibits housing providers from advertising, directly or indirectly, that they will not consider applicants with criminal histories except as required by state or federal law. Rent Board staff implements the ordinance on behalf of the City by counseling landlords and tenants on the Ordinance, working with the City Attorney's Office to draft administrative regulations related to the implementation of the hearings process, including an administrative review process, and holding full evidentiary hearings.

In 2020, Berkeley voters passed Measure MM which required owners register rental units that are partially covered by the Rent Ordinance (not subject to rent control but covered by good cause for eviction protections and security deposit interest provisions). Registration allows the Rent Board staff the ability to provide more comprehensive housing services to both tenants and landlords. As of March 2022, approximately 4,750 rental units have registered due to Measure MM.

5.2.2 CITY HOUSING TRUST FUND

The City of Berkeley also has a number of funding sources available to implement its housing programs, including the preservation of housing units at risk of converting to market-rate housing.

The City of Berkeley's Housing Trust Fund (HTF) was established in 1990. The purpose of the HTF is to support the creation and preservation of affordable housing in Berkeley. Federal funds such as HOME Investment Partnerships Program (HOME) and the Community Development Block Grant (CDBG) are combined in the HTF with local funds such as revenue from mitigation fees on commercial development (Resolution 66,617-N.S.), new market rate housing (BMC 22.20.065 Affordable Housing Mitigation Fee and BMC 23C.12 Inclusionary Housing Ordinance), and condominium conversions (BMC 21.28). The City Council may approve additional sources of funding for the HTF at any time, such as the 2018 Measure O bond measure, or state and federal sources. The Council may allocate general funds such as those generated through Measure U1. The City's Housing Advisory Commission (HAC) advises the City Council on HTF allocations.

A significant source of the HTF is the City's Affordable Housing Mitigation Fee. As of March 2022, the fee is set at $36,746 per unit if paid at building permit issuance, or $39,746 per unit if paid at Certificate of Occupancy. The City also allocates a portion of the HOME funds to the HTF it receives annually as an entitlement jurisdiction under HUD's Community Planning and Development programs.

As of March 2022, the City has $108.8M reserved or in contract for affordable housing projects, representing over 700 units in 19 projects. The City is committed to continuing to support projects in predevelopment and future development opportunities as additional HTF revenue becomes available.

5.2.3 SB 2 PLANNING GRANT AND PERMANENT LOCAL HOUSING ALLOCATION

In 2017, Governor Brown signed a 15-bill housing package aimed at addressing the State's housing shortage and high housing costs. Specifically, it included the Building Homes and Jobs Act (SB 2, 2017), which establishes a $75 recording fee on real estate documents to increase the supply of affordable homes in California. Because the number of real estate transactions recorded in each county will vary from year to year, the revenues collected will fluctuate.

The first year of SB 2 funds are available as planning grants to local jurisdictions. Berkeley received $310,000 for planning efforts to facilitate housing production. This funding is primarily used to develop zoning standards for both Ashby and North Berkeley BART stations for transit-oriented development.

For the second year and onward, 70 percent of the SB 2 funding will be allocated to local governments for affordable housing purposes. A large portion of subsequent years' allocation will be distributed using the same formula used to allocate CDBG funds. SB2 PLHA funds can be used to:

- Increase the supply of housing for households at or below 60 percent of AMI;
- Increase assistance to affordable owner occupied workforce housing;
- Assist persons experiencing or at risk of homelessness;
- Facilitate housing affordability, particularly for lower and moderate income households;

- Promote projects and programs to meet the local government's unmet share of regional housing needs allocation.

The City of Berkeley adopted a five-year PLHA allocation plan as required by HCD in July 2020. The City received a PLHA allocation of $1,293,584 in year-one (FY2021) and will receive an allocation of $2,010,631 in year-two (FY2022). The City's PLHA allocation over the next five years is projected at $7,761,504. However, initial projections for the transaction fees were created by the State prior to COVID-19. The actual amounts in years three through five may be lower and therefore result in different, possibly lower, disbursements. In December 2021, the City amended its allocation plan to support a Project Home Key homeless housing acquisition project in Year 2. The plan for years three to five will support new affordable housing construction initiatives via two avenues: 1) operating subsidies for homeless households and 2) supplementing the Housing Trust Fund program.

5.2.4 PROJECT HOMEKEY

HCD offers grant funding for local entities to support a variety of housing types for persons experiencing homelessness or who are at risk of homelessness. For FY 2021-2022, HCD set aside $1.4 billion in grant funding and is accepting applications on a rolling basis until funds are exhausted or May 2, 2022, whichever comes first. The various housing types it supports include multifamily and single-family housing, hostels, motels, hotels, adult residential facilities, and manufactured housing. The funding can also support adaptive reuse of projects into permanent or interim housing for this population. The City is pursuing the acquisition of the Golden Bear Inn for Project HomeKey.

5.2.5 COVID-RELATED FUNDING

Due to COVID, the City received additional funding from HUD to address the impacts of the pandemic. Specifically, the City received $2.5 million in CDBG-CV and $6.7 million in ESG-CV (Emergency Solutions Grant) in FY 2020. An additional $2.7 million in American Rescue Plan (ARP) funds was also made available to the City in FY 2021. The funds were used to respond to and address economic effects of COVID-19, including assistance to households and small businesses, as well as balance budget deficits.

5.3 PUBLIC/PRIVATE PARTNERSHIPS

Public/private partnerships are arrangements between a public agency and a private-sector organization, and can be used to finance, build, and operate projects that serve a public good—such as the development and management of affordable housing. The City of Berkeley partners with several organizations to provide and administer a variety of housing programs, including rental vouchers, energy incentives, fair housing support, and legal services.

5.3.1 BERKELEY HOUSING AUTHORITY

Established in 1966, BHA provides rental assistance to a total of 1,939 low-income households units through the Section 8 and Moderate Rehabilitation Program. BHA administers two basic types of

housing programs: tenant-based assistance (that is, Housing Choice Voucher Program (Section 8) and project-based assistance.

5.3.2 AFFORDABLE HOUSING BERKELEY

The BHA Board has established a non-profit entity - Affordable Housing Berkeley, Inc. (AHB) – as the development arm of BHA to produce affordable housing units in Berkeley. BHA's former low income public housing properties were sold to a developer in 2014. The proceeds from the sale will be used by AHB Inc. to develop the new deed-restricted units. The BHA board also serves as the Board of AHB.

5.3.3 BAY AREA REGIONAL ENERGY NETWORK

The Bay Area Regional Energy Network (BayREN) is a coalition of the Bay Area's nine counties — a network of local governments partnering to promote resource efficiency at the regional level, focusing on energy, water and greenhouse gas reduction. BayREN provides technical assistance, rebates, financing for energy efficiency and electrification projects. These BayREN resources are recommended by the City's Building Emissions Saving Ordinance (BESO) assessments to support voluntary upgrades.

5.3.4 EDEN COUNCIL FOR HOPE AND OPPORTUNITY (ECHO)

ECHO was established by community volunteers dedicated to equal housing opportunities and the prevention and elimination of homelessness. Established as a fair housing agency, ECHO has expanded to a full-service housing counseling organization providing services to very low and moderate income clients. The City of Berkeley contracts with ECHO Housing to provide fair housing services in the community.

5.3.5 EAST BAY COMMUNITY LAW CENTER (EBCLC)

EBCLC seeks to promote justice by providing:

- Legal services and policy advocacy that are responsive to the needs of low income communities; and
- Law training that prepares future attorneys to be skilled and principled advocates who are committed to addressing the causes and conditions of racial and economic injustice and poverty.

The City partners with EBCLC to provide no cost legal advocacy help to low income tenants.

5.4 HOUSING PROGRAMS

The City of Berkeley is committed to implementing the goals and policies in Chapter 2, addressing the housing needs identified in Chapter 3, and responding to the constraints in Chapter 4 through the housing programs listed in this section to facilitate the development of housing to meet RHNA.

The following programs have been developed through an extensive public engagement process and in concert with staff from departments and divisions throughout the city in order to identify specific programs that would realistically facilitate implementation of the City's goals and achieve the stated policies. Many of the housing programs reflect City Council referrals that are funded and/or staffed and are already included in the future workplans for departments.

While the City is not required to rezone or up-zone to meet its RHNA (described in Section 5.1 Summary of Land Available for Housing and Appendix C Sites Inventory), as a pro-housing community, the City is pursuing several rezoning programs to increase its residential capacity.

Program 1 - Affordable Housing Berkeley

The Berkeley Housing Authority (BHA) was recently selected by HUD to be a Move to Work Agency (MTW) that allows for flexibility programmatically; the cohort for which BHA was selected is "Landlord Incentives" and will allow BHA to attract additional landlords to participate with BHA to house voucher holders in Berkeley. Some of the flexibilities include: A Payment Standard above 110 percent; one-month contract rent signing bonus for brand new landlords; and funds for accessibility unit modifications. Additional programmatic flexibilities will focus on expansion of the Project-based Section 8 program. BHA is currently working on the process, including future public hearings, to be able to fully implement these flexibilities, and it is expected that will happen by mid-2023.

Furthermore, the BHA Board has established a non-profit entity - Affordable Housing Berkeley, Inc. (AHB) – as the development arm of BHA to produce affordable housing units in Berkeley. BHA's former low income public housing properties were sold to a developer in 2014, and those units were converted to Project-based Section 8. The proceeds from the sale will be used by AHB Inc. to develop the new units. The BHA board also serves as the Board of AHB and has just hired Mosaic Urban Development to assist with its Strategic Planning Process.

Specific Actions and Timeline	Complete Strategic Plan for Affordable Housing Berkeley Inc. by December 2023
Lead Department(s)/Agency	BHA/AHB
Funding Source(s)	BHA Low Income Public Housing Disposition proceeds
AFFH	n/a
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-2 Funding Sources H-3 Permanent Affordability H-4 Economic Diversity H-7 Berkeley Housing Authority H-19 Regional Housing Needs

Program 2 - Housing Choice Vouchers

BHA provides a range of rental housing assistance to very low income, and low income households through a number of programs, including Housing Choice Vouchers, Project-Based Section 8 Vouchers, and Moderate Rehabilitation (SROs).

BHA also operates several Special Purpose Voucher programs including:

- Emergency Housing Vouchers (EHV): 51 EHVs awarded by HUD to house homeless households.
- Mainstream Voucher Program: 91 vouchers to house non-elderly and disabled homeless or at-risk households.
- Veterans Affairs Supportive Housing (VASH): 40 VASH vouchers for homeless veterans.

BHA provides all disabled households the opportunity to apply for Reasonable Accommodations so that they can fully participate in our programs. Some examples of Reasonable Accommodations include an extra bedroom for a 24-hour Live in Aide, or an extra room to store bulky medical equipment.

Specific Actions and Timeline	Continue to assist up to 2,000 households during the 2023-2031 period through: Moderate Rehabilitation SRO Program – 98 units Housing Choice Vouchers – 1,500 households (and growing) Project-Based Vouchers – 400 households Emergency Housing Vouchers – 51 households Mainstream Voucher Program – 91 households VASH – 40 households
Lead Department(s)/Agency	BHA
Funding Source(s)	HUD
AFFH	Housing Mobility; BHA will work to expand all areas of Berkeley with rental housing units. Provide targeted outreach to educate the community on Source of Income protection with the goal of increasing acceptance of HCVs in high resource areas. Increase baseline by 200 households by January 2031.
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-2 Funding Sources H-3 Permanent Affordability H-7 Berkeley Housing Authority H-23 Homelessness and Crisis Prevention H-24 Homeless Housing H-27 Persons with Disabilities H-28 Emergency Shelters and Transitional and Supportive Housing H-30 Accessible Housing

Program 3 - Citywide Affordable Housing Requirements

The City is revising its Citywide Affordable Housing Requirements to enhance the effectiveness of the program in delivering affordable housing, especially for extremely low-income households. Proposed changes include:

- **Rate of Rent Increases**. Cap the annual rate of rent increases for the Citywide Affordable housing Requirements (AHR) using both Consumer Price Index (CPI) and Area Median Income (AMI). Currently rent increases are based on AMI alone. Recent trends have resulted in sharper increases in AMI due to a greater share of higher-income earners moving to the county rather than from increases in wages, resulting in the existing approach having unintended adverse impacts to tenants. While changes in CPI-U have traditionally been more stable than changes to AMI, this may change as we enter into a more inflationary cycle. The overall goal of this proposed program is to ensure that rent increases do not result in high housing cost burden or displacement of existing tenants.
- **Extremely Low Income Units.** Incentivize the provision of extremely low income (ELI, 30 percent of AMI) units by offering low income units to voucher holders prior to other income eligible households.
- **In-Lieu Fee Based on Unit Size.** Establish a per-square-foot in-lieu fee, instead of the existing per-unit basis for fees.
- **Alternative Housing Types.** Alternative affordable housing types, including live/work units, would qualify for meeting the City's inclusionary housing requirements.
- **In-Lieu Options for Compliance**. Add land dedication as a potential alternative to providing on-site units.

In addition, City staff will be initiating a new residential financial feasibility study starting 2023, in accordance with the recommendations of both the Planning and Housing Advisory Commissions. This new study will analyze the feasibility of smaller building development types (e.g., middle housing), monitor the effects of the newly adopted fees and inclusionary requirements, and establish whether adjustments should be made to the development controls, including fee level or cost structure. Adjustments may be made to raise or lower the per square foot fee: to adjust the sliding scale for smaller projects, to better align the developer cost of the inclusionary versus fee options, or to make other changes to reflect market conditions as the city emerges from the pandemic and faces inflationary, recessionary, and other market influences.

Specific Actions and Timeline	By June 2023, amend Berkeley Municipal Code (BMC) Chapter 23.38, updating the Citywide Affordable Housing Requirements (AHR) in the Zoning Ordinance. By June 2023, adopt a Resolution addressing regulations for a voucher program and establishing an in-lieu fee pursuant to BMC Section 23.328.020(A)(2). By December 2025, conduct a follow-up residential financial feasibility study to inform modifications to the City's affordable housing fees and continue to ensure a realistic development environment. (See also Program 35 -Affordable Housing Overlay and Southside Local Density Bonus)

Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund; SB 2 Grant Funding; Enterprise Fund – Community Planning Fee
AFFH	Anti-Displacement and Tenant Protection New Opportunities in High Resource Areas Disproportionate Needs
Policies Implemented	H-2 Funding Sources H-3 Permanent Affordability H-4 Economic Diversity H-6 Low-Income Homebuyers H-19 Regional Housing Needs H-35 Incentivize Affordable Housing

Program 4 - Housing Trust Fund

Berkeley's Housing Trust Fund (HTF) pools funds for affordable housing construction from a variety of sources with different requirements, and makes them available to developers through one single application process. Affordable housing developers and land trusts can find funding opportunities on this page as they become available. The Affordable Housing Mitigation Fee/Inclusionary fee is the primary driver of the HTF program. The HTF is also regularly supported by fees collected from condo conversions and new commercial development, as well as federal HOME funds.

The City has significantly expanded its capacity since the adoption of the Measure O bond for affordable housing in 2018. The City's funding commitments typically leverage federal tax credits and State funds to complete 100 percent affordable projects. During the upcoming cycle, the City will complete over 500 units across 7 projects currently in the pipeline – as well as future opportunities.

The City will also commit $53 million in HTF - $40 million of Measure O and $13 million in local funds – to fund a minimum of 35% affordable units at North Berkeley and Ashby BART. The program targets funding a minimum of 500 units of nonprofit affordable housing and a minimum of 35 percent affordable housing at Ashby and North Berkeley BART sites.

Funding recipients will follow the standard Loan Terms, requiring 55-year development loans, unless variations are granted by the City Manager or City Council.

Specific Actions and Timeline	Homekey • December 2023. Homekey 2 project completion • December 2023. Homekey 3 RFP process (target selection and funding of project) Housing Trust Fund Program • December 2023. Funding awards for pipeline projects.

	• December 2024. Project completion for funded affordable projects: Maudelle Miller Shirek Community (2001 Ashby) and Blake Apartments (2527 San Pablo) • December 2025. Issue Housing Trust Fund RFP Small Sites Program • December 2023. North Berkeley project completion to preserve and renovate 13 units(1685 Solano Ave) BART - See also Program 28 -BART Station Area Planning. • February 2023. Predevelopment funding award. • December 2025. Initial development funding award.
Lead Department(s)/Agency	HHCS
Funding Source(s)	Measure O, AHMF, Condo Conversion Mitigation Fee, Commercial Linkage Fee, HOME
AFFH	Anti-Displacement and Tenant Protection New Opportunities in High Resource Areas Disproportionate Needs
Policies Implemented	H-2 Funding Sources H-4 Economic Diversity H-6 Low-Income Homebuyers H-19 Regional Housing Needs H-35 Incentivize Affordable Housing

Program 5 - Preservation of At-Risk Housing

The City will monitor and assist in preserving deed-restricted housing. There are over 2,300 deed restricted affordable rental units within the City of Berkeley. Three projects (92 units) are at risk for potential conversion to market-rate units between 2023 and 2033. These are Bonita House (2 affordable units), Lawrence Moore Manor (46 affordable units), and Stuart Pratt Manor (44 affordable units). These projects are subject to annual renewal of its project-based Section 8 certificates with HUD.

Specific Actions and Timeline	During the 2023-2031 period, continue to implement the City's affordable housing policies and administer the Housing Trust Fund and Small Sites Programs that subsidize both new affordable housing development and rehabilitation of existing projects to preserve and extend their affordability. Annually monitor status of the at-risk project with the goal of preserving the 92 at risk units Ensure tenants are properly noticed by the property owners should a Notice of Intent to opt out of low income use is filed. Notices must be filed three years, one year, and six months in advance of conversion.

	Pursue acquisition of the affordable units through Affordable Housing Berkeley should conversion to market rate housing
Lead Department(s)/Agency	HHCS
Funding Source(s)	Housing Trust Fund
AFFH	Anti-Displacement and Tenant Protection
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-3 Permanent Affordability H-4 Economic Diversity H-5 Rent Stabilization

Program 6 - Fair Housing Outreach and Enforcement

The City contracts with ECHO Housing for Fair Housing services and ensure the public has access to information through the City's website, and other modes of communication, including newsletters and through local Community-Based Organization (CBO) partners. The City also partners with East Bay Community Law Center (EBCLC) to provide no cost legal advocacy help to low income tenants.

The City's approach is to be collaborative with landlords through the Berkeley Property Owners Association (BPOA) to provide trainings to rental property owners.

Specific Actions and Timeline	During the 2023-2031 period, continue to provide fair housing services to residents, landlords, and housing professionals. Increase outreach and education to Homeowners Associations. Annually: Conduct 9 education/training workshops for tenant-focused CBOs and property owner associations. Annually: Provide 70 Fair Housing Counseling sessions on fair housing information, respond to information alleging potential discrimination, and provide basic information on State and Federal fair housing laws to tenants and landlords. Annually: Conduct 22 outreach events to inform Berkeley residents of their rights. Annually: Conduct 10 tenant/landlord mediation sessions to resolve disputes and/or legal problems. By December 2025, conduct an Equity Study to target program marketing
Lead Department(s)/Agency	HHCS
Funding Source(s)	CDBG
AFFH	Fair Housing Outreach and Enforcement: ECHO is tasked with reaching specific target demographics including people with disabilities, female heads of households, homeless households, and chronically homeless households. Echo records income and demographic data for each client served to ensure the City is consistent with AFFH goals. ECHO's counselor will respond to all inquiries and complaints from City of

	Berkeley regarding illegal housing discrimination based on race, sex, sexual orientation, gender identity, national origin, marital status, familial status, physical and mental disability, religion, source of income, and all other arbitrary forms (immigration status, LEP, personal characteristics) of discrimination as defined in state and federal fair housing law. ECHO will deliver services to any Berkeley renter who feels they have experienced illegal housing discrimination or any housing provider requiring education or training with regard to federal, state, and local fair housing laws and ordinances. As a Qualified Fair Housing Enforcement Organization (QFHO), ECHO continues to coordinate and collaborate with cooperating attorneys, the Department of Housing and Urban Development, and the Department of Fair Employment and Housing on cases we have investigated and referred for litigation. Education/Training – tenant-focused CBOs and Property Owner Associations: Targeting citywide with emphasis in Central and Southern Berkeley and areas surrounding UC Berkeley campus where LMI households and cost burdened renters are concentrated Education/Training – rental property owners: Targeting citywide with emphasis in Central and Southern Berkeley and areas surrounding UC Berkeley campus. Outreach Events – Berkeley residents: Targeting citywide with emphasis in Central and Southern Berkeley where protected groups and sensitive communities at risk of displacement are concentrated.
Policies Implemented	H-5 Rent Stabilization H-29 Fair Housing

Program 7 - Rent Stabilization and Tenant Protection

The Rent Stabilization Board (RSB) works closely with other City departments to ensure that tenants are protected from retaliation when they complain about code violations and to assist landlords in following the requirements of the law when they need to temporarily relocate tenants in order to make repairs. The Board also assists with the enforcement of the Fair Housing Ordinance (BMC Section 13.30.050) by providing funding for the East Bay Community Law Center and the Eviction Defense Center, which provide legal services to the low-income community.

Rent stabilization provisions apply to approximately 21,000 units in multi-family properties built before 1980. About 19,000 of these units are required to register at any given time and the other 2,000 units are temporarily exempt. The City currently has over 3,500 long-term tenants who have continuously resided in their rent controlled units since 1980 when the Rent Board and Rent Stabilization Ordinance was created.

The most common reason for temporary exemption is that the unit is rented to a tenant who participates in either the Section 8 Portable Voucher or Shelter Plus Care programs.

Specific Actions and Timeline	Continue to enforce the Rent Stabilization Ordinance.

	Maintain rent stabilization on approximately 21,000 units and monitoring the effect of the Ellis Act. Pursue new affordable housing to replenish units removed due to Ellis.
Lead Department(s)/Agency	RSB
Funding Source(s)	Fees
AFFH	Anti-Displacement and Tenant Protection
Policies Implemented	H-4 Economic Diversity H-5 Rent Stabilization H-10 Naturally Affordable Housing

Program 8 - Rental Housing Safety

The City of Berkeley performs inspections of rental units to ensure they meet safety requirements defined by the California Building Standards Code. Both tenants and property owners can request inspections by the City. The program focuses on tenant-occupied housing and is both complaint-driven and proactive program. Code enforcement inspections will respond to requests for service from tenants as well as conduct proactive inspections on a regular cycle. Units where tenants have submitted a complaint to Housing Code Enforcement will be prioritized.

If the inspector finds any code violations, the City will provide a written report of the issue and set a timeline for correction. The property owner is responsible for correcting the violation before the City returns for a re-inspection. If the re-inspection finds that the property owner resolved the violation, the City will not charge a fee. If the re-inspection finds that the violation remains, the City will charge an inspection service fee, with costs increasing with each additional re-inspection.

Specific Actions and Timeline	The City is currently working on expanding the proactive inspections program, with the goal of inspecting every building during a 5-year cycle as part of the Rental Housing Safety Program. By December 2022, complete the Housing Inspector Manual. By December 2023, hire 5 additional staff, including 2 inspectors and 1 administrative staff person, and 2 additional inspectors By December 2023, rewrite and adopt the Berkeley Housing Code
Lead Department(s)/Agency	Building and Safety
Funding Source(s)	Program Fees: Annual, Inspection Service and Penalty Fees.
AFFH	Place-Based Strategy for Neighborhood Improvements

	Proactive Inspections Program – Targeting citywide with emphasis in Central and Southern Berkeley neighborhoods where there are higher concentrations of renters and aging housing units.
Policies Implemented	H-9 Housing Preservation H-11 Code Requirements H-12 Prevent Deferred Maintenance

Program 9 - Tenant Survey

The City has issued an RFP to conduct a Tenant Survey to gather a representative sample of tenants' experiences in Berkeley today. The data collected will be used to ensure the City's elected Rent Stabilization Board adopts legislation that promotes policies and services stated in the Berkeley Rent Ordinance. Based on data from Tenant Survey, the Board will make changes to the Rent Stabilization Ordinance.

Specific Actions and Timeline	By December 2023, conduct Tenant Survey By December 2023, provide summary of data to the Rent Stabilization Board
Lead Department(s)/Agency	RSB
Funding Source(s)	Fees
AFFH	Anti-Displacement and Tenant Protection
Policies Implemented	H-5 Rent Stabilization H-9 Housing Preservation H-10 Naturally Affordable Housing

Program 10 - Housing Preference Policies

Currently, the BHA Housing Choice Voucher waitlist provides preference points for households or families that—at the time of selection from the waiting list—reside in the City of Berkeley, or formerly resided in Berkeley, or include a member who works or has been hired to work in the jurisdiction. Use of this preference will not have the purpose or effect of delaying or otherwise denying admission to the program based on the race, color, ethnic origin, gender, religion, disability, or age of any member of an applicant family.

The City is developing a housing preference policy to assist residents at-risk of displacement and those who have already been displaced to receive priority for new, local affordable housing units. The City intends for this policy to apply to units created via its HTF and BMR programs to the extent permissible by Fair Housing law.

Specific Actions and Timeline	By December 2023, the City will adopt a housing preference policy. The City plans to conduct outreach on an ongoing basis, coordinate preferences with the Alameda County Housing Portal for applications, and collect data and monitor annually to asses impact.
Lead Department(s)/Agency	BHA and HHCS
Funding Source(s)	General Fund
AFFH	Anti-Displacement and Tenant Protection
Policies Implemented	H-7 Berkeley Housing Authority H-29 Fair Housing

Program 11 - Rental Assistance

The City utilizes CDBG and local Measure P funding to contract with Community Based Organizations (CBOs) to provide supportive services. These services help stabilize households in rental assistance programs and to move unhoused community members into permanent supportive housing.

Specific Actions and Timeline	Annually: Provide rental assistance to 50-75 new households (or 400-600 new households over eight years)
Lead Department(s)/Agency	HHCS
Funding Source(s)	CDBG; local Measure P
AFFH	Tenant Protection and Anti-Displacement Targeting citywide with emphasis in Central and Southern Berkeley neighborhoods and areas surrounding UC Berkeley campus where cost burdened renter populations are most prevalent.
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-2 Funding Sources H-5 Rent Stabilization H-24 Homeless Housing

Program 12 - Workforce Housing

The City of Berkeley is dedicated to supporting local efforts to expand the construction of workforce housing that is affordable to households earning between 60 and 120 percent of area median income (AMI). The availability of affordable housing to moderate income residents is important to attract and retain workers, reduce commute time and vehicle miles traveled, and create opportunities for workers to live in the communities they serve. Workforce housing targets middle-income households

who work within the City of Berkeley, such as teachers, health care workers, retail clerks, artists and young professionals.

In 2018, Berkeley voters passed Measure O, a $135 million bond to develop affordable housing, that includes a priority for education workers. In December 2021, the City Council approved $24.5 million for a Berkeley Unified School District (BUSD) sponsored low-income and workforce housing project.

Specific Actions and Timeline	**By June 2023, entitle construction of 110 affordable units, with a preference for Berkeley Unified School District employees.**
Lead Department(s)/Agency	HHCS
Funding Source(s)	Measure O, AHMF, Condo Conversion Mitigation Fee, Commercial Linkage Fee
AFFH	New Opportunities in High Resource Areas Disproportionate Needs
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-3 Permanent Affordability H-8 Workforce Housing H-15 Publicly-Owned Sites

Program 13 - Homeless Services

The City of Berkeley is committed to addressing homelessness and is working on a large variety of new and potential homeless programs, including:

- Acquisition of the Golden Bear Inn for Project HomeKey;
- Leasing with the Rodeway Inn to provide sheltering for people currently living at People's Park; and
- A drop-in center for the unhoused in People's Park and Telegraph Ave district jointly funded by UC Berkeley

Preliminary discussions are underway to assist Berkeley Food and Housing Project in acquiring Russell Street Residence.

The City is also working to implement a new rental assistance program ("Shallow Subsidies") for people who are unhoused but do not need supportive services, and the City is administering a County contract to place unhoused people in motels to provide respite from the streets.

Finally, the City is also assisting Larkin Street to purchase the property at 3404 King Street, currently owned by Fred Finch and operated as transitional housing for homeless youth, for the same purpose.

Specific Actions and Timeline	By December 2022, establish programs and services with the goal of assisting: • Increase capacity for housing the homeless by 43 beds/persons at Golden Bear Inn

	• Increase capacity for housing the homeless by 43 beds/persons at the Rodeway • Serve an average of 15-25 unhoused persons the drop-in center daily • Maintain transitional housing for 12 transition aged youth at 3404 King Street • Maintain capacity for housing persons experiencing homelessness by 27 beds/households at the Berkeley Inn.
Lead Department(s)/Agency	HHCS and CMO
Funding Source(s)	Local (Measure P, general fund); State HomeKey; State Encampment Resolution Fund grant; City of Berkeley - University of California Settlement Payment funds
AFFH	Tenant Protection and Anti-Displacement Place Based Strategies for Neighborhood Improvement New Opportunities in High Resource Areas Housing Mobility
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-4 Economic Diversity H-21 University of California H-23 Homelessness and Crisis Prevention H-28 Emergency Shelters and Transitional and Supportive Housing

Program 14 - Housing for Homeless Persons with Disabilities

The City plans to provide local subsidy to Resources for Community Development (RCD) for a 119-unit very low income development for households earning between 10 and 50 percent AMI (Supportive Housing in People's Park) with at least 50 percent of the units dedicated to previously unhoused residents with mental health conditions. This project has been allocated 27 project-based vouchers by BHA.

Specific Actions and Timeline	By December 2023, approve and assist in the construction of a 119-unit very low-income housing project.
Lead Department(s)/Agency	HHCS Mental Health
Funding Source(s)	MSHA funding and others to be determined
AFFH	Tenant Protection and Anti-Displacement
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-21 University of California H-23 Homelessness and Crisis Prevention H-27 Persons with Disabilities

Program 15 - Shelter Plus Care

Shelter Plus Care is a housing subsidy program for individuals who are chronically homeless and disabled in Berkeley. Participants pay approximately 30% of their income towards rent, and receive ongoing supportive services. Shelter Plus Care participants must have a disability due to mental illness, drug or alcohol dependence, physical disability, or chronic medical condition, and meet the following criteria for homelessness:

- Continuously homeless on the streets or in shelters for last 12 consecutive months;
- Currently on the streets or in a shelter for less than 12 months, with at least 4 separate occasions of being homeless and on the streets/in shelters during the past 3 years as long as the combined occasions equal at least 12 months; OR
- Staying in an institutional care facility for fewer than 90 days and prior to that met the above criteria for being chronically homeless (Institutional care facilities include jails, substance abuse or mental health treatment facilities, hospitals or other similar facilities).
- Residing in transitional housing and prior to that met the above criteria for being chronically homeless (Persons in transitional housing do not meet HUD criteria, but may qualify for City of Berkeley program on a limited basis).

The City continues to administer 300 Shelter Plus Care vouchers for the homeless, along with supportive services.

Specific Actions and Timeline	Annually: Enroll 10 new clients as vouchers become available due to existing clients exiting the program
Lead Department(s)/Agency	HHCS
Funding Source(s)	Federal S+C Funding
AFFH	Housing Mobility Tenant Protection and Anti-Displacement
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-23 Homelessness and Crisis Prevention H-27 Persons with Disabilities

Program 16 - Home Modification for Accessibility and Safety

The City partners with nonprofit providers to fund home modifications for lower income households. Both organizations bring volunteers and communities together to provide free repair services for low-income homeowners.

Specific Actions and Timeline	Annually: Assist home modifications for approximately 13 homes (a total of 104 homes over the 2023-2031 period)
Lead Department(s)/Agency	HHCS
Funding Source(s)	General Fund and CDBG
AFFH	Housing Mobility Targeted outreach to areas identified by the California Tax Credit Allocation Committee (TCAC) map as low or moderate resource census tract.
Policies Implemented	H-9 Housing Preservation H-11 Code Requirements H-12 Prevent Deferred Maintenance H-30 Accessible Housing H-31 Affordable Accessible Housing

Program 17 -Accessible Housing

The City promotes housing accessibility for persons with disabilities. The City also promotes its reasonable accommodation to property owners. The City also requires community-based organizations to conduct outreach throughout the community targeting the low and moderate income households, including seniors and people with disabilities, served by these programs.

As part of Program 33 -Zoning Code Amendment: Residential, the City will also modify standards for ground floor uses to incorporate first floor residential that facilitate accessible housing. The intent is to increase the number of accessible dwelling units in the local housing supply, particularly in transit and service-rich neighborhoods.

BHA has a robust Reasonable Accommodation program for all of its program participants who are disabled – each time they conduct a new voucher holder intake, and in annual recertification packets, clients receive the Notice of Right to Request a Reasonable Accommodation, and a Form to Request a Reasonable Accommodation. All disabled households have the right to request a Reasonable Accommodation at any time, and BHA staff are trained to respond properly, adhering to Fair Housing Law. All Project-based Voucher long term contracts have a requirement to adhere to current Section 504/ADA designs in the number of units.

Specific Actions and Timeline	By December 2025, develop and amend the Zoning Ordinance to adopt Objective Design Standards for residential and mixed use developments to facilitate first floor residential

	and live/work uses that encourages accessible design in higher density districts (e.g. R-3, R-4, and commercial districts). By December 2026, promote residential units to be developed with universal design and visitability principles in future PBV Master Contracts or exemptions for requiring a modified unit to be returned to its original state upon vacating the unit. As part of BHA's MTW application addressed in Affordable Housing Berkeley, the fiscal flexibilities include the ability to spend up to $500 per unit to help landlords pay for unit modifications. This benefit cannot be combined with the CIL program addressed in Home Modification for Accessibility and Safety.
Lead Department(s)/Agency	BHA, Planning
Funding Source(s)	General Fund
AFFH	Housing Mobility Tenant Protection and Anti-Displacement
Policies Implemented	H-7 Berkeley Housing Authority H-27 Persons with Disabilities H-30 Accessible Housing H-31 Affordable Accessible Housing

Program 18 -Senior / Disabled Home Improvement Loan

The purpose of the Senior and Disabled Home Rehabilitation Loan Program is to assist low and moderate income senior and disabled homeowners in repairing/modifying their homes, to eliminate conditions that pose a threat to their health and safety and to help preserve the City's housing inventory. Qualified borrowers can receive interest-free loans of up to $100,000.

The building to be rehabilitated has to be located within the City of Berkeley boundaries. The property will contain no more than two units. Only the unit occupied by the senior or disabled homeowner is eligible to receive assistance.

Specific Actions and Timeline	Annually: Provide two interest-free loans up to $100,000 for a total of 16 loans over eight years.
Lead Department(s)/Agency	HHCS
Funding Source(s)	CalHome Reuse Account (program income) and CDBG
AFFH	Housing Mobility
Policies Implemented	H-26 Senior Housing H-27 Persons with Disabilities

	H-30 Accessible Housing H-31 Affordable Accessible Housing

Program 19 - Housing Condition Standards

The City will develop an Amnesty Program for Unpermitted Dwelling Units (UDUs). The amnesty program will promote legalization of unpermitted or undocumented dwelling units—including Accessory Dwelling Units –while ensuring safe, healthy and habitable living conditions, resulting in an increased number of legal dwelling units within the Berkeley community. The program would provide tenants a means of getting potentially substandard or unsafe conditions abated in their homes, while providing property owners a pathway to legalization without fear of punitive action. The program would pertain solely to existing unpermitted dwelling units, and not to newly constructed dwelling units.

For Housing Choice Voucher holders, BHA implements HUD's housing inspection protocol, called Housing Quality Standards (HQS) to ensure safe and decent living conditions.. Each assisted unit is inspected before a contract is approved, and at least once every 12 months thereafter. The inspection is performed to determine compliance with HUD's HQS. The program withholds rental subsidies to landlords if the property fails inspection twice, as an incentive for landlords to make repairs.

Specific Actions and Timeline	By December 2024, adopt and commence implementation of a Building and Safety Amnesty Program for Unpermitted Dwelling Units. Under BHA's Housing Quality Standards Program: • Conduct an Annual Inspection approximately 9 months after the initial inspection, and every 9-10 months thereafter. • Written notice of the inspection is mailed to the tenant and landlord approximately 2 weeks prior to the scheduled inspection. A person 18 or older must be present to grant the inspector permission to enter the unit. • Minor repairs to be conducted on the spot if a maintenance person is available in order to avoid the need for a reinspection. • If all deficiencies noted at the inspection are not repaired and confirmed by the scheduled reinspection date, rental subsidies will be withheld effective the first day of the month following the failed inspection. Payments will resume effective upon confirmation of all required repairs.
Lead Department(s)/Agency	Building and Safety, BHA
Funding Source(s)	HUD
AFFH	Housing Mobility Anti-Displacement through legalization of unpermitted units
Policies Implemented	H-7 Berkeley Housing Authority H-9 Housing Preservation

	H-11 Code Requirements H-12 Prevent Deferred Maintenance

Program 20 - Livable Neighborhoods

The City Manager's Office (CMO) provides guidance and resources to make neighborhoods safer and more livable for residents through its Livable Neighborhoods program. The Neighborhood Services Code Enforcement (NSCE) unit responds to requests for traffic calming, street lighting, and mediates complaints of noise and wood smoke disturbances, sewage releases, rodent and pests, and abandoned vehicles.

The NSCE leads on complex code enforcement cases that require multi-departmental response. The program is also updating the protocols by which such cases are referred and handled, which will lead to more efficient response times.

Currently there are three NSCE officer staff, who work closely with one zoning code enforcement officer in Planning. The City is in the process of updating its implementation of the Group Living Accommodations (GLAs) ordinance and has created an online registry system for GLAs or mini-dorms, as well as short-term rentals, to register. Eligible GLAs may apply to receive a functionally equivalent exemption from certain requirements of the GLA ordinance. Mini-dorms are buildings in residential districts that are occupied by six or more adults. Sororities, Fraternities, and Student Co-ops are not considered Mini-Dorms, as long as they have a resident manager. Group living accommodations (GLA) are buildings or units that are occupied by individuals. GLAs are characterized by separate sleeping rooms without individual kitchen facilities, and containing congregate bath and/or dining facilities or rooms.

Specific Actions and Timeline	By December 2022: Create an updated registry of GLAs. By December 2023: Expand NSCE capacity by adding additional staff and/or outsourcing administrative functions.
Lead Department(s)/Agency	City Manager's Office – Neighborhood Service Code Enforcement (NSCE) Unit
Funding Source(s)	General Fund
AFFH	Place-Based Strategy for Neighborhood Improvements Neighborhood - Southside. Work with stakeholders and city staff to develop a process, with a targeted timeline to notify impacted GLAs by June 2022 and implement the new application by September 2022.
Policies Implemented	H-9 Housing Preservation H-10 Naturally Affordable Housing H-11 Code Requirements H-12 Prevent Deferred Maintenance

Program 21 - Lead-Poisoning Prevention

The City of Berkeley's Environmental Health Division will incorporate "Proactive Lead-Based Paint Inspections" as part of the Childhood Lead Prevention Program (CLPP), and will continue documenting these types of inspectional activities throughout the 2023-2031 period. CLPP contains three levels: Tier I: Response to elevated blood-lead levels in children; Tier II: Proactive inspections; and Tier III is contractor enforcement.

Conducting proactive lead-based paint inspections satisfies State requirements as part of the CLPP program. These inspections (in coordination with Housing Code Enforcement staff) also provide a community service by responding to tenant concerns, particularly those with toddlers and young children. The City will inspect the presence of lead in the residential environment, especially where peeling lead paint has been identified. These inspections also provide documentation on lead levels in soil before and after any remediation.

Specific Actions and Timeline	Annually: Continue to assist approximately 12 households (or more, as needed) during the 2023-2031 period by: Conduct an Environmental Investigation (EI) for presence of lead when peeling lead paint has been identified or if/when a child has elevated blood lead levels. Proactive inspections will be conducted in high-risk areas citywide, which include a visual assessment and notifications to homeowners and landlords. The average inspection process from start to finish should take approximately 30 days to complete. Environmental Investigation timeframes – If blood lead level is: 9.5 – 14.4 mcg/dL → Perform EI within four weeks of PHN referral. 14.5-19.4 mc/dL→ Perform EI within two weeks of PHN referral 19.5-44.4 mcg/dL → Perform EI within one week of PHN referral 44.5-69.4 mcg/dL → Perform EI within 48 hours of PHN referral Greater than 69.4 mcg/dL → Perform EI within 24 hours of PHN referral
Lead Department(s)/Agency	HHCS – Environmental Health
Funding Source(s)	California Department of Public Health's (CDPH) Childhood Lead Poisoning and Prevention Program (CLPP) Annual Grant
AFFH	Place-Based Strategy for Neighborhood Improvements Environmental Investigations will target neighborhoods which have been identified as having one or more cases of toddlers or young children with elevated blood lead levels, presumably linked to environmental sources.
Policies Implemented	H-9 Housing Preservation H-11 Code Requirements H-12 Prevent Deferred Maintenance

Program 22 - Seismic Safety and Preparedness Programs

The City implements, and supports, a number of programs to address seismic preparedness:

- **Soft Story Program**. Continue program management for buildings newly added to the soft story inventory, as well as code enforcement for non-compliant soft story buildings subject to Berkeley Municipal Code Section 19.39. [Soft Story Ordinance (Ord. No. 7,318-N.S.) adopted December 3, 2013.]
- **Unreinforced Masonry (URM) Ordinance**. Continue code enforcement for non-compliant URM buildings subject to Berkeley Municipal Code Section 19.38. (Ord. 6604-NS § 2, 2000) as of November 15, 1991.
- **Retrofit Grants Program**. In early 2017, the City launched its first Retrofit Grants Program to incentivize individual property owners to retrofit their seismically vulnerable buildings. This ground-breaking program leveraged both federal and state hazard mitigation grant funding from FEMA and the California Governor's Office of Emergency Services (CalOES) to reimburse property owners for a portion of their design and construction costs. In May 2020, the City received approval for additional hazard mitigation grant funding, enabling the City to launch a second round of the Retrofit Grants Program. The City will continue to seek additional hazard mitigation grant funding throughout 2023-2031, in an effort to provide further financial assistance to building owners, and encourage retrofit of additional Berkeley buildings.
- **Seismic Retrofit Transfer Tax Rebate Program**. This Program provides refunds of Berkeley transfer taxes for seismic upgrades to residential properties that are completed within one year of property transfer. Up to 1/3 of the base 1.5% transfer tax rate may be refunded on a dollar-for-dollar basis, for all expenses incurred on or after October 17, 1989, for seismic upgrades to residential property. This program applies to structures that are used exclusively for residential purposes, or any mixed-use structure that contains two or more dwelling units. Between 2013 and 2019, 702 rebates have been distributed, amounting to over $4M.
- **Earthquake Brace and Bolt**. Earthquake Brace and Bolt, a program of the California Residential Mitigation Program, provides rebates of up to $3,000 for homes that make qualifying seismic safety upgrades. For the first time, in 2022, this program will also provide grants for up to 100% of the costs for low-income homeowners. Berkeley is proactively making residents aware of and is utilizing the Brace and Bolt program, through news releases, distribution of flyers in the Permit Service Center, and workshops during annual registration to answer questions and encourage participation. The City actively promotes and tracks participation in the Earthquake Brace and Bolt rebate program.

Specific Actions and Timeline	Soft Story Program: By December 2025, facilitate the compliance of the remaining 14 soft story buildings. As of March 1, 2022, out of 360 soft-story buildings, 265 buildings (containing approximately 2,995 units) have complied with the soft story program requirements, and 35 soft story buildings (containing ~306 dwelling units) must still come into compliance with mandatory retrofit requirements. Of the remaining 35 buildings, 8 owners have obtained building permits, 13 have applied for permits and 14 have yet to apply. Identify additional buildings may be added to the inventory for improvements. Unreinforced Masonry Ordinance: By December 2025, facilitate the retrofitting of the remaining four unreinforced masonry (URM) building. Of the approximately 600 buildings

	originally included in the City's URM inventory, roughly 99 percent have been seismically retrofitted, demolished or demonstrated to have adequate reinforcement. As of March 1, 2022, four buildings remain on the city's URM list and are required to retrofit in order to avoid further penalties. Two of the four building owners have applied for retrofit permits, and two have expired permit applications. By December 2023, provide Retrofit Grants to 50 property owners. Seismic Retrofit Transfer Tax Rebate Program: Continue to issue building permit seismic upgrades and facilitate transfer tax rebates for qualifying properties. Earthquake Brace and Bolt program: Annually, the City's goal is to help at least 50 homeowners complete seismic retrofits and obtain rebates.
Lead Department(s)/Agency	Building and Safety
Funding Source(s)	Transfer Tax Rebate Program Retrofit Grants Program California Residential Mitigation Program
AFFH	Place-Based Strategy for Neighborhood Improvements Anti-Displacement and Tenant Protection
Policies Implemented	H-9 Housing Preservation H-11 Code Requirements H-12 Prevent Deferred Maintenance H-13 Seismic Reinforcement

Program 23 - Berkeley Pilot Climate Equity Fund

The Resilient Home Retrofit portion of the Berkeley Pilot Climate Equity Fund Program seeks to support building decarbonization that enhances resilience, supports occupants and reduces GHG emissions.

Many lower and moderate income (LMI) units would benefit from health, safety, efficiency, and electrification upgrades. While there are some resources to support these repairs for income qualified households, it is difficult for low income residents to access multiple programs that have different application processes and eligibility requirements. The Resilient Home Retrofit aspect of the new Berkeley Pilot Climate Equity Fund Program seeks to demonstrate how retrofit funding available to income-qualified households can be combined with other programs to leverage greater benefits, and achieve meaningful home improvements for LMI residents.

This initial funding ($250,000) for this program will be used to retrofit approximately 12 LMI units (multi-family and single-family), and the hope is to get additional funding after this initial pilot funding is exhausted. The City selected contractors in 2022 to establish and implement this program.

Specific Actions and Timeline	June 2023, commence program implementation, with the goal of retrofitting 12 low and moderate income units.

	Depending on program effectiveness, pursue additional funding to continue program.
Lead Department(s)/Agency	OESD
Funding Source(s)	City Council authorized $600,000 from the General Fund in FY22 for the Berkeley Pilot Climate Equity Fund Program (2022-2024); $250,000 of this fund will support resilient retrofits for LMI units. Will add additional funding as it becomes available.
AFFH	Place-Based Strategy for Neighborhood Improvements Disproportionate Housing Needs Homes for this Program may be anywhere in Berkeley, but are most likely to be in formerly red-lined areas in South and West Berkeley. Goal with existing funding is to retrofit 12 low and moderate income units between 2022-2024.
Policies Implemented	H-9 Housing Preservation H-12 Prevent Deferred Maintenance H-14 Resource Efficiency and Climate Resilience

Program 24 - Berkeley Existing Buildings Electrification (BEBE) Strategy

The BEBE Strategy identified home repair and maintenance needs that accompany building electrification as a major challenge to decarbonizing existing residential buildings in Berkeley. The strategy seeks to transition existing buildings in Berkeley from natural gas appliances to all-electric alternatives in a way that benefits all residents, especially members of historically marginalized communities. The strategy focuses on how to equitably electrify all of Berkeley's low-rise residential buildings.

Specific Actions and Timeline	By December 2023, complete Energy Equity for Renters Technical Assistance program with ACEEE and receive its research results. This is one implementation of BEBES that is tied to housing preservation. Within two years of receiving research results, develop programs and policies that promote energy efficiency while protecting tenants from displacement. By December 2025, explore funding opportunities for equity programs, including integration of electrification measures into housing protection and preservation programs, such as the City's Senior and Disabled Home Loan Program or Section 8 housing voucher program.
Lead Department(s)/Agency	OESD
Funding Source(s)	General Fund ACEEE-funded program, with foundation support

AFFH	Place-Based Strategy for Neighborhood Improvements Disproportionate Housing Needs Anti-Displacement and Tenant Protection Neighborhoods most targeted would be those with the largest proportion of renters in older buildings: Southside, Central Berkeley, and West and South Berkeley. Goal with existing funding is to retrofit 15 low and moderate income homes between 2022-2024
Policies Implemented	H-9 Housing Preservation H-12 Prevent Deferred Maintenance H-14 Resource Efficiency and Climate Resilience

Program 25 - Building Emissions Saving Ordinance (BESO)

Berkeley's Building Emissions Saving Ordinance (BESO) requires building owners and homeowners, at the time of listing a property for sale, to complete and publicly report comprehensive energy assessments with tailored recommendations on how to save energy, eliminate fossil fuels and link building owners to incentive programs for energy efficiency and electrification upgrades.

Specific Actions and Timeline	Annually: On average, around 400 buildings complete BESO assessments each year. By December 2025, amend ordinance to update requirements for building upgrades.
Lead Department(s)/Agency	OESD
Funding Source(s)	General Fund
AFFH	Place-Based Strategy for Neighborhood Improvements Disproportionate Housing Needs BESO applies to homes anywhere in the City of Berkeley; distribution of eligible homes is dependent on the geography of home listings.
Policies Implemented	H-9 Housing Preservation H-12 Prevent Deferred Maintenance H-14 Resource Efficiency and Climate Resilience

Program 26 - BayREN Single-Family Homes and Multi-Family Homes Programs

The City of Berkeley actively promotes participation in this technical assistance, rebate, and financing program for renovation projects improving health, comfort, utility costs, and resilience. Higher energy burdens have real implications on the health and wellbeing, and housing stability for families and individuals. These programs include energy efficiency measures that reduce energy burden on

low and moderate income residents. BayREN provides technical assistance, rebates, financing for energy efficiency and electrification projects that are recommended by BESO assessments and currently promoted by Berkeley for voluntary upgrades. Berkeley tracks BayREN rebate receivers as a performance metric. The City has program influence and has been successful in recruiting participants for the program, particularly through BESO.

Specific Actions and Timeline	Annually during the 2023-2031 period: Continue to assist in recruiting participants to BayREN's rebate programs through BESO and other outreach, with the goal of assisting at least 75 single-family homes and 125 multi-family dwelling units annually in receiving BayREN incentives for qualifying renovations (or 600 single-family homes and 1,000 multi-family dwelling units over eight years).
Lead Department(s)/Agency	OESD
Funding Source(s)	BayREN is funded by utility ratepayer funds through the California Public Utilities Commission, as well as other sources.
AFFH	Place-Based Strategy for Neighborhood Improvements Disproportionate Housing Needs Targets neighborhoods with the greatest proportion of homes in need of energy efficiency, health, and safety retrofits; most likely to be in areas with older, less maintained homes, such as Southside, Central, West, and South Berkeley. Goal is to get 75% of total BayREN projects in these neighborhoods (so 450 single-family homes and 750 multi-family dwelling units over eight years)
Policies Implemented	H-9 Housing Preservation H-12 Prevent Deferred Maintenance H-14 Resource Efficiency and Climate Resilience

Program 27 - Priority Development Areas (PDAs), Commercial and Transit Corridors

San Pablo Avenue PDA Specific Plan – The City will be developing a San Pablo Avenue Corridor PDA Specific Plan, which will study allowed densities and/or development capacity, design standards, public improvements, and mechanisms to incentivize affordable housing. The Housing Element sites inventory identifies 64 sites completely or partially within the San Pablo Avenue PDA, accounting for a total of 3,429 anticipated units (665 very low income, 599 low income, 353 moderate income, and 1,812 above moderate income units). As part of the San Pablo Specific Plan, the team will also study live/work or other innovative "all-use building" strategies. The specific plan process kicks-off in December 2022.

Southside Plan Area – The City will also be pursuing zoning map and development standard amendments in the Southside Plan Area, which comprises a portion of the Telegraph PDA. These proposed zoning modifications are intended to increase housing capacity and production in the

Southside through changes in a targeted number of zoning parameters: building heights, building footprints (including setbacks and lot coverage), parking, ground-floor residential use, and adjustments to the existing zoning district boundaries. Under existing zoning, the Housing Element identifies 21 sites in the Southside Plan area, accounting for a total of 752 anticipated units (44 very low income, 38 low income, 150 moderate income, and 520 above moderate income units. This Southside zoning modification program proposes amendments that could facilitate an additional 1,000 units compared to existing zoning and sites inventory capacity.

Land Use, Safety, and Environmental Justice Element Update - The City will evaluate zoning map and development standards to accommodate housing capacity and growth on transit and commercial corridors, particularly in the highest resource neighborhoods. An update to the City's Land Use Element, Safety Element, and Environmental Justice Element will be conducted in tandem with this effort.

Specific Actions and Timeline	By December 2024, complete Telegraph PDA/Southside Plan Area zoning map amendments and up-zoning. By December 2025, develop and adopt the San Pablo PDA Specific Plan. Conduct analysis, public and stakeholder engagement, and policy options, including zoning and General Plan amendments. By December 2026, update Land Use, Safety, and Environmental Justice Elements of the General Plan to accommodate greater housing capacity on commercial and transit corridors, and revise the City's zoning map and development standards to be consistent.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund, ABAG/MTC PDA Planning Grant
AFFH	New Opportunities in High Resource Areas Targeted outreach to Southside Area residents and UC students
Policies Implemented	H-16 Medium and High-Density Zoning H-17 Transit-Oriented New Construction H-19 Regional Housing Needs H-22 Inter-Jurisdictional and Regional Coordination H-33 Reduce Governmental Constraints H-35 Incentivize Affordable Housing

Program 28 - BART Station Area Planning

The City and the San Francisco Bay Area Rapid Transit District (BART) are collaborating to advance equitable transit-oriented development (TOD) at the Ashby and North Berkeley BART station areas. The development of the Ashby and the North Berkeley BART station sites is a multi-year, multi-phase process, including ongoing community engagement. The preliminary planning stage has focused on milestones outlined in the March 2020 MOU to prepare to issue Requests for Qualifications (RFQs)

for potential developer teams for the two sites. These milestones include: a provisional reservation by the City Council to reserve $53 million of City affordable housing funding for the two sites (completed April 2021), adoption of zoning consistent with AB 2923 (completed June 2022) and a City-BART Joint Vision and Priorities document based on City and BART adopted policies and plans and a community process that included a Council-appointed Community Advisory Group.

List of City Actions:

The City of Berkeley's roles, responsibilities and actions throughout the development process for the Ashby and North Berkeley BART station areas include the following:

- Review project applications and process entitlements.
- Commit funding from the City's bond measure revenues and Affordable Housing Trust Fund toward affordable housing pre-development and development costs.
- Assist the selected developer teams to secure additional funding for affordable housing.
- Work with BART to secure grants to advance Adeline Street roadway redesign.
- Conduct and/or support robust community engagement during the development process.
- Support the Berkeley Flea Market through the planning and construction process at Ashby BART station.

The City is relying on private and non-profit developers and BART to ensure that the project proceeds within the expected schedule. If for any reason the development of either site is halted during the 6th cycle period, or insufficient progress is made by January 2026, the City will identify alternative opportunity sites to ensure the City complies with SB 166 (No Net Loss) – see Program 36 -Adequate Sites for RHNA and Monitoring.

Specific Actions and Timeline	June 2022, the City adopted zoning and associated General Plan amendments consistent with AB 2923; adopted City – BART Joint Vision and Priorities for Transit-Oriented Development at the Ashby and North Berkeley BART Station Areas and certified EIR on these documents. The goal for development for both stations is by 2031. As stipulated in the June 2022 City and BART MOA, the next milestones include: • July 2022 – Complete. Developer Request for Qualification (RFQ) and City of Berkeley Notice of Affordable Housing Funding (NOFA) • November 2022. Right-Of-Way Redesign Options for Adeline Street at Ashby BART Station to City Council • December 2022. Developer selection for the North Berkeley BART station area. • February 2023. City Affordable Housing Funding (Predevelopment Funding Award) • April 2023. Exclusive Negotiating Agreement (ENA) execution with North Berkeley BART selected developer team. • June 2023. An amended Memorandum of Agreement (MOA) for the Ashby BART Station. The amended MOA will include a refined timeline for the developer solicitation process. Structure of the developer solicitation process and project requirements and community benefits are currently in process of being negotiated between the City and BART. • August 2023. City and BART issue a solicitation for developer selection for Ashby BART.

	• December 2023. Development and adoption of Objective Design Standards for North Berkeley BART. • December 2027. Entitlement for development project(s) at North Berkeley BART.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	Place-Based Strategy for Neighborhood Improvements BART's TOD Performance Targets prioritize below market rate units for low and very low income households and transit dependent populations. Complete streets and active transportation improvements are underway at North Berkeley BART.
Policies Implemented	H-17 Transit-Oriented New Construction H-19 Regional Housing Needs H-22 Inter-Jurisdictional and Regional Coordination H-35 Incentivize Affordable Housing

Program 29 - Middle Housing

The City is currently in the process of amending the Zoning Code and applicable objective development standards to encourage and promote a mix of dwelling types and sizes, particularly infill and converted existing housing in high resource neighborhoods, as described in Section E3 and E4 of Appendix E Affirmatively Further Fair Housing. The zoning updates would allow for by-right multi-unit development on one lot to encourage housing for middle- and moderate-income households and increase the availability of affordable housing in a range of sizes to reduce displacement risk for residents living in overcrowded units or experiencing high housing cost burden.

While not included in the City's sites inventory because the placement of future Middle Housing is unknown, modeling conducted by the Terner Center[10] indicates that the City of Berkeley could anticipate approximately 1,100 new market-feasible units through SB 9. Using HCD's 70th percentile methodology, the Housing Element assumes 770 additional units distributed throughout the lower density residential districts for the 2023-2031 period. Additionally, based on current development trends and anticipated zoning changes, 975 additional units are projected throughout the R-1A, R-2, R-2A and MU-R districts for a total of 1,745 middle housing units in the 2023-2031 period.

[10] July 21, 2021. Terner Center. https://ternercenter.berkeley.edu/wp-content/uploads/2021/08/Terner-Center-SB9-model-jurisdiction-output.xlsx

To facilitate middle housing and encourage more affordable units, the City will also introduce a reduced inclusionary housing fee for middle housing projects with less than 12,000 gross square feet (GSF), with a sliding scale increase for projects with floor areas between 0 and 12,000 GSF.

Specific Actions and Timeline	By June 2023, amend Affordable Housing Fee schedule to introduced a sliding scale for projects with less than 12,000 gross square feet (see also Program 3 -Citywide Affordable Housing Requirements). By December 2023, amend Zoning code to allow multi-unit development on one lot in the lower density districts: R-1, R-1A, R-2, R-2A, and MU-R districts.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	New Opportunities in High Resource Areas Anti-Displacement and Tenant Protection Targeted outreach in lower density Residential districts: R-1, R-1A, R-2, R-2A, and MU-R
Policies Implemented	H-4 Economic Diversity H-10 Naturally Affordable Housing H-32 Middle Housing H-33 Reduce Governmental Constraints H-34 Streamlined Review Process

Program 30 -Accessory Dwelling Units

The City will continue to implement Chapter 23.306 of the Berkeley Municipal Code (Zoning) to allow accessory dwelling units by right Citywide. The City will monitor the latest hazard and risk science and assessments for natural and manmade hazards in Berkeley. The City will amend the local ADU ordinance based on revised statutory requirements, such as AB 2221 and SB 897, and may modify ADU development standards based on changing understanding of conditions of risks and hazards. The City will facilitate ADU production by:

- Prioritizing accessory dwelling unit permit applications;
- Promote ADU standards by including information on the City's website and making fact sheets available at the City's permit counter; and
- Providing one dedicated ADU planner to respond to questions and offering office hours and other educational programs for those interested in creating ADUs.
- Monitoring ADU permit progress annually to ensure that anticipated RHNA progress is being met (average 75 ADUs or JADUs per year, or 600 units over eight years).

Specific Actions and Timeline	By June 2023, provide contact info for dedicated ADU planner on the City's ADU webpage.

	By December 2023, amend the City's local ADU ordinance based on revised statutory requirements. By December 2025, assess if ADU production is on the trajectory to meet RHNA assumptions. If not, identify additional efforts needed (including, but not limited to, rezoning or pre-approved building plans) to incentivize ADUs. Annually: Update ADU webpage to ensure information addresses questions raised by applicants Annually: Provide update on ADU permit progress to Planning Commission and City Council Throughout the 2023-2031 period: Coordinate ADU policies with the Community Wildfire Protection Plan (CWPP) and Fire Department Standards of Coverage assessment.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	New Opportunities in High Resource Areas
Policies Implemented	H-10 Naturally Affordable Housing H-18 Accessory Dwelling Units H-20 Monitoring Housing Element Progress H-34 Streamlined Review Process

Program 31 -Zoning Code Amendment: Special Needs Housing

The City will update the Zoning Code to align with required State laws for special needs housing:

- **Lanterman Act.** Remove minimum parking requirement for non-resident employees to ensure that development standards do not constrain the development of residential care facilities.
- **AB 101.** Low Barrier Navigation Center must be permitted by-right where multi-family residential land use is permitted.
- **AB 2162.** Supportive housing must be permitted by-right where multi-family and mixed-use residential development is permitted, if:
    - At least 25% of the units in a development or 12 units, whichever is greater, are restricted to residents in supportive housing who meet criteria of the target population; or
    - If the development consists of fewer than 12 units, then 100 percent of the units restricted to residents in supportive housing who meet criteria of the target population.
- **Health and Safety Code Section 17021.** Any employee housing providing accommodations for six or fewer employees is deemed a single-family structure with a residential land use designation. For the purpose of all local ordinances, employee housing cannot be included

within the definition of a boarding house, rooming house, hotel, dormitory, or other similar term that implies that the employee housing is a business run for profit or differs in any other way from a family dwelling.

- **AB 2339.** Identify commercial zones where emergency shelters are permitted by right depending on size, subject to the following regulations:
    - Sites identified for emergency shelters must be in areas where residential use is permitted or otherwise suitable, and connected to services; and
    - Emergency shelters meeting objective standards shall be approved.
- **Household (Family) Definition.** Revise the definition to simplify that households are characterized by one or more persons with common access and use of all living, kitchen, and eating areas within a dwelling unit, while maintaining distinction from other residential arrangements such as Dormitory or Group Living Accommodation.

Specific Actions and Timeline	By December 2023, review and adopt new zoning provisions and definitions to align land use standards with State law requirements for special needs housing.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	Housing Mobility
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-27 Persons with Disabilities H-28 Emergency Shelters and Transitional and Supportive Housing H-34 Streamlined Review Process

Program 32 - By-Right Approval on Reused Sites for Affordable Housing

Pursuant to AB 1397 passed in 2017, the City will amend the Zoning Code to provide by-right approval of housing development in which the project includes 20 percent of the units as housing affordable to lower income households, on sites being used to meet the Sixth Cycle Housing Element RHNA that represent "reused opportunity sites" from previous Housing Element cycles. The "reused" sites are specifically identified in the inventory and will be identified and monitored in a publicly accessible map.

Specific Actions and Timeline	By December 2023, amend the Zoning Code to provide by-right approval of projects with 20 percent lower income units on opportunity sites that are reused from the previous Housing Element cycles. In the meantime, the city applies the law in a manner that supersedes local zoning.

	By December 2023, create an additional GIS layer in the public facing Community Map portal to identify all Sites Inventory sites, with a color to identify the reused opportunity sites that must be approved by-right for 20 percent lower income units. As projects are entitled, permitted, and constructed, the GIS layer must be updated, by unit count and affordability categories.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	New Opportunities in High Resource Areas
Policies Implemented	H-1 Extremely Low, Very Low, Low and Moderate-Income Housing H-4 Economic Diversity H-20 Monitoring Housing Element Progress H-33 Reduce Governmental Constraints H-34 Streamlined Review Process H-35 Incentivize Affordable Housing

Program 33 -Zoning Code Amendment: Residential

The City will study and develop residential objective standards to provide clarity and predictability for State-streamlined projects (e.g., SB 35, AB 1397) and reduce reliance on the use permit process and non-detriment findings by replacing them with new objective standards.

The proposed Zoning Ordinance amendments would create or modify objective standards to increase residential development potential, including but not limited to, increasing building height, coverage, floor area ratio, and reducing setbacks and building separation, and allowing for more flexibility in the calculation and configuration of open space. In addition, the Berkeley zoning code currently does not contain a minimum or maximum density standard expressed in "units per acre" for the majority of its residential and mixed-use zoning districts. While the zones have no density caps, a minimum density threshold can ensure adequate baseline capacity to meet RHNA targets and achieve Housing Element compliance.

The City will also evaluate and modify the standards for ground floor uses to address commercial living situations, such as live/work artist space, in order to add vibrancy along commercial corridors and incentivize vacant space conversion for residential use.

Specific Actions and Timeline	By June 2024, as part of the Multi-Unit Residential Objective Standards project, minimum densities will be applied to all residential and mixed-use developments with five or more units. By December 2025, develop and amend the Zoning Ordinance to adopt Objective Design Standards for residential and mixed use developments in order to facilitate streamlined projects for larger (e.g. 10+ units) housing projects in higher density

	districts (e.g. R-3, R-4, and commercial districts), and commercial living situations, such as live/work units.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	Place-Based Strategy for Neighborhood Improvements New Opportunities in High Resource Areas
Policies Implemented	H-19 Regional Housing Needs H-33 Reduce Governmental Constraints H-34 Streamlined Review Process

Program 34 - Permit Processing

Delays in processing development applications can increase the costs of development. The City plans to update its Planning and Building technology systems, including digital permitting software and inspections software, to allow access to all applications and processes online and reduce time and cost for the applicant and the City.

To provide additional transparency regarding project permit status, the City will maintain its permit tracking software so that permit status and completeness determination are available publicly and kept up-to-date.

In August 2022, for applications where a CEQA exemption or other form of CEQA environmental review is recommended to the decision-making body, the City has revised and implemented a new Application Completeness template to inform applicants of their applicable CEQA pathway, including whether the project meets the criteria for Categorical Exemption or requires additional analysis to determine the level of CEQA review needed. The letter states that staff will recommend the level of CEQA review for the project within 30 days of the application being deemed complete.

In addition, in conjunction with Program 33 -Zoning Code Amendment: Residential to create or modify residential objective development standards, the City will analyze and develop permitting processes that seek to reduce entitlement and permit processing time, increase certainty for applicants by removing subjective judgements from project approvals, and reduce administrative costs and burden associated with qualitative justifications for discretionary review. Ordinance amendments include increasing the thresholds for discretionary review and eliminating post entitlement hearings, such as a Final Design Review.

Specific Actions and Timeline	By June 2023, functionality will be added to the permit tracking software and the Planning Department website to provide on-demand reporting of project status, which will include up to date completeness, CEQA and other actions.

	By June 2024, the City will conduct a needs assessment, develop an RFP for the Planning and Building permit and records management systems, and hire a consultant to implement a software upgrade. By December 2025, as part of the Objective Design Standards effort (Program 33 - Zoning Code Amendment: Residential), City staff will also develop Zoning Ordinance amendments to update entitlement processes to increase the thresholds for discretionary review of residential and mixed-use residential projects for City Council consideration. By December 2027, the City will implement the updated permit tracking software and continually maintain permit statuses and monitor project progress.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	n/a
Policies Implemented	H-20 Monitoring Housing Element Progress H-33 Reduce Governmental Constraints

Program 35 -Affordable Housing Overlay and Southside Local Density Bonus

The City will analyze the feasibility and effectiveness of an Affordable Housing Overlay and Southside Local Density Bonus.

A local density program in the Southside would allow a project sponsor to meet the affordable housing requirement by paying an in-lieu fee into the City's Housing Trust Fund. As proposed in a May 2017 City Council Referral, the funds raised by such projects would be used to fund housing for extremely low-income households (30% AMI or less), who may not qualify for typical inclusionary units, while encouraging much-needed student housing near campus.

An Affordable Housing Overlay would streamline approval of 100 percent affordable development projects and permit increases in achievable floor area and density through raised height limits, lot coverage, and/or floor area ratio (FAR) in higher density residential and commercial zoning districts.

As part of the Affordable Housing Overlay and Southside Local Density Bonus project, City staff will conduct targeted outreach in neighborhoods where the incentives would apply, including areas around downtown and the UC Berkeley campus, and along and adjacent to major commercial corridors.

Specific Actions and Timeline	By December 2024, adopt a local density bonus program in the Southside, concurrent with the Zoning Ordinance amendments proposed for the Southside in Program 27 - Priority Development Areas (PDAs), Commercial and Transit Corridors. By December 2025, adopt an Affordable Housing Overlay Density Bonus, concurrent with the residential financial feasibility study (Program 3 -Citywide Affordable Housing

	Requirements), Residential Objective Design Standards (Program 33 -Zoning Code Amendment: Residential), and the General Plan Land Use Element Update
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	New Opportunities in High Resource Areas Targeted outreach in downtown, Southside, and major commercial corridors
Policies Implemented	H-2 Funding Sources H-3 Permanent Affordability H-4 Economic Diversity H-6 Low-Income Homebuyers H-16 Medium and High-Density Zoning H-21 University of California H-24 Homeless Housing H-33 Reduce Governmental Constraints H-34 Streamlined Review Process H-35 Incentivize Affordable Housing

Program 36 -Adequate Sites for RHNA and Monitoring

The City of Berkeley has been allocated 8,934 units (2,446 very low income, 1,408 low income, 1,416 moderate income, and 3,664 above moderate income units). Based on projected ADUs, BART station area planning (Program 28 -BART Station Area Planning) and entitled projects, the City has met 4,090 of its RHNA. An additional 4,773 units are included in projects currently under review for anticipated based on pre-application submittals. Based on existing uses, zoning and development standards, the City has identified an inventory of sites with potential for redevelopment over the eight year planning period to accommodate 6,290 units (3,002 lower income, 1,867 moderate income, and 1,421 above moderate income units), adequate to address the remaining RHNA.

As part of Program 34 -Permit Processing, the City will be investing in its Planning and Building technology systems. The updated permit tracking software will enable the City to more easily monitor project progress, as well as identify approved projects that have not advanced to construction within the typical 3-4 year timeframe.

To ensure that the City comply with SB 166 (No Net Loss), the City will monitor the consumption of residential and mixed use acreage to ensure an adequate inventory is available to meet the City's RHNA obligations. To ensure sufficient residential capacity is maintained to accommodate the RHNA, the City will develop and implement a formal ongoing (project-by-project) evaluation procedure pursuant to Government Code Section 65863. Should an approval of development result in a reduction of capacity below the residential capacity needed to accommodate the remaining need for

lower income households, the City will identify and if necessary, rezone sufficient sites to accommodate the shortfall and ensure no net loss in capacity to accommodate the RHNA.

Specific Actions and Timeline	Within 3 months of a certified Housing Element, the City will publish an inventory of the available sites for residential development and provide it to prospective residential developers. Annually: The City will publish a list of entitled projects to facilitate market-driven transactions to advance development. By January 2026: Assess the 3-year development progress of entitled and pipeline sites, and implement a formal evaluation procedure pursuant to Government Code Section 65863 to monitor the development of vacant and nonvacant sites in the sites inventory and ensure that adequate sites are available to meet the remaining RHNA by income category. Should resulting development capacity be below assumed potential, the City will identify additional efforts, including but not limited to rezoning or streamlined processes, to accommodate the shortfall of sites to meet the RHNA.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	New Opportunities in High Resource Areas
Policies Implemented	H-9 Housing Preservation H-19 Regional Housing Needs H-20 Monitoring Housing Element Progress

Program 37 - Replacement Housing / Demolition Ordinance

Development on nonvacant sites with existing residential units is subject to replacement requirement, pursuant to AB 1397. Specifically, AB 1397 requires the replacement of units affordable to the same or lower income level as a condition of any development on a nonvacant site consistent with those requirements set forth in State Density Bonus Law.

The City of Berkeley is currently working on a Demolition Ordinance in partnership with the Rent Board that goes beyond the protections afforded by State and Federal legislation. Once adopted, all future development projects will be subject to these regulations.

Specific Actions and Timeline	By December 2023, update the Zoning Code to address the replacement requirements in a revised Demolition Ordinance.
Lead Department(s)/Agency	Planning
Funding Source(s)	General Fund
AFFH	Anti-Displacement and Tenant Protection

Policies Implemented	H-4 Economic Diversity H-5 Rent Stabilization H-9 Housing Preservation

5.5 AFFH ACTIONS SUMMARY

The following table summarizes the various housing program actions that have direct or indirect beneficial impacts in furthering fair housing choice.

Table 5.6: Summary of AFFH Actions

Program	Action	Targeting	Schedule	Metric
Fair Housing Outreach and Enforcement (Medium Priority)				
Program 6 -Fair Housing Outreach and Enforcement	Continue to provide fair housing services to residents, landlords, and housing professionals. Increase outreach and education to Homeowners Associations.	Citywide	Annually	Outreach to 100 residents, housing providers, and housing professionals
	Conduct education/training workshops annually for tenant-focused CBOs and property owner associations.	Citywide with emphasis in Central and Southern Berkeley and areas surrounding UC Berkeley campus where there are higher proportions of LMI households and cost burdened renters.	Annually	Conduct 9 workshops
	Provide annual training sessions on fair housing rights and requirements to rental property owners.	Citywide with emphasis in Central and Southern Berkeley and areas surrounding UC Berkeley campus.	Annually	Provide 70 training sessions
	Conduct outreach events to inform Berkeley residents of their rights.	Citywide with emphasis in Central and Southern Berkeley where there are higher proportions of protected groups and sensitive communities at risk of displacement.	Annually	Conduct 22 outreach events
	Conduct tenant/landlord mediation sessions to resolve disputes and/or legal problems.	Citywide	Annually	Conduct 10 mediation sessions
	Conduct an Equity Study to target program marketing	Citywide	By 2028	Complete study and develop targeting

Program	Action	Targeting	Schedule	Metric
Housing Mobility (High Priority)				
Program 2 -Housing Choice Vouchers	BHA will work to expand all areas of Berkeley with rental housing units.	Provide targeted outreach to educate the community on Source of Income protection with the goal of increasing acceptance of HCVs in high resource areas.	By 2031	Increase baseline by 200 households
Program 15 -Shelter Plus Care	Enroll new clients as vouchers become available due to existing clients exiting the program	Citywide	Annually	10 new clients
Program 16 -Home Modification for Accessibility and Safety	Assist home modifications.	Targeted outreach to areas identified by the California Tax Credit Allocation Committee (TCAC) map as low or moderate resource census tract	Annually	13 homes
Program 17 -Accessible Housing	Encourage residential units to be developed with universal design and visitability principles in future PBV Master Contracts or exemptions for requiring a modified unit to be returned to its original state upon vacating the unit.	Citywide	By 2026	Achieve two projects designed with universal design and/or visitability principals
	As part of BHA's MTW application addressed in Program 1 -Affordable Housing Berkeley, the fiscal flexibilities include the ability to spend up to $500 per unit to help landlords pay for unit modifications.	Citywide	By 2031	Assist 20 rental units for unit modifications
Program 18 -Senior / Disabled Home Improvement Loan	Provide interest-free loans up to $100,000.	Citywide	Annually	Provide two loans
Program 19 -Housing Condition Standards	Conduct an Annual Inspection approximately 9 months after the initial inspection, and every 9-10 months thereafter.	Citywide	Annually	All Housing Choice Voucher units
Program 31 -Zoning Code Amendment: Special Needs Housing	Review and adopt new zoning provisions to align land use standards with	Citywide	By 2023	Achieve 5% of new housing units as special needs

Program	Action	Targeting	Schedule	Metric
	State law requirements for special needs housing.			housing in eight years
New Opportunities in High Resource Areas (Medium Priority)				
Program 27 -Priority Development Areas (PDAs), Commercial and Transit Corridors	Develop San Pablo PDA Specific Plan.	San Pablo PDA	By 2025	Increase new housing opportunities in higher resource areas by 2000 units.
	Complete Telegraph PDA/Southside Plan Area zoning map amendments and up-zoning.	Telegraph PDA/Southside Plan Area	By 2023	
	Update Land Use, Safety, and Environmental Justice Elements of the General Plan to accommodate greater housing capacity on commercial and transit corridors	Citywide	By 2026	
Program 29 -Middle Housing	Amend Affordable Housing Fee schedule.	Citywide	By Spring 2023	Achieve 15% of new units in higher resource areas in eight years
	Amend Zoning code to allow two- to four-unit development on one lot.	Citywide	By Summer 2023	
Program 30 -Accessory Dwelling Units	Facilitate development of ADUs	Citywide	Annually	100 ADUs or JADUs
Program 32 -By-Right Approval on Reused Sites for Affordable Housing	Amend the Zoning Code to provide by-right approval of projects with 20 percent lower income units on sites that are reused from the previous Housing Element cycles.	Citywide	By January 2024	Achieve 20% of new units in higher resource areas in eight years
Program 33 -Zoning Code Amendment: Residential	As part of the Multi-Unit Residential Objective Standards project, minimum densities will be applied to all residential and mixed-use developments with five or more units.	Citywide	By 2024	Achieve 20% of new units in higher resource areas in eight years
	Develop Objective Design Standards for residential and mixed use developments.	Citywide	By 2026	
Program 35 -Affordable Housing Overlay and Southside Local Density Bonus	Adopt an Affordable Housing Overlay Density Bonus, concurrent with the residential financial feasibility study, Residential Objective Design Standards,	Targeted outreach in downtown, Southside, and major commercial corridors	By 2026	Achieve 20% of new units in higher resource areas in eight years

Program	Action	Targeting	Schedule	Metric
	and the General Plan Land Use Element Update			
Program 36 -Adequate Sites for RHNA and Monitoring	Provide an adequate inventory of sites for RHNA	Citywide	By 2024	Implement a formal evaluation procedure to monitor the development of opportunity sites and provide it to prospective residential developers.
Place-Based Strategies for Neighborhood Improvements (High Priority)				
Program 8 -Rental Housing Safety	Expand proactive inspections program.	Citywide with emphasis in Central and Southern Berkeley neighborhoods where there are higher proportions of renters and aging housing units.	By 2023	Inspect every building during a 5-year cycle
Program 13 -Homeless Services	Establish programs and services	People's Park Telegraph Avenue District	By 2025	Increase capacity for housing the homeless by 43 beds/persons at Golden Bear Inn Increase capacity for housing the homeless by 43 beds/persons at the Rodeway Serve an average of 15-25 unhoused persons the drop-in center daily Maintain transitional housing for 12 transition aged youth at 3404 King Street
Program 20 -Livable Neighborhoods	Expand Neighborhood Services Code Enforcement.	Southside	By 2023	One additional office
	Update implementation of the Group Living Accommodations (GLAs) Ordinance.	Citywide	By 2022	Implement new process
Program 21 -Lead-Poisoning Prevention	Conduct an Environmental Investigation (EI) for presence of lead when	Target neighborhoods which have been identified as having one	Ongoing	Perform EI within 24 hours of Public

Program	Action	Targeting	Schedule	Metric
	peeling lead paint has been identified or if/when a child has elevated blood lead levels. The average inspection process from start to finish should take approximately 30 days to complete.	or more cases of toddlers or young children with elevated blood lead levels, presumably linked to environmental sources		Health Nurse (PHN) referral
Program 22 -Seismic Safety and Preparedness Programs	Soft Story Program: Facilitate the compliance of the remaining. Identify additional buildings may be added to the inventory for improvements.	Targeted buildings	By 2025	14 remaining buildings
	Unreinforced Masonry Ordinance: Facilitate the retrofitting of the remaining buildings	Targeted buildings	By 2025	4 remaining buildings
Program 23 -Berkeley Pilot Climate Equity Fund	Establish and implement program.	Homes for this Program may be anywhere in Berkeley, but are most likely to be in formerly red-lined areas in South and West Berkeley.	2022-2024	Retrofit 12 low and moderate income homes
Program 24 -Berkeley Existing Buildings Electrification (BEBE) Strategy	Develop programs and policies that promote energy efficiency while protecting tenants from displacement.	Neighborhoods most targeted would be those with the largest proportion of renters in older buildings: Southside, Central Berkeley, and West and South Berkeley	2022-2024	Retrofit 15 low and moderate income homes
Program 25 -Building Emissions Saving Ordinance (BESO)	Complete BESO assessments.	Citywide	Annually	400 buildings
Program 26 -BayREN Single-Family Homes and Multi-Family Homes Programs	Continue to assist in recruiting participants to BayREN's rebate programs through BESO and other outreach.	Targets neighborhoods with the greatest proportion of homes in need of energy efficiency, health, and safety retrofits; most likely to be in areas with older, less maintained homes, such as Southside, Central, West, and South Berkeley	Annually	75 single-family homes and 125 multi-family dwelling units
Program 28 -BART Station Area Planning	Adopt zoning and associated General Plan amendments	BART's TOD Performance Targets	By 2022	Provide opportunity for 1,200 units;

Program	Action	Targeting	Schedule	Metric
	consistent with AB 2923; adopt City – BART Joint Vision and Priorities for Transit-Oriented Development at the Ashby and North Berkeley BART Station Areas and certify EIR on these documents.	prioritize below market rate units for low and very low income households and transit dependent populations.		35% for lower income
Anti-Displacement and Tenant Protection (High Priority)				
Program 3 -Citywide Affordable Housing Requirements	Adopt a Resolution addressing regulations for a voucher program and establishing an in-lieu fee pursuant to BMC Section 23.328.020(A)(2).	Citywide	By 2023	Achieve 40% of inclusionary low-income units
Program 4 -Housing Trust Fund	Utilize HTF to gap finance affordable housing development	Citywide with emphasis at BART stations	By 2031	Fund a minimum of 500 units of nonprofit affordable housing. Fund a minimum of 35% affordable housing at Ashby & North Berkeley BART.
Program 5 - Preservation of At-Risk Housing	Monitor status of the at-risk project.	Citywide	Annually	Preserve all 92 at-risk units
Program 7 -Rent Stabilization and Tenant Protection	Continued enforcement of Rent Stabilization Ordinance	Citywide	Annually	Maintain 19,000 rent stabilized units to the extent possible. Pursue additional affordable housing opportunities to mitigate the impact of the Ellis Act.
Program 9 -Tenant Survey	Conduct Tenant Survey.	Citywide	By 2022	Collect data for formulating policy changes
Program 10 -Housing Preference Policies	Adopt a housing preference policy.	Citywide	By 2023	Rehouse displaced residents
Program 11 -Rental Assistance	Provide rental assistance.	Citywide with emphasis in Central and Southern Berkeley neighborhoods and areas surrounding UC Berkeley campus where cost burdened	Annually	50-75 new households

Program	Action	Targeting	Schedule	Metric
		renter populations are most prevalent.		
Program 12 -Workforce Housing	Assist in the development of workforce housing, with a preference for BUSD employees.	Citywide	By 2028	110 units
Program 14 -Housing for Homeless Persons with Disabilities	Assist in the development of a very low-income housing project	Citywide	Begin construction in 2023/2024	119 units
Program 37 - Replacement Housing / Demolition Ordinance	Update the Zoning Code to address the replacement requirements in a revised Demolition Ordinance.	Citywide	By Summer 2023	Achieve replacement of all affordable units demolished

5.6 QUANTIFIED OBJECTIVES

State law (Government Code Section 65583[b]) requires that the Housing Element contain quantified objectives for the maintenance, preservation, improvement, and development of housing. The quantified objectives are separate from the City's sites inventory capacity detailed in Section 5.1 Summary of Land Available for Housing.

State law recognizes that the total housing needs identified by a community may exceed available resources and the community's ability to satisfy this need. Under these circumstances, the quantified objectives need not be identical to the total housing needs. The quantified objectives shall, however, establish the target number of housing units by income category that can be constructed, rehabilitated, and conserved over the eight-year planning period.

For the 2023-2031 Housing Element planning period, the City has established the following quantified objectives for the number of units—by income level—likely to be constructed, rehabilitated, or conserved based on the programs described above and existing and anticipated resources.

Table 5.7: Summary of Quantified Objectives (2023-2031)

	Extremely Low	Very Low	Low	Moderate	Above Moderate	Total
RHNA	1,614	832	1,408	1,416	3,664	8,934
Construction	331	1009	831	204	8,580	10,755
Entitled Projects since 2018	-	133	163	9	1,785	2,090
Pipeline Projects (Under Review)	-	84	32	11	1,432	1,559
Pipeline Projects (Pre-Application)	-	353	113	30	2,567	3,063
Program 4 -Housing Trust Fund	107	213	213	-	-	533

	Extremely Low	Very Low	Low	Moderate	Above Moderate	Total
Program 28 - BART Station Area Planning	84	126	210	-	780	1,200
Program 29 -Middle Housing	-	-	-	154	616	770
Program 30 -Accessory Dwelling Units	-	-	-	-	600	600
Program 13 -Homeless Services	140	-	-	-	-	140
Program 27 -Priority Development Areas (PDAs), Commercial and Transit Corridors	-	80	80	-	640	800
Rehabilitation	115	27	132	16	200	490
Program 2 -Housing Choice Vouchers	98	-	-	-	-	98
Program 4 -Housing Trust Fund	17	27	28	-	-	72
Program 16 -Home Modification for Accessibility and Safety	-	-	104	-	-	104
Program 18 -Senior / Disabled Home Improvement Loan	-	-	-	16	-	16
Program 19 -Housing Condition Standards	-	-	-	-	200	200
Conservation	66	66	20	20	20	192
Program 5 -Preservation of At-Risk Housing	46	46	-	-	-	92
Program 6 -Fair Housing Outreach and Enforcement	20	20	20	20	20	100
TOTAL	512	1,082	963	240	8,640	11,437

Pursuant to AB 2634, in estimating the number of extremely low-income households, a jurisdiction can apportion the very low-income figure based on Census data. As shown in Table 3.8: Household Income by Tenure, extremely low- and very low-income households total 14,565 households, with extremely low-income households comprising 66 percent of the 14,565 households. Therefore, the City's very-income RHNA of 2,446 can be split into 1,614 extremely low-income and 832 very low-income units.

Construction of units are based on projected development trends and anticipated economic conditions. Actual housing production relies on the private, non-profit, and public housing development community, as well as property owner decisions, market conditions, and other factors that are outside of the control of the City. Ongoing operations subsidies are necessary for extremely low income units, which have historically been underfunded at the State and Federal level.

The Rehabilitation objective for the eight-year planning period are based on the HTF guidelines and the number of rehabilitated units funded by the HTF in the past, as well as based on the past performance of Berkeley's rehabilitation programs. Condominium conversions are assumed to be in

the above moderate-income category. Senior and Disabled Home Loans are in the moderate-income category. All others are assumed to rehabilitate housing for low-income households.

Housing Trust Fund	ELI 107 units (9 units / year) VLI 213 units (18 units / year) LI 213 units (18 units / year)
Home Rehabilitation (CESC and Rebuilding Together)	LI 104 units (13 units / year)
Senior and Disabled Home Loans	Mod 16 units (2 units / year)

The Conservation objective represents the conservation of the 92 units at risk of converting to market rate through the City's Program 5 -Preservation of At-Risk Housing and 100 units protected through targeted outreach and counseling services to tenants and landlords through the City's Program 6 -Fair Housing Outreach and Enforcement.

APPENDIX A

Publicly Assisted Housing

The City of Berkeley partners with non-profit and for-profit developers to create affordable housing units. To apply to live in an affordable housing unit, interested parties can find an available unit through the Alameda County Housing Portal or contact affordable housing providers listed on the City of Berkeley's website to find out if there are open units or sign up on a waitlist.

- **City of Berkeley Affordable Housing Website**: https://berkeleyca.gov/community-recreation/affordable-housing-berkeley/affordable-housing-resources
- **Alameda County Housing Portal**: https://housing.acgov.org/

Table A- 1: Deed Restricted Affordable Units

Property Name	Target Population	Address	Extremely Low Income	Very Low Income	Low Income	Moderate Income	Total Affordable	Affordability Expiration[1]
Units At Risk of Conversion to Market Rate								
Lawrence Moore Manor	Renters	1909 Cedar St.	0	45	0	0	45	Annual Renewal
Stuart Pratt Manor	Seniors	2020 Durant Ave.	0	43	0	0	43	Annual Renewal
Units Not At Risk of Conversion to Market Rate								
2214 Martin Luther King Jr	Renters	2214 Martin Luther King Jr	0	2	0	0	2	In Perpetuity
2319-23 Shattuck	Renters	2319 Shattuck	0	2	0	1	3	In Perpetuity
2801 Cherry	Renters	2801 Cherry St.	0	0	1	0	1	In Perpetuity
4th & U Apartments	Renters	2020 4th Street	0	16	0	15	31	In Perpetuity
Acton Courtyard	Renters	1392 University Avenue	0	15	5	50	70	In Perpetuity
Allston Place	Renters	2161 Allston Way	0	6	6	0	12	In Perpetuity
Aquatic III	Renters	2000-2010 Fifth Street	0	12	0	0	12	In Perpetuity
Aquatic II	Renters	814 University	0	4	0	0	4	In Perpetuity
Aquatic	Renters	2001 5th St	0	4	0	0	4	In Perpetuity
Avalon Berkeley	Renters	Addison Street 651	0	8	6	0	14	In Perpetuity
Aventerra Apts.	Renters	2700 San Pablo Ave.	0	3	3	0	6	In Perpetuity
Bachenheimer Apts	Renters	2119 University Avenue	0	4	3	0	7	In Perpetuity
Berkeley Central	Renters	2055 Center Street	0	12	0	11	23	In Perpetuity
Blake Berkeley	Renters	2035 Blake	0	4	0	0	4	In Perpetuity
Campanile Court (1122U)	Renters	University, 1122-1132	0	4	9	0	13	In Perpetuity
Garden Village	Renters	2201 Dwight	0	7	0	0	7	In Perpetuity
Heinz, 800	Renters	Heinz, 800	0	3	15	0	18	In Perpetuity
Higby	Renters	3015 San Pablo	0	8	7	0	15	In Perpetuity
Hillside Village LLC	Renters	1797-1801 Shattuck Avenue	0	10	0	11	21	In Perpetuity
Jones Berkeley	Renters	1500 San Pablo Street	0	16	0	0	16	In Perpetuity
K Street Flats	Renters	2020 Kittredge Street, St. D	0	0	35	0	35	In Perpetuity
Martin Luther King Way, 2500	Renters	Martin Luther King Way, 2500	0	0	2	0	2	In Perpetuity
Modera Berkeley	Renters	2133 University Avenue	0	6	0	0	6	In Perpetuity

Property Name	Target Population	Address	Extremely Low Income	Very Low Income	Low Income	Moderate Income	Total Affordable	Affordability Expiration[1]
New Californian	Renters	Martin Luther King Way, 1950	0	11	11	0	22	In Perpetuity
Parker Place	Renters	Parker St, 2037 & 2038 / Shattuck 2598-2600	0	15	16	0	31	In Perpetuity
Regent Terrace	Renters	2597 Telegraph Ave.	0	1	0	0	1	In Perpetuity
Standard Berkeley	Renters	2580 Bancroft Way	0	11	0	0	11	In Perpetuity
Shattuck, 1385	Renters	Shattuck, 1385	0	0	0	8	8	In Perpetuity
Stadium Place	Renters	2310 Fulton St.	0	7	8	0	15	In Perpetuity
Sterling Addison (ARTech)	Renters	2002 Addison Street	0	1	0	4	5	In Perpetuity
Sterling Allston (Gaia)	Renters	2116 Allston Way	0	9	9	0	18	In Perpetuity
Sterling Haste (Fine Arts)	Renters	2110 Haste Street	0	0	10	10	20	In Perpetuity
Sterling Jefferson (Renaissance Villas)	Renters	1627 University Avenue	0	0	0	6	6	In Perpetuity
Sterling Oxford (Berkeleyan)	Renters	1910 Oxford Street	0	6	5	0	11	In Perpetuity
Sterling University Ave (Touriel)	Renters	2006 University Avenue	0	4	3	0	7	In Perpetuity
Stonefire	Renters	2010 Milvia Street	0	8	0	0	8	In Perpetuity
Stranda	Renters	1901 Dwight Way/2489 Martin Luther King Jr. Way	0	0	3	0	3	In Perpetuity
Telegraph Gardens	Renters	3001 Telegraph Avenue	0	3	1	2	6	In Perpetuity
Telegraph, Bay Apartments	Renters	2616-20 Telegraph Ave	0	2	2	0	4	In Perpetuity
The Addison	Renters	1950 Addison Street	0	4	0	0	4	In Perpetuity
The Den	Renters	2510 Channing	0	3	0	0	3	In Perpetuity
The Dwight	Renters	2121 Dwight	0	9	0	0	9	In Perpetuity
The Overture	Renters	1812 University	0	4	0	0	4	In Perpetuity
The Panoramic	Renters	2539 Telegraph	0	6	0	0	6	In Perpetuity
The URSA	Renters	2124 Bancroft	0	5	0	0	5	In Perpetuity
Wesley House	Renters	Bancroft Way, 2398	0	1	0	0	1	In Perpetuity
Adeline Street Apartments	Physically Disabled/Homeless	3222 Adeline Street	7	11	0	0	18	2055
Ashby Lofts	Renters	2909 and 2919 Ninth Street	40	13	0	0	53	2060
Berkeley 75	Renters	1521 Alcatraz, 1812 Fairview, 3016 Harper, 1605 Stuart, 2231 Eighth	70	0	4	0	74	2055
Harmon Gardens	Transition-Aged Youth	3240 Sacramento Street	0	15	0	0	15	2065
Harper Crossing	Seniors	3132 Martin Luther King Jr Way	9	0	32	0	41	2071
Lorin Station	Renters	3253-3269 Adeline Street	10	0	0	0	10	2078
Oxford Plaza	Renters	2175 Kittredge Street	0	4	83	9	96	2062
William Byron Rumford Plaza	Renters	3012 Sacramento	12	0	14	0	26	2075
Redwood Gardens	Renters	2951 Derby St.	0	168	0	0	168	2047
Rosewood Manor	Renters	1615 Russell St.	0	0	35	0	35	2078
1314 Haskell Street	Ownership	1314 Haskell Street	0	0	0	3	3	2055

Property Name	Target Population	Address	Extremely Low Income	Very Low Income	Low Income	Moderate Income	Total Affordable	Affordability Expiration[1]
1320 Haskell Street	Ownership	1320 Haskell Street	0	0	0	5	5	2055
2012 Berkeley Way_01_PH	Renters	2012 Berkeley Way	57	0	0	0	57	2077
2012 Berkeley Way_02_PSH	Homeless/Formerly Homeless	2012 Berkeley Way	29	0	0	0	29	2077
2012 Berkeley Way_03_TH	Homeless/Formerly Homeless	2012 Berkeley Way	44	0	0	0	44	2077
Addison Court Housing Cooperative	Renters	1135 Addison Street	10	0	0	0	10	2051
Alcatraz Apartments	Renters	1900 Alcatraz Avenue	3	4	1	5	8	2052
Allston Commons	Renters	2203-2207 Sixth Street	0	3	9	0	12	2049
Allston House	Renters	2121 Seventh Street	0	28	0	0	28	2064
Amistad House	Seniors	2050 Delaware Street	12	0	47	0	59	2064
Ashby Apartments	Renters	1317 Ashby Avenue	6	0	0	0	6	2049
Ashby Court Apartments	Renters	1222-1228 Ashby Avenue	0	20	0	0	20	2052
Ashby Studios	Renters	1303-1311 Ashby Avenue	0	0	6	0	6	2049
BFHP - Transitional House	Shelter, Homeless / Formerly Homeless	2140 Dwight Way	0	14	0	0	10	2053
Blake Street 1340	n/a	1340-1348 Blake Street	1	0	4	0	5	2074
Bonita House	Mental illness/ Substance Treatment	1410 Bonita Avenue	15	0	0	0	15	2055
BuiLD, Inc	Adults with Severe Mental/Physical Disabilities	2110 Seventh Street	0	0	6	0	6	2057
California Street 2425	Renters	2425 California Street	1	1	3	1	6	2055
Casa Buenos Amigos Hsg Cooperative	Renters	3011 Shattuck Avenue	0	1	3	0	4	2055
Channing House	Renters	1843-1849 Channing Way	4	0	0	0	4	2047
Crossroads Village Mutual Housing Assoc.	Renters	1966-1970-A San Pablo Ave	0	0	26	0	26	2046
Dwight Way Apartments	Adults with Mental/Physical Disabilities	2501 Sacramento Street	15	0	0	0	15	2055

Property Name	Target Population	Address	Extremely Low Income	Very Low Income	Low Income	Moderate Income	Total Affordable	Affordability Expiration[1]
Erna P. Harris / Belair Housing Project	Formerly Homeless/Shelter Plus Care	1330 University Avenue	34	0	0	0	34	2065
Fairview House Cooperative	Renters	1801 Fairview Street	0	9	0	0	9	2055
Fred Finch Youth House - Turning Point	Mentally Disabled, Youth	3404 King Street	0	12	0	0	12	2055
Grayson Apartments	Renters	2748 San Pablo Ave	5	0	9	0	14	2074
Haste Street 2207	Renters	2207 Haste Street	7	0	0	0	7	2055
Hearst Street Apts	Renters	1133-1139 Hearst Street	31	0	0	0	31	2055
Hearst Studios	Renters	950 Hearst	0	2	6	0	8	2049
Helios Corner	Seniors	1535 University Avenue	47	32	0	0	79	2060
Hillegass Apartments	Renters	2500 Hillegass Street	4	4	4	5	17	2070
Hope Homes	Renters	2418 Eighth Street	1	0	2	0	3	2056
Idaho Street	Renters	3227 Idaho Street	1	0	0	0	1	2055
MLK House	Formerly Homeless, Mentally Disabled	2942 - 2944 Martin Luther King Jr. Way	0	0	0	12	12	2055
Mable Howard	Seniors	3250 Sacramento or 1499 Alcatraz	0	40	0	0	40	2052
Margaret Breland Senior Homes	Seniors	2577 San Pablo Avenue	0	27	0	0	27	2046
McKinley House	Formerly Homeless, Mentally Disabled	2111 McKinley Street	6	0	0	0	6	2069
Prince Street	Renters	1534 Prince Street	0	6	0	0	6	2071
Regent House	HOPWA set-aside units	2511 Regent Street	0	0	0	6	6	2065
Rosevine	Developmentally Disabled Adults	1431-33 Oxford Street	0	5	0	0	5	2052
Sacramento Senior Homes	Seniors	1501 Blake St (2517 Sacramento)	2	17	20	0	39	2058
Sankofa House	Formerly Homeless, Homeless	711 Harrison Street	7	0	0	0	7	2058
Savo Island	Renters	2017 Stuart Street	31	4	0	0	35	2067
Shattuck Senior Homes	Seniors	2425 Shattuck Avenue	0	15	11	0	26	2052
Strawberry Creek Lodge	Seniors	1320 Addison Street	0	10	75	0	90	2069

Property Name	Target Population	Address	Extremely Low Income	Very Low Income	Low Income	Moderate Income	Total Affordable	Affordability Expiration[1]
U A Coop Homes (UACH)	Renters	1471 Addison Street	37	5	4	0	46	2080
U A Homes/U.C. Hotel	Formerly Homeless, Homeless	1040 University Avenue	51	22	0	0	73	2069
University Neighborhood Apts	HOPWA set-aside units	1721 University Avenue	8	13	5	0	26	2060
Harriet Tubman Terrace	Renters	2870 Adeline St.	0	90	0	0	90	2059
Oceanview Gardens	Renters	1715-35 5th St; 1726-32 6th St.; 1816-1832 6th St.; 813-15 Hearst St.	0	0	0	61	61	2059
800 Heinz	Renters	800 Heinz St.	0	3	15	0	18	In Perpetuity
2747 San Pablo Ave.	Ownership	2747 San Pablo Ave.	0	0	6	0	6	In Perpetuity
2001 Fourth St.	Renters	2001 Fourth St.	0	12	0	0	12	In Perpetuity
1974 University Ave.	Renters	1974 University Ave.	0	8	0	0	8	In Perpetuity

1. Units marked with "In Perpetuity" were created via Below Market Rate inclusionary housing. They are deed restricted but do not receive public assistance.

APPENDIX B

Summary of Development Standards

B1 RESIDENTIAL DISTRICT DEVELOPMENT STANDARDS

TABLE B- 1: RESIDENTIAL DISTRICT DEVELOPMENT STANDARDS

Zoning District	Min Lot Area (sq. ft.)	Density (sq. ft.) Min Lot Area Per Unit	Height Limit			Yard[3]						Maximum Lot Coverage			Usable Open Space Per Unit (sq ft.)
			Avg. Height	Max Ht (H ovrly)	Stories (#)	Story	Front	Rear	Side	Street Side	Building Separation	Main Building Height (stories)	Interior and Through Lots (%)	Corner Lots (%)	
R-1 Single Family	5,000	—	28' [1]	35'	3	All	20'	20'	4'	4'	—	1 to 3	40	40	400
R-1A Limited Two Family	5,000	— [7]	28' [1]	35'	3	1	20'	20'	4'	4'	8'[10]	1	40	45	400
						2	20'	20'	4'	4'	12'[10]	2	40	45	
						3	20'	20'	4'	4'	16'[10]	3	40	45	
ES-R Environmental Safety	25,000	—	24' [2]	35' [2]	2	All	20'	20'	15'	15'	—	All	30	30	400
R-2 Restricted Two Family	5,000	2,500 [5]	28' [1]	35' [2]	3	1	20'	20'	4'	10'	8'	1	45	50	400
						2	20'	20'	4'	10'	12'	2	40	45	
						3	20'	20'	6'	10'	16'	3	35	40	
R-2A Restricted Multiple Family	5,000	1,650 [6]	28' [1]	35' [2]	3	1	15'	15'	4'	6'	8'	1	45	50	300
						2	15'	15'	4'	8'	12'	2	40	45	
						3	15'	15'	6'	10'	16'	3	35	40	
R-3 Multiple Family	5,000	— [4]	35'	35' [2]	3	1	15'	15'	4'	6'	8'	1	45	50	200 [8]
						2	15'	15'	4'	8'	12'	2	45	50	
						3	15'	15'	6'	10'	16'	3	30	45	
R-4 Multi Family	5,000	— [4]	35' [9]	35' [2]	3 [9]	1	15'	15'	4'	6'	8'	1	45	50	200 [8]
						2	15'	15'	4'	8'	12'	2	45	50	
						3	15'	15'	6'	10'	16'	3	40	45	
						4	15'	17'	8'	12'	20'	4	35	40	
						5	15'	19'	10'	14'	24'	5	35	40	
						6	15'	21'	12'	15'	28'	6	35	40	
R-5 High Density	5,000	— [11]	40[9]	35' [2]	4[9]	1	10'	15'	4'	6'	8'	1	55	60	100[12]
						2	10'	15'	4'	8'	12'	2	55	60	
						3	10'	15'	6'	10'	16'	3	50	55	
						4	10'	17'	8'	10'	20'	4	45	50	
						5	10'	19'	10'	10'	24'	5	40	45	
						6	10'	21'	12'	10'	28'	6	40	45	
R-S Residential Southside	5,000	— [4]	35 [2]	35' [2]	3[9]	1	10'	10'	4'	6'	8'	1	65	70	50[13]
						2	10'	10'	4'	8'	12'	2	65	70	
						3	10'	10'	6'	10'	16'	3	60	65	
						4	10'	17'	8'	10'	20'	4	55	60	
R-SMU Residential Southside Mixed-Use	5,000	— [11]	60 [2]	--	4[9]	1	10'	10'	4'	6'	8'	1	55	60	40[14]
						2	10'	10'	4'	8'	12'	2	55	60	
						3	10'	10'	6'	10'	16'	3	50	55	
						4	10'	17'	8'	10'	20'	4	45	50	
						5	10'[15]	19'[15]	20'[15]	10'[15]	24'[15]	5	40[15]	45[15]	
R-BMU Residential BART Mixed Use	—	— [16]	80'	--	7	1	— [17]	—	—	—	—	—	—	—	35/40[19]
						2+	— [18]	—	—	—	—	—	—	—	

1. *Up to 35' allowed with an AUP*
2. *May exceed with an AUP (UP in ES-R)*
3. *Setbacks may be reduced subject to the requirements of BMC 23.304.030.B.*
4. *No minimum lot area per unit except for Group Living Accommodations (GLA). 1 GLA room for every 350 sq. ft; additional room allowed for any remaining lot area of more than 200 sq. ft.*
5. *Additional dwelling unit allowed for any remaining lot area more than 2,000 sq. ft.*
6. *Additional dwelling unit allowed for any remaining lot area more than 1,300 sq. ft.*
7. *No minimum lot area per unit, although no more than two dwelling units allowed; lot area must be at least 4,500 sq. ft. to establish two dwelling units.*
8. *200 sq. ft. for each dwelling unit, 90 sq. ft. for each person in a Group Accommodation Room.*
9. *Main Buildings may exceed 35 ft. and three stories in height, to a height of, but not exceeding, 65 ft. and six stories subject to obtaining a Use Permit*
10. *R-1A Separation Standard based on building height, not by story.*
11. *No minimum lot area per unit except for Group Living Accommodations (GLA). 1 GLA room for every 175 sq. ft; additional room allowed for any remaining lot area of more than 100 sq. ft (R-5) and 40 sq ft. (R-SMU).*
12. *100 sq. ft. for each dwelling unit, 35 sq. ft. for each person in a Group Accommodation Room.*
13. *50 sq. ft. for each dwelling unit, 20 sq. ft. for each person in a Group Accommodation Room.*
14. *40 sq. ft. for each dwelling unit, 20 sq. ft. for each person in a Group Accommodation Room.*
15. *Only applies in Sub Areas 1 and 2 [for front yard setbacks, only in Subarea 2 if a minimum 50% of floor area is Residential)*
16. *The residential density minimum for R-BMU is 75 dwelling units per acre.*
17. *Setbacks are not required at Martin Luther King Jr. Way, Adeline Street, Sacramento Street. Setbacks along all other frontages along public rights-of-way and internal publicly accessible pathways shall range from 5 feet (minimum) to 15 feet (maximum) for at least 50 percent of any building's linear street frontage, including all frontages within 50 lineal feet of an intersecting corner.*
18. *Front Upper-Story Step-backs. Any street-facing building frontage above four stories in height that is not within 100 linear feet of Sacramento Street, Adeline Street, Ashby Avenue, or Martin Luther King Jr. Way, shall step back from the property line for portions of the building above four stories.*
19. *Public open space minimum is 35 sf per dwelling unit, and 18sf per GLA resident. Private usable open space miminum is 40 sf per dwelling unit, and 15 sf/resident per GLA resident. Private Usable Open Space may be provided as any combination of personal and common private space. 50% of the Private Usable Open Space requirement may be fulfilled through the provision of an equal amount of additional Public Open Space.*

B2 COMMERCIAL DISTRICT MIXED-USE AND RESIDENTIAL DEVELOPMENT STANDARDS

TABLE B- 2: MIXED-USE AND RESIDENTIAL DEVELOPMENT STANDARDS IN COMMERCIAL DISTRICTS

Zoning District	Max. FAR (MU/Res. only)	Max. Height (MU/Res. only)	Max. Stories (MU/Res. only)	Open Space (SF/unit) (MU/Res. only)	Max. Coverage (MU/Res. only)	Yard Requirements	Main Building Separation	Min. Lot Area (SF)	Density (DU/acre)
C-C Corridor	3.0/None	40'[2]/35'	3[2 3]	200	100%/40-50%	Per Tables 23.204-8 and 23.204-9		None[1]	None
C-U University Avenue	2.2-3.0/None	36-48'[2]/36'	3-4[2]	200	100%/40-50%	Per Tables 23.204-12 and 23.204-13		None[1]	None
C-N Neighborhood	3.0/None	35'	3[2]	200	100%/40-50%	Per Tables 23.204-17 and 23.204-18		None[1]	None
C-E Elmwood	0.8-1.0/None	28'/35'	2/3	200	100%/40-50%	Per Tables 23.204-21 and 23.204-22		None[1]	None
C-NS North Shattuck	1.0/None	35'/28'	3/2	200	100%/40-50%	Per Tables 23.204-24 and 23.204-25		4,000/5,000	None
C-SA South Area	4.0/None	36-60'[2 4]	3-5[2 4]	40/200	35-50%	Per Table 23.204-29		None[1]	None
C-T Telegraph Avenue	4.0-5.0	50-85'	5-6	40	100%	None[5]		None	None
C-SO Solano Avenue	2.0/None	28'	2	40/200	100%/40-50%	Per Tables 23.204-34 and 23.204-35		None[1]	None
C-DMU Downtown Mixed-Use	None	40-60'[6]	None	80	None	Per Table 23.204-39		None	None
C-W West Berkeley	3.0	50'	4[7]	40	100%	None[5]		None	None
C-AC Adeline Corridor (South Shattuck Subarea)	2.5-5.5[8]	45-90'[8]	4-8[8]	40	60-95%[8]	None[5]		None	120-300
C-AC Adeline Corridor (North and South Adeline Subarea)	2.0-5.0[8]	35-75'[8]	3-7[8]	40	60-95%	None[9]		None	100-250
MU-R Mixed Use Residential[10]	1.5	35'	3	150	100%	Front/Street Side: 5'[11] Rear/interior Side: None[12]	None	None	34.8

1. *No minimum lot area for mixed use projects; 5,000 sq. ft. minimum lot area for residential only projects.*
2. *3rd floor and above residential only*
3. *4 stories and 50 feet allowed with a UP*
4. *Dependent on district subarea. See BMC Table 23.204-28.*
5. *Unless abutting a residential district. See Section 23.304.030.C.2.*
6. *May increase height up to 180', depending on the subarea, with use permit. Core: Up to 3 buildings with max height 180 ft. Up to 2 buildings in Core or Outer Core with max height 120 ft. Theater and Museums exempt from min. height requirement.*
7. *4th floor must be residential or live/work.*
8. *Dependent on percent of project that is affordable. See Table 23.204-44*
9. *Unless abutting a residential district. See Table 23.204-45.*
10. *Standards included are for residential or mixed use. Standards differ slightly for live/work project*
11. *Front: If adjacent to residential: 10'; Street: If adjacent to residential 10' or 10%, whichever is less.*
12. *12. Rear: If the rear abuts the street: 5'; For rear and interior: If adjacent to residential 10' or 10%, whichever is less*

APPENDIX C

Residential Sites Inventory

CONTENTS

C1 PROJECTED ADUS

Pursuant to State law, the City may credit potential ADUs to the RHNA requirements by using the trends in ADU construction to estimate new production. Between 2018 and 2021, the City issued 419 building permits ADUs with an average of 105 ADUs per year over this period (Table C-1). Specifically, ADU permit activities accelerated significantly within the last two years. Assuming this trend continues, and reducing the number to conservatively account for the City's revised 2022 ADU ordinance in the Hillside Overlay District, the City expects to produce around 75 ADUs per year or 600 ADUs over the eight-year planning period.

The Association of Bay Area Government (ABAG) has issued guidance on the anticipated affordability of ADUs in order to determine which RHNA income categories they should be counted toward. Based on the ADU rent survey conducted by ABAG, the affordability distribution of ADUs in the region is: 30% very low income; 30% low income; 30% moderate income; and 10% above moderate income.

Table C-1: ADU Trends

	Permits Issued
2018	80
2019	96
2020	120
2021	123
Average	105

C2 BART SITES

The City of Berkeley is working collaboratively with the Bay Area Rapid Transit District (BART) to convert surface parking lots at two of the City's three BART stations (Ashby and North Berkeley) into transit-oriented development. The City and BART have signed an MOU on the potential development of these lots and the entities are actively working together to select private developers through an RFQ process for each station. BART's development of these parcels is permitted under AB 2923, which allows BART to enable TOD through land-use zoning on BART-owned property in collaboration with local jurisdictions. Each station can accommodate up to 1,200 units and in 2021, the City earmarked $53 million for the projects to ensure that at least 35% of the units are affordable to very low and low income households. While up to 1,200 units can be accommodated at each station, this Housing Element takes a more conservative approach in its estimate for what is expected to be constructed during the eight-year planning period and assumes 600 units at each station (Table C-2).

Table C-2: BART Sites

Station	Extremely Low/Very Low	Low	Moderate	Above Moderate	Total	Acreage	Density Achieved (du/ac)

North Berkeley BART	105	105	0	390	600	6.5	92
Ashby BART	105	105	0	390	600	6.0	100
Total	210	210	0	780	1,200		

C3 LIKELY SITES - ENTITLED PROJECTS

While the 6th cycle Housing Element planning period covers from January 31, 2023, through January 31, 2031, the RHNA projection period begins June 30, 2022. Housing units that have been entitled for construction but do not receive a Certificate of Occupancy until after June 30, 2022 can be credited towards the 6th cycle RHNA.

The Likely sites include projects that have been entitled between 2018 and June 30, 2022. The City conducted an analysis of 47 permitted projects and the average time between entitlement and permit issuance is three years. As the majority of the residential and mixed use projects in the City are high density podium development, the preparation of construction documents and financing tend to require a longer time. Inactive projects with entitlements prior to 2018 are still valid, but have not been included as Likely sites.

In total, the City has entitled 2,101 units (133 very low, 166 low, 9 moderate, and 1,793 above-moderate), that are expected to be constructed during the 6th cycle planning period. The affordability of the units was determined based on the affordability specified on the project proposal as approved by the City.

Two projects – ZP2019-0027 and ZP2020-0134 - propose development across multiple parcels. In the table below, the projects are separated by APN and the total unit count for each project is pro-rated by parcel size. ZP2019-0027 proposes a total of 169 units on two parcels – 2150 and 2176 Kittredge – with 0.15 acres and 0.49 acres, respectively. In Table C-6, 2150 Kittredge (8b) has been allocated 41 units, and 2176 Kittredge (8a) has been allocated 128 units.

Total Number of Entitled Projects	Total Number of Entitled Parcels	Total Number of Entitled Parcels Included in 5th Cycle	Extremely Low/Very Low	Low	Moderate	Above Moderate	Total Number of Entitled Units	Acreage
46	48	13	133	166	9	1,793	2,101	14.96

Table C-3 Likely Sites - Entitled Projects since 2018

	APN	Permit Number	Address	Likely Sites - Project Description	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Net New Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB 330 (Y/N)	Density Bonus (Y/N)
1	056 197701300	ZP2018-0112	2198 San Pablo	Existing Use: Wine and Liquor Store. Demolish an existing single-story commercial building and construct a new 6-story, mixed-use development with 3 live/work units, 57 dwelling units (including 5 available to very low-income households), stacked parking for 20 vehicles, and 48 bicycle spaces.	5	0	0	55	60	C-W	MU	10+	266.7	0.22	No	No	No	Yes
2	057 202700202	ZP2020-0011	2210 Harold	Existing Use: Vacant Commercial office. Demolish an existing commercial building and to construct a seven-story, 75-foot tall mixed-use building with 652 square feet of commercial space on the ground floor, 38 dwellings with a total of 135 bedrooms, and secure storage for 48 bicycles on a 5,953 square-foot parcel. The project would provide no off-street parking, reduce certain setbacks, and pay an in-lieu fee instead of providing privately-owned public open space.	0	0	0	38	38	C-DMU	MU	10+	278.1	0.14	Yes	No	Yes	No
3	053 163300107	ZP2019-0155	3000 San Pablo	Existing use: Discount Fabrics. 1) demolish an existing two-story commercial building; and 2) construct a six-story, mixed-use building with 78 dwelling units (including seven Very Low-Income units), 1,248 square feet of commercial space, 2,320 square feet of usable open space, 50 bicycle parking spaces and 43 vehicular parking spaces.	7	0	0	71	78	C-W	MU	10+	242.7	0.32	No	No	Yes	Yes
4	060 235401503	ZP2020-0046	1207 Tenth	Existing Use: Single-Story structures MU L/W, studio, R&D, Lt Manufacturing, Art Gallery. Construction of a new 3-story, 18,450 square-foot mixed-use building, providing 12 parking spaces, 12 artist studios, R&D space, a fabrication shop, art gallery and two live/work units.	0	0	0	2	2	MU-LI	MU	5+	6.8	0.29	No	No	No	No
5	052 157410400	ZP2020-0069	3031 Telegraph	Demolish an existing two-story commercial (medical office) building and construct a six-story, 98,338 square-foot mixed-use building with 110 dwelling units (including 7 Very Low-Income units), including 5,666 square feet of commercial space, 7,474 square feet of usable open space, 112 bicycle parking spaces and 29 vehicular parking spaces at the ground level.	7	0	0	103	110	C-C	MU	10+	151.6	0.73	No	No	Yes	Yes
6	056 197201800	ZP2018-0145	2015 Eighth	Demo rear detached garage, build 2 du behind existing duplex	0	0	0	2	2	R-4	MF	2-4	26.8	0.15	No	No	No	No
7	057 202502300	ZP2018-0235	2009 Addison	Demo commercial single-story storage building, build MU with performing arts space, Berkeley Rep-Rent Free	0	0	9	36	45	C-DMU	MU	10+	188.1	0.24	Yes	No	No	No
8a	057 202900204	ZP2019-0027	2176 Kittredge	Former gas station. Demolish a five-story commercial building at 2176 Kittredge Street and a one-story convenience store and carwash facility at 2150 Kittredge Street; to merge the two parcels for a total lot area of approximately 32,600 sq. ft.; and to construct a new, 75 ft.-tall, seven-story mixed-use building of approximately 177,000 sq. ft. in total gross floor area containing: 23,000 sq. ft. of commercial floor area on the ground level; a total of 165 dwellings units on the second through seven stories; approximately 13,250 sq. ft. of usable open space within a series of rooftop patios; and a sub-surface parking garage providing 52 off-street parking spaces.	0	0	0	128	128	C-DMU	MU	10+	261.2	0.49	Yes	No	No	No
8b	057 202901600	ZP2019-0027	2150 Kittredge	*Same project as above.* One-story convenience store and carwash facility at 2150 Kittredge Street. Demolish a	0	0	0	41	41	C-DMU	MU	10+	273.3	0.15	Yes	No	-	-

	APN	Permit Number	Address	Likely Sites - Project Description	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Net New Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB 330 (Y/N)	Density Bonus (Y/N)
				five-story commercial building at 2176 Kittredge Street and a one-story convenience store and carwash facility at 2150 Kittredge Street; to merge the two parcels for a total lot area of approximately 32,600 sq. ft.; and to construct a new, 75 ft.-tall, seven-story mixed-use building of approximately 177,000 sq. ft. in total gross floor area containing: 23,000 sq. ft. of commercial floor area on the ground level; a total of 165 dwellings units on the second through seven stories; approximately 13,250 sq. ft. of usable open space within a series of rooftop patios; and a sub-surface parking garage providing 52 off-street parking spaces.														
9	052 157404400	ZP2018-0038	3028 Regent	Convert care facility to duplex	0	0	0	2	2	R-2A	DP	2-4	14.6	0.14	No	No	No	No
10	057 208602501	ZP2018-0220	1835 San Pablo	Former Tire shop. Demolish an existing one-story commercial building and construct a new 6-story, mixed-use development with 99 dwellings (including 7 dwellings available to very low income households) and 2 live/work units. The project would include stacked parking for 49 automobiles and secure storage for 92 bicycles.	7	0	0	92	99	C-W	MU	10+	222.8	0.44	No	No	No	Yes
11	059 226800601	ZP2016-0050	1506 Bonita	Raise existing duplex to add 2 du on site w/ 3 duplexes. Use Permit #ZP2016-0050 to raise an existing one-story duplex by 8'-10" resulting in a two-story building. The new approximately 1,600 square foot ground level would accommodate two new residential units. This would increase the total number of dwelling units on the parcel from six to eight and the number of bedrooms from six to twelve.	0	0	0	2	2	R-2A	MF/DP	2-4	25.8	0.31	No	No	No	No
12	060 235400200	ZP2019-0192	1200-1214 San Pablo	Art Gallery, Tattoo Parlor, and Former Fast-Food Restaurant. Use Permit #ZP2019-0192 to demolish three existing commercial buildings and construct a six-story, mixed-use building with 104 units (including nine Very Low Income units), a 3,119-square-foot restaurant, 4,343 square feet of usable open space, and 55 ground-level parking spaces.	9	0	0	95	104	C-W	MU	10+	182.6	0.57	Yes	No	No	Yes
13	057 206101000	ZP2016-0101	1717 University	Demo commercial, SFD, Detached Garage, and construct new 5-story MU bldg	3	0	0	25	28	C-U/R-2A	MU	10+	143.9	0.19	No	No	No	Yes
14	057 203400800	ZP2019-0041	2023 Shattuck	Former Vacant Lot. Construct a 24,178 square-foot, seven-story, 73'5" tall, mixed-use building with 48 dwelling units (including 4 units available to very-low-income households) and 1,250 square feet of ground floor commercial space. The project would provide no vehicle parking; it would provide secure storage for 34 bicycles.	4	0	0	44	48	C-DMU Core	MU	10+	570.97	0.08	No	Yes	No	Yes
15	058 212701403	ZP2017-0014	1740 San Pablo	Prior use: Vacant service station. Demolish two existing 1-story buildings and build a 5-story mixed-use building with 48 dwelling units, 3 live/work units, 1 approximately 800 square-foot quick-serve restaurant, and 53 parking spaces at the ground floor.	4	0	0	47	51	C-W	MU	10+	156.4	0.33	No	No	No	Yes
16	057 202401300	ZP2019-0081	2099 Martin Luther King Jr.	Demolish an existing one story 3,595 square foot auto service building and construct a 62,419 square-foot, seven-story, 69' tall, mixed-use building with 72 dwellings (including 5 dwellings available to very low-income households) and 2,448 square feet of ground floor retail space. The project would provide 12 parking	5	0	0	67	72	C-DMU Buffer	MU	10+	252.7	0.28	Yes	No	No	Yes

	APN	Permit Number	Address	Likely Sites - Project Description	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Net New Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB 330 (Y/N)	Density Bonus (Y/N)
				spaces and secure storage for 65 bicycles within a grade level garage.														
17	055 189401501	ZP2017-0103	2028 Bancroft	Relocate an existing single-unit to 1940 Haste Street and construct a 33,539 square-foot, six-story, 65' tall, residential building with 37 dwellings (including 2 Below Market Rate units) and a landscaped courtyard.	2	0	0	35	37	C-DMU	MF	10+	223.4	0.17	No	No	No	Yes
18	056 197701001	ZP2018-0222	2100 San Pablo	Prior use: Vacant single-story commercial - U-Haul. Use Permit Modification #ZP2018-0222 to modify approved Use Permit #ZP2016-0034, which allowed the construction of a 4-story mixed-use building containing a 96-unit Residential Care Facility, by reducing the number of off-street parking spaces from 30 spaces to 26 spaces, adding 9,265 sq. ft. of new gross floor area, and modifying the interior layout of the commercial and residential uses of the approved Residential Care Facility.	0	0	0	96	96	C-W	MU	10+	156.8	0.61	No	No	No	No
19	053 159101803	ZP2021-0191	2001 Ashby	Prior use: Cooperative Center, Federal Credit Union, single-story commercial. SB 35 - 86 BMR + 1 MR. Resubmitted 10/21/2021 SB 35 modification application to PLN2019-0059.	53	33	0	1	87	C-SA	MF	5+	144.1	0.60	Yes	No	No	Yes
20	057 208601300	ZP2016-0028	1173 Hearst	Develop two parcels, including the substantial rehabilitation of the existing seven dwelling units and construction of six new dwelling units. 6 of the 7 rehabilitated units are rent controlled and shall remain rent stabilized. The project proposes to rehabilitate the seven existing dwelling units (three duplexes and one single-family dwelling) and add three two-story duplexes as a common interest development (i.e. condominiums) for a total of seven buildings and 13 dwellings.	1	0	0	3	4	R2-A	MF	5+	16.1	0.31	No	No	No	No
21	057 207300500	ZP2019-0173	1367 University	Vacant Lot. Construct an approximately 9,273-square-foot, four-story 39-unit Group Living Accommodation (GLA) operating as a Single-Room Occupancy (SRO) Residential Hotel on a vacant parcel.	6	0	0	34	40	C-U	GLA	10+ GLA	338.3	0.12	No	Yes	Yes	Yes
22	052 156317900	ZP2018-0034	2714 Alcatraz	Alter an existing 3,391 square foot, 2-story residential building and an existing 360 square foot, 1-story accessory building to: 1) restore the residential building to its original density of 5 units; 2) expand the basement by 24 square feet and convert the basement to a dwelling; 3) construct a 21 square foot addition on the first floor; 3) construct a 337 square foot addition on the second floor; 4) reconfigure the floor plans for the four existing units on the first and second floors; and 5) remove an illegal dwelling from the garage to restore 2 off-street parking spaces.	0	0	0	5	5	R-2	MF	5+	36.9	0.14	No	No	No	No
23	055 187602101	ZP2016-0172	2542 Durant	Existing parking lot and multi-family residential, Infill. Merge two parcels and construct a new five-story, mixed use building with 32 dwelling units including a Variance request to allow dwelling units on the ground floor next to and behind an existing 12-unit apartment building.	0	0	0	32	32	C-T	MF	10+	149.8	0.29	No	No	No	No
24	055 182901100	ZP2018-0161	2215 Parker	Vacant Lot. Construct a two-story, 6,001 sq. ft. duplex on a 6,750 sq. ft. vacant parcel.	0	0	0	2	2	R-2A	DP	2 to 4	12.9	0.15	Yes	Yes	No	No
25	057 204600100	ZP2018-0137	1951 Shattuck	Existing Use: Hair salon, convenience corner store, clothing retailer. Demolish two existing non-residential buildings and to construct a 12-story, 120-foot tall mixed-use building with 5,000 square feet of commercial space on the ground floor, 156 dwelling units, and a 100-space	0	0	0	156	156	C-DMU	MU	10+	390.0	0.40	Yes	No	No	No

	APN	Permit Number	Address	Likely Sites - Project Description	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Net New Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB 330 (Y/N)	Density Bonus (Y/N)
				subterranean parking garage on a 17,424 square foot parcel.														
26	057 208601400	ZP2016-0028	1155 Hearst	Rehabilitation of seven units, and six additional dwelling units	1	0	0	6	7	R2-A	MF	5+	14.1	0.5	No	No	No	No
27	055 183700100	ZP2015-0096	2556 Telegraph	Prior use: Multi-tenant commercial (Street view 2011 shows Hair studio, spiritual healer, Japanese restaurant, electronics store). Use Permit 2015-0096 to (1) demolish an existing 16,000 square-foot, two-story commercial building; and (2) construct a 42,363 square-foot, fivestory, 64'-5" tall, mixed-use building with 22 dwelling units, two Live-Work units, and 3,092 square feet of commercial space.	0	0	0	24	24	C-T	MU/LW	10+	106.3	0.23	Yes	No	No	No
28	056 194401100	ZP2018-0108	2422 Fifth	Office + two dwelling units on lot with existing duplex. Note - Finaled after June 30, 2022 (9/29/2022).	0	0	0	2	2	MU-R	MU/DP	2 to 4	27.9	0.14	No	No	No	No
29	053 162703701	ZP2021-0027	3015 San Pablo	2 Live/Work added to existing 98 unit (Higby Apts); Conversion of an 1,824 sq. ft. commercial space to two (2) Live/Work Units.	0	0	0	2	2	C-W	L/W	5+	127.4	0.79	No	No	No	No
30a	057 202501300	ZP2020-0134	2000 University	Prior cafe and restaurant use and vacant ground floor commercial. Merge 2 parcels. Demolish one existing commercial and one mixed-use structure containing two dwelling units and construct a new, 8-story mixed-use building with 82 dwelling units and 1,415 square feet of ground floor commercial space.	5	0	0	53	58	C-DMU	MU	10+	580	0.10	Yes	No	Yes	Yes
30b	057 202501200	ZP2020-0134	2001 Milvia	*Same project as above.* Merge 2 parcels. Construct a new, 8-story mixed-use building with 82 dwelling units and 1,415 square feet of ground floor commercial space.	2	0	0	22	24	C-DMU	MU	10+	600	0.04	Yes	No	-	-
31	055 188400600	ZP2020-0090	2317 Channing	Existing Use: medical office. 1) Demolish an existing two-story medical building; and 2) construct a 4-story, residential building with 17 dwelling units.	0	0	0	17	17	R-S	MF	10+	113.8	0.15	No	No	Yes	No
32	057 208902600	ZP2018-0226	1923 Ninth	(1) Demolish an existing 1,272-square-foot, one-story duplex and (2) construct three detached, three-story, single family dwelling units: 1,856 square feet (Unit A), 2,006 square feet (Unit B), and 1,932 square feet (Unit C).	0	0	0	3	3	R-3	3-SFD	2 to 4	21.4	0.14	No	No	No	No
33	055 187700100	ZP2019-0100	2590 Bancroft	Prior use: Multi-Tenant Retail: Urban Outfitters, Inkstone Art Supply, Freedom Flowers. 1) Demolish an existing two-story commercial building; and 2) construct an eight-story, mixed-use building with 87 dwelling units (including five Very Low-Income units), 4,345 square feet of commercial space, 2,566 square feet of usable open space, 40 long-term bicycle parking spaces and zero vehicular parking spaces.	5	0	0	82	87	C-T	MU	10+	288.6	0.30	Yes	No	No	Yes
34	057 210100103	ZP2018-0052	1900 Fourth	Existing Surface Parking Lot. SB 35 Mixed-Use Development with 260 units over 27,500 sf retail, including restaurant and cafe space. Project includes 290 vehicle parking spaces and 140 bike parking spaces. 50% affordable. Last sold in February 2022.	0	130	0	130	260	C-W	MU	10+	117.6	2.21	No	No	No	Yes
35	054 174400700	ZP2016-0014	2720 San Pablo	Demolish the former automobile service station and construct a 6 story, 60' high mixed-use building, with 25 dwellings (including 2 dwellings available to very low income households) with a total of 97 bedrooms, and 963 square feet of ground floor retail space. The project would include parking for 15 automobiles and secure storage for 50 bicycles	2	0	0	23	25	C-W	MU	10+	113.7	0.22	No	No	Yes	Yes

	APN	Permit Number	Address	Likely Sites - Project Description	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Net New Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB 330 (Y/N)	Density Bonus (Y/N)
36	053 162301201	ZP2017-0205	1331 Ashby	Existing single-family dwelling. Construct six dwelling units in three buildings	0	0	0	6	6	R-3	MF	5+	35.4	0.17	No	No	No	No
37	056 194101900	ZP2017-0146	2325 Sixth	Expand an existing one-story, 1,348 sq. ft. single-family residence and alter an existing 6,000 sq. ft. parcel by: 1) raising the existing one-story dwelling 9'2" to create a new 1,676 sq. ft. sq. ft. ground floor dwelling, 2) increasing the total number of bedrooms on the parcel from three to eight, and 3) constructing a two-story, 472 sq. ft. accessory building with an average height of 19'3", located 1'6" from the rear and side yard property line to the south.	0	0	0	1	1	R1-A	MF	2 to 4	14.5	0.14	No	No	No	No
38	053 168501100	ZP2019-0141	2139 Oregon	Existing single-family dwelling. Construct two single-family dwellings on one lot	0	0	0	2	2	R-2	SFD	2 to 4	23.2	0.09	No	No	Yes	No
39	055 188802700	ZP2017-0015	2236 Channing	Convert 1,480 square feet of medical offices, a residential lounge and laundry area, and 3 parking spaces, into three new dwelling units, for a total of 22 dwelling units in an existing 5-story mixed use building.	0	0	0	22	22	R-3	MU	10+	85.1	0.26	No	No	No	No
40	054 171900100	ZP2016-0244	2701 Shattuck	Prior use: Vacant Auto Dealership. Construct a 5-story, 62'-tall, mixed-use building with 57 dwelling units (including 5 VLI units), a 600-square-foot ground floor quick-service restaurant, and 30 parking spaces.	5	0	0	52	57	C-SA	MU	10+	210.0	0.27	No	No	No	Yes
41	055 182201902	ZP2019-0074	2000 Dwight	Existing use: Six 1-3 story contiguous medical office commercial bldgs. Demolish six existing non-residential buildings, and construct a six-story, 113-unit, Community Care Facility for seniors with 40 parking spaces in a subterranean garage.	0	0	0	113	113	R-4	MF	10+/Senior	173.4	0.65	No	No	Yes	Yes
42	054 174202900	ZP2019-0048	2795 San Pablo	Existing single-story single dwelling unit. Demolish and construct a mixed-use development consisting of three-stories, five units with 600 square feet of commercial space.	0	0	0	5	5	C-W	MU	5+	53.4	0.09	No	No	Yes	No
43	059 232500501	ZP2021-0083	1442 Fifth	Existing single-family dwelling. 3 SFD on one lot	0	0	0	3	3	MU-R	SFD	2 to 4	30.0	0.10	No	No	Yes	No
44	052 154401200	ZP2021-0113	1519 Fairview	Existing triplex. Add a new three-story detached dwelling unit.	0	0	0	1	1	R-2A	SF/MF	2 to 4	25.8	0.15	No	No	No	No
45	058 211900900	ZP2020-0123	1716 Seventh	Existing single-family dwelling. Construct two detached, 2-story single-family dwellings.	0	0	0	2	2	R1-A	SFD	2 to 4	18.2	0.11	No	No	Yes	No
46	060 244901300	ZP2020-0045	1915 Berryman	Demolish an existing three-unit residential building and construct a four-story residential building with eleven dwelling units.	0	3	0	8	11	R-2A	MF	10+	58.6	0.24	No	No	Yes	Yes
	TOTAL				133	166	9	1,793	2,101								13	19

C4 AVAILABILITY OF LAND TO ADDRESS REMAINING RHNA

Prepared with the Infill-First strategy in mind, the housing sites inventory for the 2023-2031 planning period demonstrates that new housing growth in the City of Berkeley over this eight-year period will largely conform to these patterns. The 6th Cycle Sites Inventory is made up of two types of sites:

- ***Pipeline Applications:*** These pending projects include applications submitted for entitlement or building permit and are currently under review. Pipeline sites also include anticipated projects based on pre-application submittals ("pre-app") and expressed developer interest. Affordability levels reflect proposed project plans to the extent they are known; where affordability levels are unknown at this time, all units have been placed in the above moderate income category.
- ***Opportunity Sites:*** Include vacant or underutilized sites with the potential for near-term residential or mixed use development (including some sites used in the 5th cycle Housing Element but remain available for development).

Combined, the City estimates 11,100 units, excluding the two BART sites, in the two categories above.

Table C-4: Summary of Sites to Accommodate Remaining RHNA

Category	# of Sites	Extremely Low/ Very Low	Low	Moderate	Above Moderate	Total Units
Applications Under Review or Anticipated	69	437	142	41	3,991	4,611
Opportunity Sites: Underutilized	159	1,571	1,557	1,831	1,208	6,167
Opportunity Sites: Vacant	100	37	36	36	213	322
Total Units	328	2,045	1,735	1,908	5,412	11,100

C5 METHODOLOGY AND GUIDING ASSUMPTIONS FOR SELECTION OF SITES

C5.1 PIPELINE APPLICATIONS

Pipeline projects are divided into two categories discussed below (Table C-5). A detailed list of projects under each category are listed in Table C-6.

Application Under Review: Includes 35 project applications across 37 parcels that were either submitted in 2021 and 2022 and are yet to be entitled, or are otherwise engaging with the City on development, including active projects entitled prior to 2018. It is anticipated that these projects will undergo construction and will be ready for occupancy during the 6th cycle.

Anticipated: Includes 18 projects across 32 parcels that the City anticipates processing and approving during the 6th cycle based on developer or property owner interest and pre-application submittals. Affordability levels reflect proposed project plans to the extent they are known. Seven

projects propose development across multiple parcels the total unit count for each project is pro-rated by parcel size.

Table C-5: Summary of Applications Under Review or Anticipated

Station	Extremely Low/ Very Low	Low	Moderate	Above Moderate	Total
Application Under Review	84	29	11	1,424	1,548
Anticipated	353	113	30	2,567	3,063
Total	437	142	41	3,991	4,611

Table C-6: Pipeline Sites - Applications Under Review or Anticipated (Pre-Application)

	APN	Permit Number	Address	Project Description (Orange Text = Prior land use)	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Total Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB330 (Y/N)	Density Bonus (Y/N)
		Applications Under Review			84	29	11	1,424	1,548								24	20
1	053 159801600	ZP2021-0140	2970 Adeline	Change existing two approximately 1,000 sq. ft. commercial spaces to residential dwelling units.	0	0	0	2	2	C-AC	MU	2 to 4	23.2	0.09	No	No	Yes	No
2	055 187800400	ZP2021-0192	2439 Durant	Demolition of a two-story 10,554 sq. ft. commercial (restaurant) building, construction of 37,507 sq. ft. 7-story mixed-use building with 7,799 sq. ft. commercial space, and 27,532 sq. ft. for 22 dwelling units.	0	0	0	22	22	C-T	MU	10+	147.4	0.15	No	No	Yes	No
3a	056 201102700	PLN2021-0063	1776/1782/1790 University	Merge 2 parcels. Demo 3 1-story commercial bldgs (India Fabrics, smog check) New construction of a 5-story mixed use building with 79 SRO and common kitchen space on each level + commercial space on ground level. Demolition of 3 existing on-story buildings.	0	0	5	32	37	C-U	MU	10+	358.2	0.10	No	No	Yes	Yes
3b	056 201102800	PLN2021-0063	1776/1782/1790 University	*Same project as above.* Merge 2 parcels. Demo 3 1-story commercial bldgs (India Fabrics, smog check) SB330 Prelim App. New construction of a 5-story mixed use building with 79 SRO and common kitchen space on each level + commercial space on ground level. Demolition of 3 existing on-story buildings.	0	0	6	36	42	C-U	MU	10+	365.9	0.11	No	No	-	-
4	058 217600101	ZP2022-0011	1752 Shattuck	Demo existing auto smog services use. Construct 7-story mixed-use building with 57 dwelling units and group floor commercial. (campus auto care site) .	7	0	0	50	57	C-C	MU	10+	234.2	0.24	No	No	Yes	Yes
5	058 219300600	PLN2021-0020	2441 Le Conte	Existing Starr King School for the Ministry. 1) renovate and change the use of an existing one-story, 5,935 square-foot non-residential building to residential hotel, and 2) construct a four-story residential addition at the rear, resulting in a 17,138 square-foot residential hotel at a maximum height of 48 feet, two inches, containing 50 group living accommodation units and one manager's unit under State Density Bonus law.	0	0	0	51	51	R-4	MF	10+	173.2	0.29	No	No	Yes	Yes
6	055 188302700	ZP2020-0052	2328 Channing	Relocate a historic SFR and to construct a new 20-unit, five-story housing project	1	0	0	19	20	R-S	MF	10+	129.1	0.15	No	No	Yes	No
7	060 240500100	ZP2021-0070	1201-1205 San Pablo	Existing Vacant Lot. Construct a six-story, mixed-use building on a vacant lot, with 66 units (including five Very Low Income units), 1,720 square feet of commercial space, 2,514 square feet of usable open space, and 17 to 28 ground-level parking spaces.	5	0	0	61	66	C-W	MU	10+	221.2	0.30	No	Yes	Yes	Yes
8	057 208700500	ZP2021-0186	1820-1828 San Pablo	Demo existing building except ground floor. Construct 5-story mixed-use building with 44 dwelling units and ground floor commercial, incorporating the existing façade. (Albatross bldg.)	12	0	0	32	44	C-W	MU	10+	164.8	0.27	No	No	Yes	Yes
9a	057 203201700	ZP2021-0158	130-134 Berkeley Sq	Merge 2 parcels, demo existing 1-story retail shops	0	0	0	27	27	C-DMU core	MU	10+	450.0	0.06	Yes	No	Yes	No
9b	057 203201800	ZP2021-0158	130-134 Berkeley Sq	*Same project as above.* Merge 2 parcels, demo existing 1-story retail shops	0	0	0	23	23	C-DMU core	MU	10+	460.0	0.05	Yes	No	-	-
10	053 159200100	ZP2022-0046	3000 Shattuck	Prior gas station. New application, override ZP 2015-0229 for 23 units. Removal of existing 1 story commercial structure & construction of a new 9-story mixed-use building with 156-dwelling units, ground level commercial, and lobbies, with State of California density bonus. C-SA	2	2	0	152	156	C-SA	MU	10+	501.1	0.31	Yes	No	Yes	Yes
11	059 232500400	ZP2021-0084	776 Page	Existing single-family dwelling. 3 SFD on one lot	0	0	0	3	3	MU-R	SFD	2 to 4	33.2	0.09	No	No	Yes	No
12	052 153101202	ZP2021-0009	3233 Ellis	Demolition of existing SFD, construction of three new, detached SFDs.	0	0	0	3	3	R2-A	SFD/MF	2 to 4	21.2	0.14	No	No	No	No
13	052 156800900	ZP2021-0072	2942 College	Vacant Dry Cleaners. Demolish and existing non-residential building and construct a new two-story mixed-use development containing 1,296 sq.ft. of ground floor commercial space and 3,278 sq.ft. of residential space, including four dwelling units, in two separate buildings.	0	0	0	4	4	C-E	MU	2 to 4	27.5	0.15	No	No	Yes	No
14	055 188000700	ZP2021-0210	2435 Haste	Demolish a two-story apartment building and construct an 8-story all residential apartment building with 37 dwelling units. Replacement of 8 protected units.	1	4	0	32	37	R-SMU	MF	10+	284.3	0.13	No	No	Yes	Yes

	APN	Permit Number	Address	Project Description (Orange Text = Prior land use)	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Total Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB330 (Y/N)	Density Bonus (Y/N)
15	055 189600500	ZP2021-0201	2440 Shattuck	Demolition of existing Dollar Tree; Proposed new mixed use building (dollar tree site); 40 New Dwelling Units	3	0	0	37	40	C-DMU Corr	MU	10+	203.6	0.20	Yes	No	Yes	Yes
16	055 188100400	ZP2022-0021	2449 Dwight	Construct 4-story addition on existing 4-story mixed-use building with ground floor retail (restaurant, jewelry store, print shop, spice shop) (2015 Chandler building fire); add 27 new Dwelling Units	2	0	0	49	51	C-T	MU	10+	215.7	0.24	No	No	Yes	Yes
17	057 202700600	ZP2021-0193	2065 Kittredge	Demolish the existing Landmark commercial building on Unit B of Parcel Map 6889 (condominium) and construct a 5-story, 216,696 SF, multi-family residential building with 189 units, and 42 underground parking spaces. Density Bonus. (formerly 2211 Harold Way)	11	0	0	178	189	C-DMU Core	MF	10+	245.2	0.77	No	No	Yes	Yes
18	058 217300500	ZP2020-0022	1650 Shattuck	Prior use: dry cleaners. Construct 10 dwelling units, ground floor commercial on site of Virginia Drycleaners	2	0	0	8	10	C-NS	MU	5+	94.7	0.11	No	No	Yes	Yes
19	053 159500903	ZP2018-0156	3031 Adeline	Existing Parking lot and 1,000 square foot fast-food bldg and construct a 5-story, 57' tall, 46,948 square foot mixed-use building with 42 dwelling units, 4,324 square feet of commercial space, and 25 parking spaces on a 12,257 square foot lot.	2	0	0	40	42	C-SA	MU	10+	149.3	0.28	Yes	No	Yes	Yes
20	055 186901600	ZP2019-0051	2716-2718 Durant	Raise a dwelling at the front of the property to create a three-story dwelling; to raise a dwelling at the rear of the lot and construct two new dwellings below; and to not provide the two required parking spaces.	0	0	0	2	2	R-3	MF	2 to 4	28.5	0.11	No	No	No	No
21	056 192701800	ZP2019-0089	2371 San Pablo	Alter existing one-story, 2,105 SF mixed-use building, add two stories, 4 dwelling units, with zero parking spaces, where 8 are required.	0	0	0	4	4	C-W	MU	2 to 4	37.9	0.11	No	No	No	No
22	053 168400100	ZP2020-0118	2801 Adeline	Existing Walgreens. Proposed 222 room hotel and 84 residential units	18	17	0	49	84	C-AC	MU	10+	76.4	1.10	No	No	No	Yes
23	059 233701800	ZP2016-0025, ZP2021-0085	1415 Fifth	Existing single-family dwelling. Duplex and new SFD	0	0	0	3	3	MUR	SFD/DP	2 to 4	20.1	0.15	No	No	No	No
24	056 200400100	UPMOD2013-0001	1698 University	Demolish vacant automotive repair station. Construct new 5-story mixed-use building with 36 dwelling units. [A1]	3	0	0	33	36	C-U	MU	10+	157.3	0.23	No	No	No	Yes
25	058 218102700	ZP2022-0062	1773 Oxford	Existing four-story, 6-unit building. 5-story building 20,786 square feet. There will be 16 units and two units reserved for 50% AMI or below.	2	0	0	14	16	R-4	MF	10+	142.0	0.15	No	No	Yes	Yes
26	057 202302500	ZP2018-0200	2072 Addison	Prior use: Fitness Center. To demolish a one-story commercial building, and to construct a seven-story, mixed-use building containing an approximately 1,425-sq. ft. restaurant serving beer and wine and 29 off-street parking spaces on the ground floor, and six stories of residential uses containing a total of 66 dwelling units.	0	0	0	66	66	C-DMU	MU	10+	281.0	0.23	Yes	No	No	No
27	057 202600405	ZP2022-0026	2190 Shattuck	2-story retail and 2nd story office, ground floor Walgreens. Use Permit modification of ZP2016-0117 to construct a 25-story mixed-use housing development with 274 dwelling units and ground-floor commercial under Density Bonus law.	0	0	0	274	274	C-DMU	MU	10+	597.8	0.46	Yes	No	Yes	Yes
28	054 178101501	ZP2016-0207	2527 San Pablo	Former gas station. Use Permit #ZP2016-0207 to demolish an existing vacant service station building and construct a 6-story, mixed use building with 63 dwelling units, including 12 below market rate units for qualified persons with intellectual and developmental disabilities (I/DD); 3,179 square feet of combined ground floor commercial space for restaurant use including incidental service of beer and wine; and ground level parking for 49 vehicles.	6	6	0	51	63	C-W	MU	10+	205.9	0.31	Yes	No	No	Yes
29	055 184702000	ZP2022-0019	2555 College	Existing two one-story commercial buildings. Construct a four-story residential building with 11 dwelling units under Density Bonus law.	1	0	0	10	11	R-3	MF	10+	110.0	0.1	No	No	Yes	Yes
30	054 174203400	ZP2022-0033	2727 San Pablo	Existing Vacated Tax Services Business. Construct 3-story, 6,928 sq.ft residential building with 4 dwelling units and two off-street parking spaces.	0	0	0	4	4	C-W	MF	2 to 4	49.9	0.08	No	No	Yes	No
31	053 163400401	B2015-01784	3020 San Pablo	Existing vacant lot. Five story mixed-use building totaling 33,645 gross square feet with 29 residential units, and 2,287 square feet of commercial space.	5	0	0	24	29	C-W SP Node	MU	10+	138.6	0.21	No	Yes	No	Yes

	APN	Permit Number	Address	Project Description (Orange Text = Prior land use)	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Total Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB330 (Y/N)	Density Bonus (Y/N)
32	056 194500600	ZP2017-0039	739 Channing	Existing surface parking lot. Construct 3 detached bldgs, 1 office space, 4 LW arts/crafts	0	0	0	14	14	MU-LI/M-UR	MU/LW	10+	37.4	0.37	No	No	No	No
33	060 235000802	ZP2022-0020	919 Camelia	Existing vacant lot. Construct new 7,020 sq. ft. building containing three live/work units on vacant 3,510 sq. ft. parcel.	0	0	0	3	3	MULI	LW	2 to 4	37.5	0.08	No	Yes	No	No
34	055 182102100	ZP2021-0095	2018 Blake	Fire damaged SFR; Construct a six-story, multi-family residential building with 12 units (including 1 VLI unit), under State Density Bonus. 15% VLI for 50% bonus.	1	0	0	11	12	R-4	MF	10+	100.7	0.12	No	No	Yes	Yes
35	054 178102900	ZP2022-0028	1200 Dwight	SFD; Build two two-story dwellings, with a rear setback of 16 feet where 20 feet is required.	0	0	0	1	1	R-2	DP	2 to 4	15.4	0.13	No	No	Yes	No
		Anticipated Applications			353	113	30	2,567	3,063								16	16
1	058 212901700	PLN2022-0093	1701 San Pablo	Existing BUSD parking lot. SB 35 on BUSD property	32	48	30	0	110	R-2	MF	10+	30.6	4.45	No	No	Yes	Yes
2a	053 159202200	PLN2021-0072	2024 Ashby	SB35 Preliminary Application St. Paul's AME Church. Merge two lots and perform lot line adjustment. Demolish two non-residential buildings, and construct a mixed-use, six-story building, with 52 100% affordable units, church entry and offices, 800 SF of commercial, and 19 underground parking spaces. Utilizes Tier 4, North Adeline, Incentive Development Standards.	9	9	0	0	18	C-AC	MU	5+	152.5	0.118	No	No	No	No
2b	053 159202100	PLN2021-0072	2024 Ashby	*Same project as above.* SB35 Preliminary Application St. Paul's AME Church. Merge two lots and perform lot line adjustment. Demolish two non-residential buildings, and construct a mixed-use, six-story building, with 52 100% affordable units, church entry and offices, 800 SF of commercial, and 19 underground parking spaces. Utilizes Tier 4, North Adeline, Incentive Development Standards.	15	15	0	0	30	C-AC	MU	5+	157.9	0.19	No	No	-	-
3	056 200402000	PLN2022-0047	1652 University	Existing Use: 2-story mixed, vacant ground floor retail (former RadioShack). 5-story mixed use building with 26 units and commercial space. 2 L/W units, 26 du (1 VLI) Adjacent to Fox Commons, landmark and large protected oak tree.	1	0	0	25	26	C-U	MU	10+	151.4	0.17	No	No	Yes	Yes
4	052 153300103	PLN2021-0037	1708 Harmon	SB35 Preliminary Application Ephesian Church. Demolish three non-residential buildings, and construct a 100% affordable residential, five-story building for seniors, with 82 units, 63 ground-level parking spaces. Utilizes Tier 4, South Adeline, Incentive Development Standards. C-AC	41	41	0	0	82	C-AC	GLA	10+	78.3	1.05	No	No	No	No
5	057 210000708	PLN2022-0039	1914 Fifth	Current: Boutique retail building and parking lot. Construct 257 dwelling units, ground floor lobby and commercial. two floors of parking. 6 stories. Density Bonus	21	0	0	236	257	C-W	MU	10+	253.9	1.01	No	No	Yes	Yes
6a	057 208502500	PLN2022-0026	1931 San Pablo	Current: Surface parking, BBQ kiosk, 99 Cent stores; Construction of a new 7-story mixed-use residential development with up to 323 dwelling units on 59,000 sq ft. lot, fronting on San Pablo and Hearst with lobbies, commercial and parking using state density bonus.	23	0	0	252	275	C-W	MU	10+	238.3	1.15	Yes	No	Yes	Yes
6b	057 208501500	PLN2022-0026	1955 San Pablo	*Same project as above.* Small BBQ kiosk; SB-330 application for the construction of a new 7-story mixed-use residential development with up to 323 dwelling units on 59,000 sqft. lot, fronting on San Pablo and Hearst with lobbies, commercial and parking using state density bonus.	4	0	0	44	48	C-W	MU	10+	239.5	0.20	No	No	-	-
7a	057 205300200	PLN2022-0057	1974 Shattuck	Current: Spats restaurant; 1974-1998 Shattuck, and build new 26-story mixed-use building with 297 dwellings, using a Density Bonus.	24	0	0	214	238	C-DMU Oute	MU	10+	2043.0	0.12	Yes	No	Yes	Yes
7b	057 205300302	PLN2022-0057	1984 Shattuck	*Same project as above.* Current: 1 story commercial; 1974-1998 Shattuck, and build new 26-story mixed-use building with 297 dwellings, using a Density Bonus.	6	0	0	53	59	C-DMU Oute	MU	10+	1904.1	0.03	Yes	No	-	-
8a	055 182201400	PLN2022-0029	2001 Blake	SB330 Preliminary Application for UP Modification of ZP2020-0072 to increase unit total from 168 to 198, and the building height from 7 floors to 8 floors. / Demolish 3 existing commercial buildings and 1 duplex; restore and relocate 2 residential buildings on the site (includes 7 rent-controlled units); merge and reconfigure 7 parcels into 2 parcels; Density bonus project.	1	0	0	20	21	R-4	MF	10+	236.1	0.09	No	No	Yes	Yes

	APN	Permit Number	Address	Project Description (Orange Text = Prior land use)	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Total Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB330 (Y/N)	Density Bonus (Y/N)
8b	055 182202100	PLN2022-0029	2012 Dwight	*Same project as above.* 2-story residential building; SB330 Preliminary Application for UP Modification of ZP2020-0072 to increase unit total from 168 to 198, and the building height from 7 floors to 8 floors. / Demolish 3 existing commercial buildings and 1 duplex; restore and relocate 2 residential buildings on the site (includes 7 rent-controlled units); merge and reconfigure 7 parcels into 2 parcels; Density bonus project.	1	0	0	26	27	R-4	MF	10+	252.23	0.12	No	No	-	-
8c	055 182201303	PLN2022-0029	2015 Blake	*Same project as above.* Existing parking lot; SB330 Preliminary Application for UP Modification of ZP2020-0072 to increase unit total from 168 to 198, and the building height from 7 floors to 8 floors. / Demolish 3 existing commercial buildings and 1 duplex; restore and relocate 2 residential buildings on the site (includes 7 rent-controlled units); merge and reconfigure 7 parcels into 2 parcels; Density bonus project.	2	0	0	28	30	R-4	MF	10+	208.3	0.15	No	No	-	-
8d	055 182201304	PLN2022-0029	2015 Blake	*Same project as above.* 2-story building; SB330 Preliminary Application for UP Modification of ZP2020-0072 to increase unit total from 168 to 198, and the building height from 7 floors to 8 floors. / Demolish 3 existing commercial buildings and 1 duplex; restore and relocate 2 residential buildings on the site (includes 7 rent-controlled units); merge and reconfigure 7 parcels into 2 parcels; Density bonus project.	2	0	0	28	30	R-4	MF	10+	208.3	0.15	No	No	-	-
8e	055 182202200	PLN2022-0029	2016 Dwight	*Same project as above.* Existing parking lot; SB330 Preliminary Application for UP Modification of ZP2020-0072 to increase unit total from 168 to 198, and the building height from 7 floors to 8 floors. / Demolish 3 existing commercial buildings and 1 duplex; restore and relocate 2 residential buildings on the site (includes 7 rent-controlled units); merge and reconfigure 7 parcels into 2 parcels; Density bonus project.	1	0	0	29	30	R-4	MF	10+	208.3	0.15	No	No	-	-
8f	055 182201302	PLN2022-0029	2019 Blake	*Same project as above.* 1-story building; SB330 Preliminary Application for UP Modification of ZP2020-0072 to increase unit total from 168 to 198, and the building height from 7 floors to 8 floors. / Demolish 3 existing commercial buildings and 1 duplex; restore and relocate 2 residential buildings on the site (includes 7 rent-controlled units); merge and reconfigure 7 parcels into 2 parcels; Density bonus project.	1	0	0	29	30	R-4	MF	10+	208.3	0.15	No	No	-	-
8g	055 182202300	PLN2022-0029	2020 Dwight	*Same project as above.* 2-story residential building: SB330 Preliminary Application for UP Modification of ZP2020-0072 to increase unit total from 168 to 198, and the building height from 7 floors to 8 floors. / Demolish 3 existing commercial buildings and 1 duplex; restore and relocate 2 residential buildings on the site (includes 7 rent-controlled units); merge and reconfigure 7 parcels into 2 parcels; Density bonus project.	1	0	0	29	30	R-4	MF	10+	194.8	0.15	No	No	-	-
9a	057 203100101	PLN2022-0056	2128 Oxford, 2132-2154 Center	Demolition of two mixed use buildings (retail/restaurant first floor, 16 dwelling units above), replaced with new 26-story mixed use building with 485 dwelling units. Merge two parcels: 057 203101500 and 057 203100101.	17	0	0	153	170	C-DMU Core	MU	10+	764.4	0.28	Yes	No	Yes	Yes
9b	057 203101300	PLN2022-0056	2128 Oxford, 2132-2154 Center	*Same project as above.* Demolition of two mixed use buildings (retail/restaurant first floor, 16 dwelling units above), replaced with new 26-story mixed use building with 485 dwelling units. Merge two parcels: 057 203101500 and 057 203100101.	30	0	0	285	315	C-DMU Core	MU	10+	688.5	0.52	Yes	No	-	-
10	056 197701101	ZP2021-0046	2136-2154 San Pablo	Demolish an existing two-story nonresidential structure (Kung-Fu Academy, Auto Repair) and (2) to construct a six-story mixed-use building with 123 residential units (five residential stories above a podium), three live-work units at the ground level, and 50 off-street parking spaces in a mechanical lift system.	10	0	0	116	126	C-W	MU	10+	235.6	0.53	Yes	No	Yes	Yes
11	056 198304201	PLN2022-0020	2147 San Pablo	Currently Beyond Repair Auto Repair. Construct 6-story, mixed-use building with 3,000 SF of retail (2 units),128 GLA units (bed, bath and kitchenette), including 12 VLI units, shared living, cooking, and dining areas per floor, and 14 ground-level parking.	12	0	0	116	128	C-W	MU/GLA	10+	382.7	0.33	No	No	Yes	Yes

	APN	Permit Number	Address	Project Description (Orange Text = Prior land use)	< 50% AMI	50-80% AMI	80-120% AMI	>120% AMI	Total Units	Zone	Type	Category	Density (DU/A)	Acreage	5th Cycle (Y/N)	Vacant (Y/N)	SB330 (Y/N)	Density Bonus (Y/N)
12a	055 189600300	PLN2022-0036	2420 Shattuck	Vacated Gio's Pizza and Bocce restaurant. Construct 16-story mixed-use building with 146 dwelling units, ground level lobbies, and commercial space with state of California density bonus.	9	0	0	81	90	C-DMU Corr	MU	10+	500.0	0.18	Yes	No	Yes	Yes
12b	055 189600400	PLN2022-0036	2428 Shattuck	*Same project as above.* Existing use: Restaurant; Construct 16-story mixed-use building with 146 dwelling units, ground level lobbies, and commercial space with state of California density bonus.	6	0	0	50	56	C-DMU Corr	MU	10+	515.8	0.11	Yes	No	-	-
13a	054 178501700	PLN2022-0048	2601 San Pablo	Construction of new, 8-story mixed-use residential development with residential lobby, commercial space, and parking. 242 Dwelling Units utilizing State Density Bonus (25 VLI units)	14	0	0	121	135	C-W	MU	10+	313.3	0.48	No	No	Yes	Yes
13b	054 178501400	PLN2022-0048	San Pablo	*Same project as above.* Vacant parcel; Construction of new, 8-story mixed-use residential development with residential lobby, commercial space, and parking. 242 Dwelling Units utilizing State Density Bonus (25 VLI units)	2	0	0	20	22	C-W	MU	10+	309.3	0.08	No	Yes	-	-
13c	054 178501600	PLN2022-0048	2603 San Pablo	*Same project as above.* Vacant commercial building; Construction of new, 8-story mixed-use residential development with residential lobby, commercial space, and parking. 242 Dwelling Units utilizing State Density Bonus (25 VLI units)	6	0	0	47	53	C-W	MU	10+	314.0	0.19	No	No	-	-
13d	054 178501500	PLN2022-0048	2613 San Pablo	*Same project as above.* Vacant commercial building; Construction of new, 8-story mixed-use residential development with residential lobby, commercial space, and parking. 242 Dwelling Units utilizing State Density Bonus (25 VLI units)	3	0	0	29	32	C-W	MU	10+	312.9	0.11	No	No	-	-
14	053 159001101	PLN2022-0016	2920 Shattuck	Existing True Value Hardware and Model Garage site. Construct 10-story mixed-use residential 221 dwelling units, ground-floor commercial DB	22	0	0	199	221	C-SA	MU	10+	493.1	0.45	No	No	Yes	Yes
15	057 203000900	PLN2022-0067	2113 Kittredge	The California Theater. This building at 2113 Kittredge would be demolished to allow construction of the new project. The proposed land use is a mixed-use residential development in the C-DMU zoning district. The proposed multi-family project will have 214 units in approximately 148,206 SF of floor area. The proposed project will have a live performance theater, with approximately 18,325 SF of nonresidential floor area. The use category for the theater will be 'theater', which is allowed in the C-DMU Core zone with an Administrative Use Permit	22	0	0	192	214	C-DMU Corer	MU	10+	690.2	0.31	No	No	Yes	Yes
16	054 171400501	PLN2022-0061	2712 Telegraph	Construction of a 5-story, mixed-use building with 35 dwelling units.	3	0	0	32	35	C-C	MU	10+	175.0	0.2	No	No	Yes	Yes
17	053 168900100	PLN2022-0060	2800 Telegraph	SB330 Pre-Application: Construction of a new five-story residential building with 13 dwelling units.	1	0	0	12	13	C-C	MF	10+	6.4	2.04	No	No	Yes	Yes
18	053 168602000	PLN2022-0031	2847 Shattuck	SB 330 Preliminary Application to demolish 1-story commercial building ad construct a 9-story mixed use building with 112 dwelling units, utilizing Density bonus.	11	0	0	101	112	C-SA	MU	10+	448.0	0.25	No	No	Yes	Yes

C5.2 OPPORTUNITY SITES – NO REZONE REQUIRED

To identify additional capacity for residential development, the City underwent a thorough review and analysis of the City's vacant and underutilized sites. Before starting with the site selection process, the City arrived at baseline densities for estimating capacity based on project trends in each zone since the majority of Berkeley's zoning districts do not have density standards. The site selection process adopted an objective approach by establishing a selection criterion to identify parcels that are more likely to be developed or redeveloped, focusing on sites with existing uses that are older or show signs of disinvestment or deferred maintenance. These criteria included: realistic parcel sizes, improvement to land ratio, age of building structure on the site, and existing density with respect to potential for redevelopment for different zoning designations. Some sites with existing lower-density residential uses provide the opportunity for significant capacity increases. These assumptions were derived looking at city-specific trends for existing developments and projects in the pipeline in each zoning designation that allowed residential development. The selection was conducted using GIS and information from the County Assessor's database to determine all sites that fulfilled the established criteria. The selection criterion was revised and refined at different stages to arrive at a realistic selection of potential sites.

This first step in the process resulted in a long list of eligible sites that were then further scrutinized parcel by parcel using aerial maps, site visits, and local knowledge of the neighborhoods. Each parcel was either included or excluded if it seemed viable with respect to the surrounding context and on-ground conditions like street access, existing land use, lot dimensions, the age and condition of the property. Information regarding ownership helped identify and include sites that could potentially undergo lot consolidation and together become feasible for residential development. This stage of the sites review process applied the same filtering criteria to analyze undeveloped 5th cycle sites and included sites which fulfilled the selection criteria. Sites unlikely to develop for varied reasons were eliminated.

At multiple stages of the process, City staff reviewed and verified the selected sites which was then integrated into the list of feasible sites that could be counted towards meeting the RHNA goals. This iterative process was repeated until the City arrived at a satisfactory final list of potential additional sites reflective of the ground reality and zoned to allow residential development. A full list of the Potential Additional Sites is listed as an appendix at the end of this section, in Table C-10: Opportunity Sites – No Rezone Required.

Parcel-level data on existing conditions (such as building age, existing square footage, and existing use) is incomplete in some cases. Therefore, each parcel is evaluated based on multiple factors. Visual survey of existing uses via Google Earth was conducted on every parcel to confirm existing uses and conditions, underutilization status, and potential for redevelopment due to similar characteristics to areas nearby that have experienced recycling activities.

Broadly, sites were reviewed and excluded from potential reuse if:

- Current zoning designation does not allow residential use;
- Parcel is not State- or county-owned; and

- Parcel is developed with condos or large apartment buildings.

Sites were considered for re-use if:

- Vacant or with minimal improvements
- Used as a parking lot

OR, if nonvacant but met at least two of the following criteria:

- **Buildings on the parcel are "older".** The team used a threshold of 40 years old for residential buildings and 30 years old for non-residential buildings. Projects built or proposed between 2013 and 2021 indicate properties with a range of building ages being redeveloped, including buildings constructed after 2000 being proposed for redevelopment. Buildings older than 30 years typically require significant systems upgrades and often do not meet ADA requirements. Any significant improvements would require these buildings to become ADA-compliant, which could be cost and/or physically prohibitive.

- **Parcel has an improvement-to-land assessed value ratio (ILR)**. Low improvement to land ration indicates improvements on site is worth less than the land, an indicating of underutilized land and lack of significant improvements in recent years. Projects developed or proposed between 2013 and 2021 (when data on pre-existing conditions is available) indicate that properties have with ILR of much higher (over 2.0) have been recycled in Berkeley. Buildings with declining uses may still be assessed at high ILR for property tax purposes. Such properties become a financial liability to owners when declining uses do not generate adequate revenues or incomes. An old building with a low base value would also show an ILR that appears artificially high.

- **Parcel is underutilized based on existing Floor Area Ratio (FAR)**. Overall, projects built or proposed between 2013 and 2021 indicate an average existing Floor Area Ratio of 0.60. However, properties within very high density zones (such as C-W, C-T, and C-DMU) have recycled buildings that have existing FARs above 1.0 and even over 3.0 in some cases. Similar to ILR, buildings with declining uses may have high FARs, such as old commercial buildings or retail shopping uses. Therefore, an existing FAR of 0.60 is used as threshold for lower intensity zones (less than 100 units per acre). For properties in higher intensity zones (more than 100 units per acre), an existing FAR of 1.50 is used.

- **Current and adjacent uses make development feasible.** Regionally and in Berkeley, a variety of existing uses have been redeveloped, including auto-related uses (auto repairs, gas stations), banks, low-intensity retail and commercial uses, and church properties. Due to COVID, trends relating to remote working and online shopping have accelerated. There are vacated commercial buildings in the City, indicating an excess supply of outdated commercial spaces. Improved fuel efficiency of cars and the requirement to move toward all electrical have also accelerated the conversion of gas stations and auto-related uses to other uses.

- **Parcel size is between 0.5 and 10 acres (for lower income categories) or less than 0.5 acre for moderate and above-moderate income categories.** Note that parcels may be consolidated to achieve the 0.5-acre minimum threshold.

In summary, Table C-10 details the site selection criteria as follows:

- 1 = Vacant or parking lots
- 2a = Building age ≥ 30
- 2b = Existing FAR ≤ 1.50 or density above 100 du/ac and 0.60 for density less than 100 du/ac
- 2c = Improvement to Land Ratio (ILR) ≤ 2.00
- 2d = Current and adjacent uses made development feasible; visual confirmation on Google Earth
- 2e = Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income
- 2f = Lot consolidation with common owners

C5.3 DEVELOPMENT TRENDS AND REALISTIC CAPACITY

Density Assumptions

As stated above, the City expects to augment its housing stock primarily through infill and redevelopment along major corridors/streets and where zoning allows for high-density housing in conjunction with mixed-use development. Government Code Section 65583.2 (c) requires the calculation of projected residential development capacity of the sites identified in the housing element that can realistically be achieved. The City estimated development potential for the sites by calculating the average baseline density (without density bonus) achieved for recently approved, under construction, or completed mixed-use and residential projects per zoning district. This calculation is critical since the majority of the City's zoning districts do not have density standards. The average density assumptions listed in Table C-7 were used to calculate the capacity of sites for potential additional sites that do not require rezoning. The detailed list of projects considered to arrive at these density assumptions are included in the appendix at the end of this section. A detailed list of projects used to develop the average achievable densities is included at the end of this appendix in Table C-11.

The maximum density listed in Table C-7 is included to demonstrate that the average is a conservative estimate of the number of units that could be developed on these sites. As demonstrated below in both Table C-7 and Table C-10, there is evidence of existing projects in the same zoning districts that have been developed at a much higher density than the average density used for the purposes of this exercise.

Table C-7: Achieved Density Trends and Density Assumptions

District	Average Density Based on 2+ Projects (du/ac)	Maximum Density Based on 2+ Projects (du/ac)	Density Assumption for RHNA (du/ac)	Methodology Overview
R-1	6.1	6.1	6.0	
ES-R	1.2	1.2	1.0	
R-1A	16.4	18.2	15.0	Based on 2 projects with densities from 14.6 to 18.2 du/ac
R-2	21.6	36.9	20.0	Based on 3 projects with densities from 12.9 to 36.9 du/ac
R-2A	26.9	50.8	25.0	Based on 13 projects with densities from 12.9 to 50.8 du/ac

R-3	45.9	85.1	40.0	Based on 9 projects with densities from 21.4 to 85.1 du/ac
R-4	86.1	150.6	75.0	Based on 5 projects with densities from 26.8 to 150.6 du/ac
R-S	102.5	129.1	100.0	Based on 3 projects with densities from 64.5 to 129.1 du/ac
R-SMU	212.0	234.6	200.0	Based on 2 projects with densities from 189.5 to 234.6 du/ac
C-C	143.1	173.5	125.0	Based on 2 projects with densities from 112.6 to 173.5 du/ac. Note that 1 project was approved under the former C-1 zoning designation but is now zoned C-C
C-U	158.8	268	150.0	Based on 5 projects with densities from 17.5 to 268 du/ac. Note that 3 of these projects were approved under the former C-1 designation but are now zoned C-U
Neighborhood Commercial (C-N, C-E, C-NS, C-SO)	58.1	94.7	50.0	Based on 3 projects with densities from 28.6 to 94.7 du/ac
C-SA	183.5	207.8	180.0	Based on 7 projects with densities from 106.7 to 207.8 du/ac
C-T	168.1	442.9	160.0	Based on 10 projects with densities from 31.3 to 442.9 du/ac
C-DMU Core	339.8	457.4	320.0	Based on 9 projects with densities from 188.1 to 457.4 du/ac
C-DMU Outer Core	247.4	390.0	225.0	Based on 6 projects with densities from 143.4 to 390.0 du/ac
C-DMU Corridor	167.8	167.8	150.0	Not enough projects so based on C-DMU Buffer projects
C-DMU Buffer	167.8	190.5	150.0	Based on 6 projects with densities from 129.3 to 190.5 du/ac
C-W	136.8	272	135.0	Based on 22 projects with densities from 53.4 to 272 du/ac
C-AC	210.0	210.0	210.0	70% of max density defined in recently adopted Specific Area Plan
MU-R	28.0	34.8	24.4	Based on 9 projects with densities between 20.0 to 34.8 du/ac

Lot Consolidation

Recently there have been several projects that utilized lot consolidation for residential and mixed-use housing. For the Opportunity Sites, the site selection and review process took into consideration ownership information and only assumed lot consolidation where adjacent parcels belong to the same owner. This was done in conjunction with reviewing the sites using ownership data from the accessors parcel database, aerial photography, site visits, and local knowledge of the areas. Overall, 81 opportunity sites were considered feasible for lot consolidation to form larger parcels and were included in the final sites inventory and annotated with a letter (A, B, C, and so forth) for identification purposes. See Table C-10: Opportunity Sites – No Rezone Required.

Each site (parcel or groups of parcels of common ownership) has been assigned a Priority level based on size:

- High Priority (1) - A site/parcel larger than 0.5 acre, is adequate for facilitating lower income units

- Medium Priority (2) – A site/parcel between 0.35 and 0.5 acre that based on the City's trend of affordable housing development, is adequate for facilitating lower income units
- Low Priority (3) – A site/parcel less than 0.35 acre, is not adequate for facilitating lower income units

Affordable Project Development Trends

Table C-8 lists examples of affordable housing projects that are on sites smaller than 0.5 acre. Specifically, these projects average to a small lot size of only 0.25 acre. As a conservative assumption, only parcels or sites (groups of parcels with common ownership) that are larger than 0.35 acre are considered adequately sized for lower income housing.

Table C-8: Affordable Housing Projects on Sites Smaller than 0.5 acre

Project Address	Affordability Level					Acreage	Density Achieved (du/ac)	Zoning District
	Very Low	Low	Mod	Above Mod	Total			
Built								
2748 San Pablo	23	-	-	-	23	0.23	100.5	C-W
Harper Crossing (3132 MLK Way)	31	10	1	1	43	0.33	130	C-AC
Shattuck Senior Homes	-	27	-	-	27	0.16	168	C-DMU Corridor
1601 Oxford	21	13	-	3	37	0.33	112	R-3
Approved								
1776/1782/1790 University	-	11	68	-	79	0.22	350	C-U

Density and Affordability Assumptions

State law (Assembly Bill 2342/Government Code 65583.2) uses density as a proxy for income/affordability for the sites inventory. Table C-9: Affordability by Density, Size and Site Capacity shows the site conditions used to determine affordability for the sites inventory. Generally, lower density zones are presumed to be affordable to moderate and above moderate households. Under state law, the "default density" for most jurisdictions in urban counties is 30 units/acre. Default density refers to the density considered suitable to encourage and facilitate the development of affordable housing.

The sites inventory assumes that sites with densities of at least 30 du/acre are affordable to lower income households, as explained in Table C-9.

Table C-9: Affordability by Density, Size and Site Capacity

Income Level	Site Characteristics
Lower	Site size is between 0.35 and 10 acres alone or in consolidation with adjacent sites. AND Density assumed is at least 30 du/ac, AND Site capacity is at least 50 units
Moderate	Site size is between 0.10 and 0.35 acres alone or in consolidation with adjacent sites, AND Site capacity is between 30 and 50 units, AND

	Lot consolidation of contiguous parcels of common ownership only
Above Moderate	Density assumed is less than 30 du/ac, OR Site capacity is less than 30 units

Table C-10 Opportunity Sites - No Rezone Required

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
1a	055 182501900	2609 SHATTUCK	No	-	-	0.28	Vacant, boarded up 1-story commercial structure, no tenant, last sold in December 2021, 10 surface parking spaces; new housing development across the street includes a 5-story, 155 unit apartment building constructed in 2016, replacing a similar low-profile commercial structure	0.34	BB	Meets Criteria 2c, 2d, 2e, 2f - Improvement-to-Land Ratio less than 2.0 (0.28) - Current vacant, boarded up one-story commercial structure located on a major transit corridor, in close proximity to other new residential developments – 2215 Parker (ZP2018-0161) and 2701 Shattuck (ZP2016-0244) – and similar to other commercial structures that have been replaced by residential developments - such as 2440 Shattuck (ZP2021-0201), 2970 Adeline (ZP2021-0140), and 130-134 Berkeley Sq (ZP2021-0158) - make development feasible - Parcel size is between 0.5 and 10 acres (0.94 acres when consolidated) - Lot consolidation potential (common owners)	No	BC/C-AC	1	210	72	0	0	72
1b	055 182501502	2621 SHATTUCK	No	-	-	0.07	Vacant 1-story commercial structure and parking lot (formerly Wick's TV Appliance); no tenant, last sold in December 2021, 20 surface parking spaces; same owner as adjacent lot (055 182501900); Walker's Paradise (92), Good Transit (67), Biker's Paradise (95); new housing development across the street includes a 5-story, 155 unit apartment building constructed in 2016, replacing a similar low-profile commercial structure	0.6	BB	Meets Criteria 2c, 2d, 2e, 2f - Improvement-to-Land Ratio less than 2.0 (0.07) - Current vacant, boarded up one-story commercial structure located on a major transit corridor, in close proximity to other new residential developments – 2215 Parker (ZP2018-0161) and 2701 Shattuck (ZP2016-0244) – and similar to other commercial structures that have been replaced by residential developments - such as 2440 Shattuck (ZP2021-0201), 2970 Adeline (ZP2021-0140), and 130-134 Berkeley Sq (ZP2021-0158) - make development feasible - Parcel size is between 0.5 and 10 acres (0.94 acres when consolidated) - Lot consolidation potential (common owners)	No	BC/C-AC	1	210	126	0	0	126
2a	055 182401600	2555 SHATTUCK	No	-	0.33	0.13	Used car lot with 1-story commercial building (permanently closed; formerly Berkeley Toyota)	0.15	J	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.33) - Improvement-to-Land Ratio less than 2.0 (0.13) - Currently vacant used car lot located on a major transit corridor in close proximity to new residential developments – 2215 Parker (ZP2018-0161) and 2701 Shattuck (ZP2016-0244) – and similar to other former auto dealerships and used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244), make development feasible - Parcel size is between 0.5 and 10 acres (when consolidated – 0.58 acres) - Lot consolidation potential (common owners)	No	BC/C-AC	1	210	0	32	0	32
2b	055 182401400	2105 PARKER ST	No	-	0.45	1.78	1-story commercial complex with parking lot; auto service related business and furniture store; adjacent to 2-story commercial complex; nearby lot	0.43	J	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.45) - Improvement-to-Land Ratio less than 2.0 (1.78) - Current commercial complex (including auto service related business) located on a major transit corridor in close proximity to new residential developments – 2215 Parker (ZP2018-0161) and 2701 Shattuck (ZP2016-0244) – and similar to other former auto service related businesses that are currently being replaced by residential developments, such as 1835 San Pablo (ZP2018-0220), 2099 MLK Jr. (ZP2019-0081), and 2136-2154 San Pablo (ZP2021-0046), make development feasible - Parcel size is between 0.5 and 10 acres (when consolidated – 0.58 acres) - Lot consolidation potential (common owners)	No	BC/C-AC	1	210	90	0	0	90

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
3	055 182301101	2104 DWIGHT WAY	No	-	0.32	0.04	Parking lot	1		Meets Criteria 1, 2b, 2c, 2d, 2e - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.32) - Improvement-to-Land Ratio less than 2.0 (0.04) - Current surface parking lot located in close proximity to other residential developments – 2012 Dwight (PLN2022-0029) – and similar to other former surface parking lots that have been replaced with a large residential development, such as 2542 Durant (ZP2016-0172), make development feasible - Parcel size is between 0.5 and 10 acres (1 acre)	Yes	BC/C-AC	1	210	209	0	0	209
4	052 157602701	3030 TELEGRAPH AVE	No	57	0.42	1.10	Healthcare center parking lot	0.63		Meets Criteria 1, 2a, 2b, 2c, 2d, 2e - Vacant and/or parking lots - Building age greater than 30 years (57) - Existing FAR is less than 1.50 (0.42) - Improvement-to-Land Ratio less than 2.0 (1.10) - Current surface parking lot located on a major transit corridor, in close proximity to other residential development – 3030 Telegraph (ZP2020-0069) – and similar to a surface parking lot that has been replaced with a large residential development: 2542 Durant (ZP2016-0172), make development feasible - Parcel size is between 0.5 and 10 acres (0.63 acres)	No	BC/C-C	1	124	78	0	0	78
5	055 184002401	2655 TELEGRAPH AVE	No	64	0.58	1.31	1-story single-tenant drugstore (CVS, formerly Andronico's) and 88 space parking lot; Walker's Paradise (95), Good Transit (62); tenant/lease/sale data not available on CoStar	1.04		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (64) - Existing FAR is less than 1.50 (0.58) - Improvement-to-Land Ratio less than 2.0 (1.31) - Current single-story drugstore and large surface parking lot located along a major transit corridor in close proximity to other residential developments – 2712 Telegraph (PLN2022-0061), 2556 Telegraph (ZP2015-0096) – and similar to large commercial redevelopments, such as 2801 Adeline (ZP2020-0118), an existing Walgreens; 2190 Shattuck (ZP 2022-0026), an existing Walgreens; and 2440 Shattuck (ZP201-0201), an existing Dollar Tree, make development feasible. - Parcel size is between 0.5 and 10 acres (1.04 acres)	No	BC/C-C	1	125	130	0	0	130
6a	057 202801200	2235 MILVIA ST	No	-	0.37	0.59	Two small 1-story buildings - a restaurant and temporarily closed recording studio - and small parking lot, downtown	0.06	BC	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.37) - Improvement-to-Land Ratio less than 2.0 (0.59) - Current single-story commercial buildings and parking lot in close proximity to other residential development – 2065 Kittredge (ZP2021-0193), 2210 Harold (ZP2020-0011), 2028 Bancroft (ZP2017-0103) – and similar to redevelopments of other small commercial buildings, such as 2970 Adeline (ZP2021-0140), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate units) - Lot consolidation potential (common owners)	Yes	DT/C-DMU Buff	1	150	0	0	8	8
6b	057 202801300	2000 KITTREDGE ST	No	-	0.05	0.35	1-story car rental and parking lot, downtown	0.27	BC	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.05) - Improvement-to-Land Ratio less than 2.0 (0.35) - Currently one-story commercial structure and parking lot (auto service-related business) in close proximity to other residential development – 2065 Kittredge	Yes	DT/C-DMU Buff	1	150	0	40	0	40

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										(ZP2021-0193), 2210 Harold (ZP2020-0011), 2028 Bancroft (ZP2017-0103) – and similar to other former auto service related businesses that are currently being replaced by residential developments, such as 1835 San Pablo (ZP2018-0220), 2099 MLK Jr. (ZP2019-0081), and 2136-2154 San Pablo (ZP2021-0046), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate units) - Lot consolidation potential (common owners)								
7a	055 189700103	2480 SHATTUCK AVE	No	-	0.99	2.87	1-story commercial (bike shop), downtown	0.17	W	Meets Criteria 2b, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.99) - Current single-story commercial building and parking lot located along a major transit corridor, and in close proximity to new residential development – 2440 Shattuck (ZP2021-0201) and 2428 Shattuck (PLN2022-0036)- and similar to other residential redevelopment of commercial structures, such as 2970 Adeline (ZP2021-0140), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158), support additional residential development on this site. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.52 acres) - Lot consolidation potential (common owners)	Yes	BC/C-DMU Buff	1	150	0	0	25	25
7b	055 189700600	2450 SHATTUCK AVE	No	103	0.76	1.98	1-story commercial structure – one vacant store front, 1 laundry, 1 restaurant, 1 music store, downtown	0.35	W	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (103) - Existing FAR is less than 1.50 (0.76) - Improvement-to-Land Ratio less than 2.0 (1.98) - Current partially vacant single-story commercial building located along a major transit corridor, and in close proximity to new residential development – 2440 Shattuck (ZP2021-0201) and 2428 Shattuck (PLN2022-0036) - and similar to other residential redevelopment of commercial structures, such as 2970 Adeline (ZP2021-0140), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158), support additional residential development on this site. - 0.5 and 10 acres (when consolidated – 0.52 acres) - Lot consolidation potential (common owners)	Yes	BC/C-DMU Buff	1	150	52	0	0	52
8a	060 243503101	1575 HOPKINS ST	No	-	0.51	0.77	1-story office (Red Oak Realty) and parking lot, last sold in 2018	0.23	AI	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.51) - Improvement-to-Land Ratio less than 2.0 (0.77) - Current single-story office building; similar new residential development of office space, such as 2210 Harold (ZP2020-0011), support additional residential development on this site. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	Yes	NC/C-N	1	50	0	0	11	11
8b	060 243502801	1601 HOPKINS ST	No	43	0.44	0.75	1-story salon and storage yard	0.31	AI	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (43) - Existing FAR is less than 1.50 (0.44) - Improvement-to-Land Ratio less than 2.0 (0.75) - Current single-story commercial building; similar new residential development of office space include 2210 Harold (ZP2020-0011) and 1951 Shattuck (ZP2018-	Yes	NC/C-N	1	50	0	0	15	15

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										0137), support additional residential development on this site. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.54 acres/above moderate) - Lot consolidation potential (common owners)								
9	058 217801800	2109 VIRGINIA ST	No	-	0.83	0.34	2-story mixed use, restaurant, educational institution residential	0.52		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.83) - Improvement-to-Land Ratio less than 2.0 (0.34) - Two-story mixed-use building – current uses include a restaurant and educational institution; similar new residential development include 2441 Le Conte (PLN2021-0020) and 2439 Durant (ZP2021-0192), support additional residential development on this site. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.52 acres)	Yes	NC/C-NS	1	50	0	0	26	26
10a	059 226301001	1550 SHATTUCK AVE	No	-	0.44	1.28	2-story single-tenant grocery store (Andronico's Grocery, owned by Safeway since 2017, occupied by tenant since Apr 2006) with 75 space parking lot; Walker's Paradise (98), Good Transit (65)	1.95	H	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.44) - Improvement-to-Land Ratio less than 2.0 (1.28) - Current 2-story commercial building (grocery store), located along a major transit corridor, in close proximity to new residential development, such as 1650 Shattuck (ZP2020-0022) and 1506 Bonita (ZP2016-0050), and similar to redevelopment of other large commercial buildings, including 2801 Adeline (ZP2020-0118), 2190 Shattuck (ZP2022-0026), make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 1.38 acres) - Lot consolidation potential (common owners)	No	NC/C-NS	1	50	97	0	0	97
10b	059 226302401	1536 SHATTUCK AVE	No	-	0.92	0.16	Bank parking lot	0.4	H	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.92) - Improvement-to-Land Ratio less than 2.0 (0.16) - Current surface parking lot located on a major transit corridor, in close proximity to new residential development, such as 1650 Shattuck (ZP2020-0022) and 1506 Bonita (ZP2016-0050), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 1.38 acres) - Lot consolidation potential (common owners)	Yes	MDR/R-2A	1	25	0	0	10	10
11a	057 209700106	805 UNIVERSITY AVE	No	71	-	1.7	1-story freestanding retail building (KCC Modern Living – tenant since May 2010); 500 sf of 6,570 sf occupied; last sold in Nov 2014; Walker's Paradise (96), Good Transit (58); owned by same owner as adjacent site (057 209701401)	0.24	AK	Meets Criteria 2a, 2c, 2d, 2e, 2f - Building age greater than 30 years (71) - Improvement-to-Land Ratio less than 2.0 (1.7) - Current 1-story commercial building located along a major transit corridor, in close proximity to new residential development, such as 1914 Fifth (PLN2022-0039) and 1900 Fourth (ZP2018-0052), and similar to the redevelopment of former commercial buildings proposed at 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support	No	BC/C-W	1	135	0	31	0	31

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 1.86 acres) - Lot consolidation potential (common owners)								
11b	057 209701401	811 UNIVERSITY AVE	No	-	0.7	8.07	2-story retail (CorePower Yoga, Fusion Learning, + more) – lease signed with Flux Vertical Theatre in July 2021; additional lease signed with Fusion Learning in Sept 2018) + 43 parking spaces; Walker's Paradise (96), Good Transit (59); owned by same owner as adjacent site (057 209700106)	0.86	AK	Meets Criteria 2b, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.7) - Current 2-story commercial building located along a major transit corridor, in close proximity to new residential development, such as 1914 Fifth (PLN2022-0039) and 1900 Fourth (ZP2018-0052), and similar to the redevelopment of former commercial buildings proposed at 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 1.86 acres) - Lot consolidation potential (common owners)	No	BC/C-W	1	135	115	0	0	115
11c	057 209700201	1904 6TH ST	No	-	-	-	1-story city-owned West Berkeley Senior Center and parking lot	0.76	AK	Meets Criteria 2d, 2e, 2f - Current 1-story institutional building located along a major transit corridor, in close proximity to new residential development, such as 1914 Fifth (PLN2022-0039) and 1900 Fourth (ZP2018-0052), and similar to the redevelopment of ... buildings proposed at 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 1.86 acres) - Lot consolidation potential (common owners)	No	MU/MUR	1	24.4	0	0	18	18
12a	060 235401100	1041 GILMAN ST	No	-	0.66	-	Parking lot	0.19	AN	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.66) - Current surface parking lot in close proximity to new residential development, such as 1207 Tenth (ZP2020-0046) and 1201-1205 San Pablo (ZP2021-0070), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.66 acres) - Lot consolidation potential (common owners)	Yes	BC/C-W	1	135	0	0	25	25
12b	060 235401302	1233 10TH ST	No	-	0.82	-	Parking lot	0.32	AN	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.82) - Current surface parking lot in close proximity to new residential development, such as 1207 Tenth (ZP2020-0046) and 1201-1205 San Pablo (ZP2021-0070), and similar to redevelopment of other surface parking lots that have been replaced with a residential	Yes	BC/C-W	1	135	0	43	0	43

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.66 acres) - Lot consolidation potential (common owners)								
13a	057 208801100	1071 UNIVERSITY AVE	No	-	-	0.15	Parking lot	0.3	AY	Meets Criteria 1, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.15) - Current surface parking lot in close proximity to new residential development, such as 1931 San Pablo (PLN2022-0039), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.55 acres) - Lot consolidation potential (common owners)	No	BC/C-W	1	135	0	40	0	40
13b	057 208801500	1917 10TH ST	No	-	-	0.2	Parking lot	0.25	AY	Meets Criteria 1, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.2) - Current surface parking lot in close proximity to new residential development, such as 1931 San Pablo (PLN2022-0039), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.55 acres) - Lot consolidation potential (common owners)	Yes	HDR/R-3	1	40	0	0	9	9
14	057 210100500	701 UNIVERSITY AVE	No	-	0.13	5.02	Parking lot	1.03		Meets Criteria 1, 2b, 2d, 2e - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.13) - Current surface parking lot in close proximity to new residential development, such as 1931 San Pablo (PLN2022-0039), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (1.03 acres)	No	BC/C-W	1	135	139	0	0	139
15a	059 228702500	1629 SAN PABLO AVE	No	82	1.07	3.03	1-story retail (party store)	0.11	Y	Meets Criteria 2a, 2b, 2d, 2e, 2f - Building age greater than 30 years (82) - Existing FAR is less than 1.50 (1.07) - Current 1-story commercial building located along a major transit corridor, and in close proximity to new residential development, such as 1701 San Pablo (PLN2022-0093), and similar to residential redevelopment of low profile commercial buildings, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible.	No	BC/C-W	1	135	0	0	14	14

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income c - Lot consolidation potential (common owners)								
15b	059 228702400	1633 SAN PABLO AVE	No	98	0.82	0.96	1-story retail (party store)	0.11	Y	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (98) - Existing FAR is less than 1.50 (0.82) - Improvement-to-Land Ratio less than 2.0 (0.96) - Current 1-story commercial building located along a major transit corridor, and in close proximity to new residential development, such as 1701 San Pablo (PLN2022-0093), and similar to residential redevelopment of low profile commercial buildings, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.55 acres) - Lot consolidation potential (common owners)	No	BC/C-W	1	135	0	0	14	14
15c	059 228702102	1639 SAN PABLO AVE	No	66	0.98	1.67	1-2 story commercial	0.3	Y	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (66) - Existing FAR is less than 1.50 (0.98) - Improvement-to-Land Ratio less than 2.0 (1.67) - Current 1-story commercial building located along a major transit corridor, and in close proximity to new residential development, such as 1701 San Pablo (PLN2022-0093), and similar to residential redevelopment of low profile commercial buildings, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.55 acres) - Lot consolidation potential (common owners)	No	BC/C-W	1	135	0	40	0	40
16	060 235401001	1049 GILMAN ST	No	-	-	0.66	1-story retail (liquor, Dollar Tree)	0.61		Meets Criteria 2b, 2c, 2d, 2e - Improvement-to-Land Ratio less than 2.0 (0.66) - Current 1-story commercial building located along a major transit corridor, in close proximity to new residential development, such as 1207 Tenth (ZP2020-0046) and 1201-1205 San Pablo (ZP2021-0070), and similar to redevelopment of 1-story commercial buildings, such as 2440 Shattuck (ZP2021-0201) and 2198 San Pablo (ZP2018-0112) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.61 acres)	Yes	BC/C-W	1	135	82	0	0	82
17	059 233100200	1440 SAN PABLO AVE	No	99	0.89	0.46	2-story freestanding furniture strip retail and parking lot (West Berkeley Commercial Center)	0.67		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (99) - Existing FAR is less than 1.50 (0.89) - Improvement-to-Land Ratio less than 2.0 (0.46) - Current 2-story commercial building located along a major transit corridor and in close proximity to new residential development, such as 1701 San Pablo	No	BC/C-W	1	135	90	0	0	90

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										(PLN2022-0093), and similar to residential redevelopment of low profile commercial buildings, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.67 acres)								
18	056 198303103	2235 SAN PABLO AVE	No	33	1.49	2	2-story storage facility and parking lot (Berkeley Self Storage)	0.7		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (33) - Existing FAR is less than 1.50 (1.49) - Improvement-to-Land Ratio less than (or equal to) 2.0 (2.0) - Current 2-story storage facility and parking lot located along a major transit corridor and in close proximity to new residential development, such as 2371 San Pablo (ZP2019-0089) and 2198 San Pablo (ZP2018-0112), and similar to residential redevelopment of storage facilities, such as 2100 San Pablo (ZP2018-0222) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.7 acres)	No	BC/C-W	1	135	94	0	0	94
19	056 193200803	2424 SAN PABLO AVE	No	59	0.06	0.49	Self-service car wash	0.73		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (59) - Existing FAR is less than 1.50 (0.06) - Improvement-to-Land Ratio less than 2.0 (0.49) - Current car wash located on a major transit corridor in close proximity to 2527 San Pablo (ZP2016-0207) and 1200 Dwight (ZP2022-0028), and similar to other former auto dealerships and used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244) and 2099 MLK Jr. (ZP2019-081) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.73 acres)	Yes	BC/C-W	1	135	98	0	0	98
20a	056 194301901	2431 5TH ST	No	64	0.65	2.58	1-story vacant office building (formerly Sumiko Subwoofers)	1.08	BF	Meets Criteria 2a, 2b, 2d, 2e, 2f - Building age greater than 30 years (64) - Existing FAR is less than 1.50 (0.65) - Currently vacant single-story office building in close proximity to other residential development 2422 Fifth (ZP2018-018) and 739 Channing (ZP2017-0039), and similar new residential development of office space include 2210 Harold (ZP2020-0011), support additional residential development on this site. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 1.53 acres) - Lot consolidation potential (common owners)	No	MU/MUR	1	24.4	0	0	26	26
20b	056 194301001	2416 6TH ST	No	-	0.86	1.08	1-story sheet metal HVAC shop (Walter Mork Co., Inc.)	0.45	BF	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.86) - Improvement-to-Land Ratio less than 2.0 (1.08) - Current sheet metal shop in close proximity to other residential development 2422 Fifth (ZP2018-018) and 739 Channing (ZP2017-0039), and similar new residential development of similar industrial/manufacturing sites, such as 2100 San Pablo (ZP2018-0222) and 1835 San Pablo (ZP2018-	No	MU/MUR	1	24.4	0	0	11	11

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										0220), support additional residential development on this site. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 1.53 acres) - Lot consolidation potential (common owners)								
21	056 196101601	801 ADDISON ST	No	-	0.69	1.54	1-story warehouse (West Berkeley Dock-High Warehouse – for sale)	0.59		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.69) - Improvement-to-Land Ratio less than 2.0 (1.54) - Currently vacant warehouse in close proximity to new residential development, such as 1914 Fifth (PLN2022-0039) and 1900 Fourth (ZP2018-0052), and similar to the redevelopment of former industrial/manufacturing buildings proposed at 2100 San Pablo (ZP2018-0222) and 1835 San Pablo (ZP2018-0220), support additional residential development on this site. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.59 acres)	No	MU/MUR	1	24.4	0	0	14	14
22	056 193300602	2332 SAN PABLO AVE	No	-	-	-	1-story commercial building and open lot dedicated to plants - East Bay Nursery	1.03		Meets Criteria 2d, 2e - Current commercial building and open lot in close proximity to new and similar residential development of commercial buildings, such as 2371 San Pablo (ZP2019-0089), and 1820-1828 San Pablo (ZP2021-0186), support additional residential development on this site. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (1.03 acres)	No	BC/C-W	1	135	140	0	0	140
23a	061 261100400	914 FRESNO AVE	No	-	-	0.12	Andronico's parking lot	0.11	AU	Meets Criteria 1, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.12) - Current surface parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.69 acres) - Lot consolidation potential (common owners)	No	LDR/R-1	1	6	0	0	1	1
23b	061 261102503	915 COLUSA AVE	No	-	0.17	0.07	Andronico's parking lot	0.23	AU	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.07) - Improvement-to-Land Ratio less than 2.0 (0.07) - Current surface parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.69 acres) - Lot consolidation potential (common owners)	No	LDR/R-1	1	6	0	0	1	1
23c	061 261102504	915 COLUSA AVE	No	-	0.11	0.11	Andronico's parking lot	0.35	AU	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.11) - Improvement-to-Land Ratio less than 2.0 (0.11) - Current surface parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant	No	LDR/R-1	1	6	0	0	2	2

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										(ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.69 acres) - Lot consolidation potential (common owners)								
24a	063 298601200	1129 KEITH AVE	Yes	-	-	-	4 contiguous vacant lots by same owner, different from adjacent owners	0.12	AE	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.60 acres) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	1	6	0	0	1	1
24b	063 298601300	1129 KEITH AVE	Yes	-	-	-	4 contiguous vacant lots by same owner, different from adjacent owners	0.14	AE	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.60 acres) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	1	6	0	0	1	1
24c	063 298601400	1129 KEITH AVE	Yes	-	-	-	4 contiguous vacant lots by same owner, different from adjacent owners	0.16	AE	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.60 acres) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	1	6	0	0	1	1
24d	063 298601501	1129 KEITH AVE	Yes	-	-	-	4 contiguous vacant lots by same owner, different from adjacent owners	0.18	AE	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.60 acres) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	1	6	0	0	1	1
25a	063 314000800	924 FRESNO AVE	Yes	-	-	-	Vacant lot, different owner from adjacent lots	0.33	BE	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.68 acres) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	1	6	0	0	1	1
25b	063 314000700	39 THE CRESCENT	Yes	-	-	-	Vacant lot, owned by adjacent lot 39 THE CRESCENT	0.35	BE	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated - 0.68 acres) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	1	6	0	0	1	1
26a	063 316002000	37 HILL RD	Yes	-	-	-	Vacant lot, owned by adjacent lot 37 HILL RD BERKELEY	0.24	S	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 1.22 acres)	Yes	LDR/R-1H	1	6	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Lot consolidation potential (common owners)								
26b	063 316001402	20 BAY TREE LN	Yes	-	-	-	Vacant Lot, different owners from adj lots	0.98	S	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 1.22 acres) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	1	6	0	0	5	5
27	061 255801700	OXFORD ST BERKELEY 94707	No	-	-	-	1-story school (former Oxford Elementary School site); now vacant; seismic retrofitting needed	1.26		Meets Criteria 2d, 2e - Current vacant school building (institutional) similar to other institutional redevelopments make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (1.26 acres/above moderate)	No	OS/R-1H	1	6	0	0	7	7
28	057 207200600	1461 UNIVERSITY AVE	No	73	0.43	2.03	1-story motel and 40 parking spaces (Rodeway Inn – permanently closed) and single-story strip retail frontage, last sold in 2010, no lease data on CoStar	0.78		Meets Criteria 2a, 2b, 2d, 2e - Building age greater than 30 years (73) - Existing FAR is less than 1.50 (0.43) - Improvement-to-Land Ratio less than 2.0 (2.03) - Currently vacant 1-story motel and strip retail building in close proximity to other residential developments, such as 1367 University (ZP2019-0173) and the North Berkeley BART site, and similar to other projects, like the Golden Bear Inn at 1620 San Pablo, make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.78 acres)	Yes	MDR/R-2A	1	25	0	0	19	19
29	057 205401201	1995 UNIVERISTY AVE	No	-			Parking lot behind building	0.64		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current surface parking lot in close proximity to other new residential development, such as 2001 University/2001 Milvia (ZP2020-0134) and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.64 acres)	No	MDR/R-2A	1	25	0	0	39	39
30	056 199601203	1417 ADDISON ST	No	54	0.52	1.7	Parking lot only (Target)	1.5		Meets Criteria 1, 2a, 2b, 2d, 2e - Vacant and/or parking lots - Building age greater than 30 years (54) - Existing FAR is less than 1.50 (0.52) - Improvement-to-Land Ratio less than 2.0 (1.7) - Current surface parking lot in close proximity to other new residential development, such as 1367 University (ZP2019-0173), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (1.5 acres)	No	HDR/R-4	1	75	112	0	0	112
31	059 226100102	1451 SHATTUCK AVE	No	-	-	-	1-story retail (CVS – move date Jan 2022 – previously Longs Drugs) and 70 space parking lot; Walker's Paradise (97), Good Transit (62)	0.78		Meets Criteria 2d, 2e - Current occupied commercial building located on a major transit corridor in close proximity to other commercial structures that have been replaced with large residential developments, such as 1951 Shattuck (ZP2018-0137), and 1752 Shattuck (ZP2022-0011), make development feasible	Yes	NC/C-NS	1	50	39	0	0	39

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.78 acres)								
32	054 178000801	2546 SAN PABLO AVE	No	-	-	-	1-story Bank of America (temporarily closed) and large parking lot	1.43		Meets Criteria 2d, 2e - Current one-story commercial structure located on major transit corridor in close proximity to other residential developments, such as 2527 San Pablo (ZP2016-0207) and 2601 San Pablo (PLN2022-0048), and similar to other commercial structures that have been replaced by large residential developments, such as 2527 San Pablo (ZP2016-0207). - Current one-story commercial structure located on major transit corridor in close proximity to other commercial structures that have been replaced by large residential developments, such as 2527 San Pablo (ZP2016-0207). - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (1.43 acres)	Yes	M/C-W	1	135	0	0	192	192
33a	055 188500102	2362 BANCROFT WAY	No	-	0.56	0.05	Parking lot	0.27	AZ	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.56) - Improvement-to-Land Ratio less than 2.0 (0.05) - Current surface parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.57 acres) - Lot consolidation potential (common owners)	Yes	RMU/R-SMU	1	200	0	53	0	53
33b	055 188500201	2315 DURANT AVE	No	-	0.2	0.04	Parking lot	0.3	AZ	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.2) - Improvement-to-Land Ratio less than 2.0 (0.04) - Current surface parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (when consolidated – 0.57 acres) - Lot consolidation potential (common owners)	Yes	RMU/R-SMU	1	200	0	59	0	59
34	055 188500104	2338 Dana	No	-	-	-	United Methodist Church redevelopment	0.993		Meets Criteria 2d, 2e - Current use as a church similar to projects at 2024 Ashby (PLN2021-0072) and 1708 Harmon (PLN2021-0037) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (0.993)	No	RMU/R-SMU	1	200	199	0	0	199
35	057 208502600	1111 UNIVERSITY AVE	No	82	0.19	0.26	1-story commercial (Halmar Work Clothes Center)	0.47		Meets Criteria 2a, 2b, 2c, 2d,2e, 2f - Building age greater than 30 years (82) - Existing FAR is less than 1.50 (0.19) - Improvement-to-Land Ratio less than 2.0 (0.26) - Current 1-story commercial building located along a major transit corridor, and in close proximity to new residential development, such as 1752 Shattuck (ZP2022-0011) and 1650 Shattuck (ZP2020-0022), and similar to the redevelopment of other low profile commercial buildings, including 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University	Yes	BC/C-U	2	150	71	0	0	71

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										(PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)								
36	058 218101905	1899 OXFORD ST	No	-	0.12	-	1899 Oxford parking lot	0.4		Meets Criteria 1, 2b, 2d, 2e - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.12) - Current surface parking lot adjacent to other new residential development, such as 1773 Oxford (ZP2022-0062), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.4 acres)	Yes	HDR/R-4	2	75	0	0	30	30
37a	058 223202100	W PARNASSUS CT	Yes	-	-	-	Vacant lot, owned by 5 W PARNASSUS CT sold in 9/2020, gentle slope	0.19	Q	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	2	6	0	0	1	1
37b	058 223202000	W PARNASSUS CT	Yes	-	-	-	Vacant lot, owned by 5 W PARNASSUS CT sold in 9/2020, gentle slope	0.21	Q	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	2	6	0	0	1	1
38a	060 248201800	23029 NADINE CIR	Yes	-	-	-	Vacant lot, owned by two adjacent vacant parcels	0.2	X	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	LDR/R-1H	2	6	0	0	1	1
38b	060 248201700	23029 NADINE CIR	Yes	-	-	-	Vacant lot, owned by two adjacent vacant parcels	0.21	X	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	LDR/R-1H	2	6	0	0	1	1
39	061 257800601	89 SAN MATEO RD	Yes	-	-	-	Vacant lot	0.35		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	2	6	0	0	1	1
40	063 295202300	47 ALAMO AVE	Yes	-	-	-	Vacant lot - Acacia walk goes through the property, but advertised for development	0.37		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible	Yes	LDR/R-1H	2	6	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
41a	056 195901704	2114 5TH ST	No	-	-	-	Parking lot	0.13	AX	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current surface parking lot in close proximity to other new residential development, such as 1914 Fifth (PLN2022-0039) and 1900 Fourth (ZP2018-0052), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	MU/MUR	2	24.4	0	0	3	3
41b	056 195901705	2116 5TH ST	No	-	-	0.74	Parking lot	0.28	AX	Meets Criteria 1, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.74) - Current surface parking lot in close proximity to other new residential development similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	MU/MUR	2	24.4	0	0	6	6
42	056 195800301	2200 5TH ST	No	-	0.09	0.01	Parking lot	0.49		Meets Criteria 1, 2b, 2c, 2d, 2e - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.09) - Improvement-to-Land Ratio less than 2.0 (0.01) - Current surface parking lot in close proximity to other new residential development, such as 1914 Fifth (PLN2022-0039) and 1900 Fourth (ZP2018-0052), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MU/MUR	2	24.4	0	0	11	11
43	056 198304001	2197 SAN PABLO AVE	No	54	0.08	1.4	1-story standalone restaurant (Jack in the Box) and parking lot	0.4		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (54) - Existing FAR is less than 1.50 (0.08) - Improvement-to-Land Ratio less than 2.0 (1.4) - Current surface parking lot in close proximity to other new residential development, such as 2198 San Pablo (ZP2018-0112), 2136-2154 San Pablo (ZP2021-0046), 2147 San Pablo (PLN2022-0020), and similar to redevelopment of other restaurants that have been replaced with a residential development: 1200-1214 San Pablo (ZP2019-0192) and 2439 Durant (ZP2021-0192), make development feasible. - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.4 acres)	Yes	BC/C-W	2	135	53	0	0	53
44a	060 240502100	1275 SAN PABLO AVE	No	-	-	-	1-story garage or storage facility	0.06	AC	Meets Criteria 2d, 2e, 2f - Current 1-story storage facility and parking lot located along a major transit corridor and in close proximity to new residential development, such as 1207 Tenth	No	M/C-W	2	135	0	0	7	7

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										(ZP2020-0046) and 1201-1205 San Pablo (ZP2021-0070), similar to residential redevelopment of storage facilities, such as 2100 San Pablo (ZP2018-0222) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)								
44b	060 240502000	871 HILLSIDE AVE	No	-	0.11	-	1-story auto-related office and parking lot (smog shop)	0.29	AC	Meets Criteria 2b, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.11) - Current auto shop with large parking lot located on a major transit corridor and in close proximity to new residential development, such as 1207 Tenth (ZP2020-0046) and 1201-1205 San Pablo (ZP2021-0070), and similar to used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244) and 2099 MLK Jr. (ZP2019-081) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	No	AC/C-W	2	135	0	40	0	40
45a	058 212701200	1730 SAN PABLO AVE	No	-	0.79	1.21	1-story commercial (building materials store); adjacent to parking lot	0.07	AD	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.79) - Improvement-to-Land Ratio less than 2.0 (1.21) - Current 1-story commercial building located along a major transit corridor, and in close proximity to other residential development, 1740 San Pablo (ZP2017-0014), and similar to commercial sites that have been replaced by residential developments, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-W	2	135	0	0	9	9
45b	058 212701101	1726 SAN PABLO AVE	No	-	0.88	0.06	Parking lot for building materials store	0.14	AD	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.88) - Improvement-to-Land Ratio less than 2.0 (0.06) - Current surface parking lot in close proximity to other new residential development, 1740 San Pablo (ZP2017-0014), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-W	2	135	0	0	18	18
45c	058 212700901	1724 SAN PABLO AVE	No	76	0.4	0.43	1-story retail (Cafe Leila, accessories shop) and parking lot	0.26	AD	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (76) - Existing FAR is less than 1.50 (0.4) - Improvement-to-Land Ratio less than 2.0 (0.43) - Current 1-story commercial building located along a major transit corridor, and in close proximity to other residential development, 1740 San Pablo (ZP2017-	No	BC/C-W	2	135	0	34	0	34

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										0014), and similar to commercial sites that have been replaced by residential developments, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)								
46a	053 166101900	1043 HEINZ AVE	No	99	0.17	0.02	Large parking lot and single family house	0.2	AG	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (99) - Existing FAR is less than 1.50 (0.17) - Improvement-to-Land Ratio less than 2.0 (0.02) - Current single family house and large parking lot located in close proximity to a similar project at 2795 San Pablo (ZP2019-0048) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-W	2	135	0	0	26	26
46b	053 166101801	2840 SAN PABLO AVE	No	-	-	0.05	Parking lot	0.26	AG	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.17) - Improvement-to-Land Ratio less than 2.0 (0.05) - Current surface parking lot in close proximity to other new residential development, 2795 San Pablo (ZP2019-0048), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	Yes	BC/C-W	2	135	0	35	0	35
47a	060 240401801	1399 SAN PABLO AVE	No	-	0.04	0.19	Chevron Gas Station	0.21	AH	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.04) - Improvement-to-Land Ratio less than 2.0 (0.19) - Current single-story gas station and parking lot located along a major transit corridor, and adjacent /in close proximity to new high density residential development support additional residential development on this site, similar to 2176 Kittredge (ZP2019-0027), 2527 San Pablo (ZP2016-0207), and 1740 San Pablo (ZP2017-0014), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-W	2	135	0	0	28	28
47b	060 240402000	1337 SAN PABLO AVE	No	-	0.67	0.72	Autobody shop and parking lot	0.22	AH	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.67) - Improvement-to-Land Ratio less than 2.0 (0.72) - Current auto shop with parking lot located on a major transit corridor in close proximity to other former auto dealerships and used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244) and 2099 MLK Jr. (ZP2019-081) make development feasible	No	BC/C-W	2	135	0	0	29	29

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)								
48a	053 166101400	2830 SAN PABLO AVE	No	63	1.48	1.52	1- story commercial	0.15	AL	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (63) - Existing FAR is less than 1.50 (1.48) - Improvement-to-Land Ratio less than 2.0 (1.52) - Current 1-story commercial building located along a major transit corridor, and in close proximity to other residential development, 2795 San Pablo (ZP2019-0048), and similar to the redevelopment of low profile commercial buildings at 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-W	2	135	0	0	20	20
48b	053 166101501	2832 SAN PABLO AVE	No	-	-	24.08	1- story commercial	0.31	AL	Meets Criteria 2d, 2e, 2f - Current 1-story commercial building located along a major transit corridor, and in close proximity to other residential development, 2795 San Pablo (ZP2019-0048), and similar to the redevelopment of low profile commercial buildings at 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-W	2	135	0	42	0	42
49a	057 208901201	1011 UNIVERSITY AVE	No	78	-	-	2-story standalone vacant commercial building (former Premier Cru wine store).	0.24	N	Meets Criteria 2a, 2d, 2e, 2f - Building age greater than 30 years (78) - Currently vacant 2-story commercial building located along a major transit corridor, and in close proximity to new residential development, such as 1931 San Pablo (PLN2022-0039), and similar to residential redevelopment of commercial sites at 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	No	BC/C-W	2	135	0	32	0	32
49b	057 208901500	1925 9TH ST	No	-	-	-	Public land, parking lot behind Bauman College	0.15	N	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current surface parking lot in close proximity to other new residential development, such as 1931 San Pablo (PLN2022-0039), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2542 Durant (ZP2016-0172) and 3031 Adeline (ZP2018-0156), make development feasible.	No	HDR/R-3	2	40	0	0	6	6

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)								
50	056 192802701	2407 SAN PABLO AVE	No	68	0.02	0.02	Cement lot with storage sheds	0.36		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (68) - Existing FAR is less than 1.50 (0.02) - Improvement-to-Land Ratio less than 2.0 (0.02) - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-W	2	135	0	48	0	48
51	056 198200201	2111 SAN PABLO AVE	No	80	0.35	1.08	Parking lot	0.42		Meets Criteria 1, 2a, 2b, 2c, 2d, 2e - Vacant and/or parking lots - Building age greater than 30 years (80) - Existing FAR is less than 1.50 (0.35) - Improvement-to-Land Ratio less than 2.0 (1.08) - Current surface parking lot in close proximity to other new residential development, such as 1931 San Pablo (PLN2022-0039), and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.42 acres)	No	BC/C-W	2	135	56	0	0	56
52	057 208602903	1819 SAN PABLO AVE	No	43	0.52	0.75	1-story autobody shop and parking lot, (Nate's Green Garage, auto detailing)	0.42		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (43) - Existing FAR is less than 1.50 (0.52) - Improvement-to-Land Ratio less than 2.0 (0.75) - Current auto shop with large parking lot located on a major transit corridor in close proximity to 1820-1828 San Pablo (ZP2021-0186) and 1835 San Pablo (ZP2018-0220), other former auto shops and used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244) and 2099 MLK Jr. (ZP2019-081) make development feasible - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.42 acres)	Yes	BC/C-W	2	135	57	0	0	57
53	056 193200401	2400 SAN PABLO AVE	No	-	0.19	0.61	2-story retail and cement lot (Nu Gu Na restaurant + Ohmega Salvage)	0.44		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.19) - Improvement-to-Land Ratio less than 2.0 (0.61) - Current 2-story retail building located along a major transit corridor, and in close proximity to new residential development, such as 2371 San Pablo (ZP2019-0089), and similar to other retail sites turned into housing, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.44 acres)	Yes	BC/C-W	2	135	59	0	0	59
54	056 195401000	2031 2ND ST	No	-	0.86	0.93	1-story commercial/industrial building with parking lot (Belfiore Cheese)	0.44		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.86) - Improvement-to-Land Ratio less than 2.0 (0.93) - Current 1-story commercial/industrial building in close proximity to other residential developments at ,	No	BC/C-W	2	135	59	0	0	59

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										such as 1914 Fifth (PLN2022-0039) and 1900 Fourth (ZP2018-0052), and similar to other redevelopments of commercial/industrial buildings such as 2147 San Pablo (PLN2022-0020) make development feasible - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.44 acres)								
55	056 197300601	1010 UNIVERSITY AVE	No	93	1.53	3.18	UA Homes parking lot	0.46		Meets Criteria 1, 2a, 2d, 2e - Vacant and/or parking lots - Building age greater than 30 years (93) - Current surface parking lot in close proximity and similar to other new residential development, such as 2100 San Pablo (ZP2018-0222) make development feasible. - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.46 acres)	No	BC/C-W	2	135	61	0	0	61
56	056 197800802	2040 SAN PABLO AVE	No	-	0.81	0.42	Vacant 1-story commercial building	0.46		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.81) - Improvement-to-Land Ratio less than 2.0 (0.42) - Currently vacant 1-story commercial building located along a major transit corridor, and in close proximity to new residential development, 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), and similar to the residential redevelopment of low profile commercial buildings at 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) make development feasible. - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.46 acres)	Yes	BC/C-W	2	135	62	0	0	62
57a	057 207300400	1375 UNIVERSITY AVE	No	-	0.8	0.76	1-story retail, (Copy World print shop)	0.23	L	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.8) - Improvement-to-Land Ratio less than 2.0 (0.76) - Current 1-story commercial building located along a major transit corridor, and in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	No	BC/C-U	2	150	0	34	0	34
57b	057 207302100	1384 BERKELEY WAY	No	-	-	0.09	Parking lot	0.12	L	Meets Criteria 1, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.09) - Current surface parking lot in close proximity and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	MDR/R-2A	2	25	0	0	2	2
58	057 207200800	1401 UNIVERSITY AVE	No	-	0.23	0.65	1-story standalone coffee shop, mostly parking lot	0.35		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.23)	No	BC/C-U	2	150	52	0	0	52

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Improvement-to-Land Ratio less than 2.0 (0.65) - Current 1-story commercial building and parking lot, similar to 1955 San Pablo (PLN2022-0026) make development feasible - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.35 acres)								
59	056 201102501	1760 UNIVERSITY AVE	No	109	1.36	4.81	Church and parking lot	0.47		Meets Criteria 1, 2a, 2b, 2d, 2e - Vacant and/or parking lots - Building age greater than 30 years (109) - Existing FAR is less than 1.50 (1.36) - Current use as a church and parking lot along a major transit corridor and similar to projects at 2024 Ashby (PLN2021-0072) and 1708 Harmon (PLN2021-0037), make development feasible - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.47 acres)	No	BC/C-U	2	150	70	0	0	70
60	060 245506401	2095 ROSE ST	No	-	1.6	1.61	2-story commercial - real estate offices + gym	0.37		Meets Criteria 2c, 2d, 2e - Improvement-to-Land Ratio less than 2.0 (1.61) - Current 2-story commercial/office building similar to new residential development, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	NC/C-NS(H)	2	50	0	0	18	18
61	053 168502001	2821 SHATTUCK AVE	No	52	0.02	0.17	1-story 336 sf single-tenant auto dealership (Buggy Bank, tenant since Apr 2007) + 100 space surface parking lot; last sold in Nov 2021	0.43		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (52) - Existing FAR is less than 1.50 (0.02) - Improvement-to-Land Ratio less than 2.0 (0.17) - Current auto dealership lot located on a major transit corridor in close proximity to other former auto dealerships and used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244) make development feasible - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.43 acres)	Yes	BC/C-SA	2	180	77	0	0	77
62	055 183901901	2587 TELEGRAPH AVE	No	-	1.04	0.6	2-story, ground floor retail and office; partially vacant	0.43		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (1.04) - Improvement-to-Land Ratio less than 2.0 (0.6) - Currently partially vacant 2-story retail/office building located along a major transit corridor, and similar to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.43 acres)	No	BC/C-T	2	160	69	0	0	69
63	052 153201600	1728 ALCATRAZ AVE	No	56	0.46	2.43	Church parking lot	0.47		Meets Criteria 1, 2a, 2b, 2d, 2e - Vacant and/or parking lots - Building age greater than 30 years (56) - Existing FAR is less than 1.50 (0.46) - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and	No	MDR/C-AC	2	210	98	0	0	98

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for - Parcel size is between 0.35 and 10 acres (0.47 acres)								
64	057 203000100	2108 ALLSTON WAY	No	91	3.48	2.3	2-story multi-tenant commercial building (1st floor: FedEx, Verizon, eye wear; 2nd floor: Berkeley Wireless Research Center), downtown; opportunity zone; Walker's Paradise (100), Excellent Transit (73); 1-block from Downtown Berkeley BART Station; 22 surface parking spaces; New leases for first floor last signed in Dec 2017, Sept 2017, Mar 2016; in close proximity to the Gaia building (91 residential units)	0.41		Meets Criteria 2a, 2d, 2e - Building age greater than 30 years (91) - Current two-story multi-tenant commercial building located downtown, and similar to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.35 and 10 acres unless for moderate or above moderate income (0.41 acres)	Yes	DT/C-DMU Core	2	320	130	0	0	130
65a	055 189302000	BANCROFT WAY	No	-	0.3	-	Parking lot, downtown	0.14	AS	Meets Criteria 1, 2b, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.3) - Current parking lot in close proximity and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	Yes	DT/C-DMU Oute	2	225	0	31	0	31
65b	055 189301600	2301 SHATTUCK AVE	No	-	-	0.3	1-story commercial (Mechanics Bank)	0.22	AS	Meets Criteria 2c, 2d, 2e, 2f - Improvement-to-Land Ratio less than 2.0 (0.3) - Current one-story commercial structure located on major transit corridor in close proximity to other commercial structures that have been replaced by large residential developments, such as 2527 San Pablo (ZP2016-0207). - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	Yes	DT/C-DMU Oute	2	225	0	49	0	49
66	060 242904400	1505 HOPKINS ST	No	-	-	1.75	Immanuel Southern Baptist Church and parking lot	0.4		Meets Criteria 2c, 2d, 2e - Improvement-to-Land Ratio less than 2.0 (1.75) - Current use as a church and parking lot along a major transit corridor and similar to projects at 2024 Ashby (PLN2021-0072) and 1708 Harmon (PLN2021-0037), make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-2A	2	25	0	0	9	9
67	055 182502000	2110 PARKER ST	No	-	-	0.03	Parking lot adjacent to two other opportunity sites (both vacant 1-story commercial buildings - 055 182501900 and 055 182501502)	0.23		Meets Criteria 1, 2c, 2d, 2e - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.03) - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres, unless for moderate or above moderate income (moderate)	Yes	BC/C-AC	3	206	0	48	0	48
68	052 153101101	3237 ELLIS ST	Yes	-	-	-	Vacant lot used as a parking lot	0.1		Meets Criteria 1, 2e - Vacant and/or parking lots - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	NC/C-AC	3	210	0	0	21	21

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
69	055 182200301	2032 DWIGHT WAY	No	-	-	0.02	Medical center parking lot	0.23		Meets Criteria 1, 2c, 2d, 2e - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.02) - Current surface parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-AC	3	210	0	48	0	48
70a	055 182100400	2576 SHATTUCK AVE	No	104	1.39	1.00	2-story mixed-use building, first floor boarded up retail (former furniture outlet), second floor office space; 2 tenants occupying 1,000 sf of office space	0.09	Z	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (104) - Existing FAR is less than 1.50 (1.39) - Improvement-to-Land Ratio less than 2.0 (1.00) - Current two-story, partially vacant mixed-use building located on a major transit corridor in close proximity to other mixed-use buildings that have been replaced by residential developments, such as 2210 Harold (ZP2020-0011), 3031 Telegraph (ZP2020-0069), and 2000 University/2001 Milvia (ZP2020-0134) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-AC	3	208	0	0	19	19
70b	055 182100300	2558 SHATTUCK AVE	No	94	1.02	1.51	1-story auto-repair shop; last sold in 1997; 500 sf (8.5% of property) occupied by tenants; nearby development includes a 155 unit apartment complex completed in 2016	0.15	Z	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (94) - Existing FAR is less than 1.50 (1.39) - Improvement-to-Land Ratio less than 2.0 (1.00) - Currently one-story auto-repair shop located on a major transit corridor in close proximity to other former auto service related businesses that are currently being replaced by residential developments, such as 1835 San Pablo (ZP2018-0220), 2099 MLK Jr. (ZP2019-0081), and 2136-2154 San Pablo (ZP2021-0046) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	No	BC/C-AC	3	209	0	31	0	31
71a	058 217500400	1720 SHATTUCK AVE	No	74	0.31	1.18	1-story office + small parking lot (real estate agency)	0.05	AP	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (74) - Existing FAR is less than 1.50 (0.31) - Improvement-to-Land Ratio less than 2.0 (1.18) - Current single-story office building located along a major transit corridor, and in close proximity to new high density residential development similar to 2847 Shattuck (PLN2022-0031) and 1984 Shattuck (PLN2022-0057), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-C	3	125	0	0	5	5
71b	058 217500500	1730 SHATTUCK AVE	No	54	0.69	1.12	1-story restaurant (Agrodolce – moved in Sept 2016); Walker's Paradise (98), Good Transit (69)	0.06	AP	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (54) - Existing FAR is less than 1.50 (0.69) - Improvement-to-Land Ratio less than 2.0 (1.12) - Current single-story restaurant located along a major transit corridor, and in close proximity to new high	No	BC/C-C	3	125	0	0	8	8

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										density residential development support additional residential development on this site, similar to 2556 Telegraph (ZP2015-0096) and 2000 University (ZP2020-0134), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)								
72	056 200302500	1556 UNIVERSITY AVE	No	-	2.18	2.57	Parking lot	0.17		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current parking lot in close proximity and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	BC/C-U	3	146	0	0	25	25
73a	057 207300200	1399 UNIVERSITY AVE	No	81	0.68	1.05	1-story liquor store (moved in April 2020) and 20 space parking lot, last sold in May 2016; Walker's Paradise (93), Good Transit (68)	0.13	AA	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (81) - Existing FAR is less than 1.50 (0.68) - Improvement-to-Land Ratio less than 2.0 (1.05) - Current single-story liquor store located along a major transit corridor, and similar to 2198 San Pablo (ZP2018-0112), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-U	3	149	0	0	19	19
73b	057 207300300	1399 UNIVERSITY AVE	No	-	0.42	0.03	Parking lot	0.12	AA	Meets Criteria 1, 2b, 2c, 2d, 2e, 2f - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.42) - Improvement-to-Land Ratio less than 2.0 (0.03) - Current parking lot in close proximity and similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-U	3	150	0	0	18	18
74	052 157307601	2414 ASHBY AVE	No	-	0.26	0.15	Parking lot	0.29		Meets Criteria 1, 2b, 2c, 2d, 2e - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.26) - Improvement-to-Land Ratio less than 2.0 (0.15) - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	No	BC/C-C	3	125	0	35	0	35
75	055 183600603	2600 TELEGRAPH AVE	No	64	0.09	0.12	1-story vacant and boarded up gas station and parking lot	0.3		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (64) - Existing FAR is less than 1.50 (0.09) - Improvement-to-Land Ratio less than 2.0 (0.12)	Yes	BC/C-C	3	125	0	37	0	37

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Current single-story vacant gas station and parking lot located along a major transit corridor, and similar to new high density residential development support additional residential development on this site, similar to 2176 Kittredge (ZP2019-0027), 2527 San Pablo (ZP2016-0207), and 1740 San Pablo (ZP2017-0014), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)								
76a	057 205901200	1933 MARTIN LUTHER KING JR WAY	No	-	0.64	0.77	1-story dry cleaners, downtown	0.1	A	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (0.64) - Improvement-to-Land Ratio less than 2.0 (0.77) - Current single-story dry cleaner located downtown, and similar to new residential development, such as 2942 College (ZP2021-0072) and 1650 Shattuck (ZP2020-0022), support additional development of this site and make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	Yes	DT/C-DMU Buff	3	150	0	0	15	15
76b	057 205900900	1915 UNIVERSITY AVE	No	42	1	2.13	1-story vacant retail for sale (permanently closed; former Hot Tubs of Berkeley), downtown	0.11	A	Meets Criteria 2a, 2b, 2d, 2e, 2f - Building age greater than 30 years (42) - Existing FAR is less than 1.50 (0.64) - Improvement-to-Land Ratio less than 2.0 (0.77) - Current single-story dry cleaner located downtown, and similar to new residential development, such as 2942 College (ZP2021-0072) support additional development of this site and make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	Yes	DT/C-DMU Buff	3	150	0	0	17	17
77a	057 205900800	1921 UNIVERSITY AVE	No	96	0.64	0.97	2-story commercial, restaurant (since Aug 2019), offices (since Sep 2010 and July 2016); downtown; Walker's Paradise (99), Excellent Transit (72); new mixed-use apartment building completed nearby in 2017 (Stonefire Berkeley – 8,700 sf retail on first floor; 98 units); same owner as adjacent lot (057 205900700)	0.11	F	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (96) - Existing FAR is less than 1.50 (0.64) - Improvement-to-Land Ratio less than 2.0 (0.97) - Current single-story dry cleaner located downtown, and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	Yes	DT/C-DMU Buff	3	150	0	17	0	17
77b	057 205900700	1929 UNIVERSITY AVE	No	58	0.7	0.44	1-story commercial (CycleBar – lease signed in May 2016), last sold in 2014, Walker's Paradise (99), Excellent Transit (72), downtown; same owner as adjacent lot (057 205900800)	0.11	F	Meets Criteria 2a, 2b, 2c, 2d, 2e, 2f - Building age greater than 30 years (58) - Existing FAR is less than 1.50 (0.7) - Improvement-to-Land Ratio less than 2.0 (0.44) - Current single-story commercial building located downtown and along a major transit corridor, and in close proximity to new residential development, such as 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Buff	3	150	0	17	0	17

			Criteria											Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Lot consolidation potential (common owners)								
78	057 205900101	1921 MARTIN LUTHER KING JR WAY	No	93	0.9	0.69	Two vacant 2-story retail/office space, for rent/sale, downtown	0.07		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (93) - Existing FAR is less than 1.50 (0.9) - Improvement-to-Land Ratio less than 2.0 (0.69) - Currently vacant two-story retail/office buildings located downtown, and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	DT/C-DMU Buff	3	150	0	0	10	10
79	057 205901000	1909 UNIVERSITY AVE	No	70	0.96	7.67	1-story retail/office building (non-profit health agency), lease for Blick Art Supplies signed in 2017, since then has turned into Berkeley Wellness Center (no information on CoStar), last sold in May 2012; Walker's Paradise (99), Excellent Transit (72), downtown	0.11		Meets Criteria 2a, 2b, 2d, 2e - Building age greater than 30 years (70) - Existing FAR is less than 1.50 (0.96) - Current one-story retail/office building located downtown, and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	DT/C-DMU Buff	3	150	0	0	16	16
80	055 189201102	2111 CHANNING WAY	No	-	0.19	0.05	Parking lot, downtown	0.17		Meets Criteria 1, 2b, 2c, 2d, 2e - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.19) - Improvement-to-Land Ratio less than 2.0 (0.05) - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	HDR/C-DMU Buff	3	150	0	0	25	25
81	055 189600600	2041 HASTE ST	No	-	-	0.04	Parking lot, downtown	0.18		Meets Criteria 1, 2c, 2d, 2e - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.04) - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	BC/C-DMU Buff	3	150	0	0	27	27
82a	057 202300200	2116 SHATTUCK AVE	No	-	1.23	0.66	1-2 story partially vacant multi-tenant retail (Yin Ji Chang Fen – moved in Jan 2022, Chateau Mae – moved in Aug 2019), last sold in Dec 2021 (owner user; 540 sf currently for lease), opportunity zone, Walker's Paradise (99), Excellent Transit (72) – half block from Downtown Berkeley BART Station, downtown; same owner as	0.07	M	Meets Criteria 2b, 2c, 2d, 2e, 2f - Existing FAR is less than 1.50 (1.23) - Improvement-to-Land Ratio less than 2.0 (0.66) - Currently partially vacant two-story multi-tenant retail building located downtown and along a major transit corridor, and adjacent/in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq	Yes	DT/C-DMU Core	3	320	0	0	23	23

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
							adjacent property (057 202300300); in between two multi-story mixed-use buildings			(ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)								
82b	057 202300300	2120 SHATTUCK AVE	No	91	1.2	2.4	1-2 story multi-tenant retail (Crave Subs – lease signed July 2021, moved in Oct 2021; Precision Vision – moved in 2007), last sold in Oct 2013, opportunity zone, Walker's Paradise (99), Excellent Transit (73) – half block from Downtown Berkeley BART Station, downtown; same owner as adjacent property (057 202300200); in between two multi-story mixed-use buildings	0.09	M	Meets Criteria 2a, 2b, 2d, 2e, 2f - Building age greater than 30 years (91) - Existing FAR is less than 1.50 (1.2) - Currently two-story multi-tenant retail building located downtown and along a major transit corridor, and adjacent/in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	DT/C-DMU Core	3	320	0	0	28	28
83	057 203001200	2219 SHATTUCK AVE	No	-	1.1	1.26	Vacant 2-story retail (former Berkeley Luggage store), downtown	0.07		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (1.1) - Improvement-to-Land Ratio less than 2.0 (1.26) - Currently vacant two-story retail building located downtown and along a major transit corridor, and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	DT/C-DMU Core	3	320	0	0	21	21
84	057 202600412	2068 CENTER ST	No	-	0.85	1.52	1-story restaurant (Eureka! - lease signed in Jul 2013), opportunity zone; Walker's Paradise (99), Excellent Transit (73) – half a block from the Downtown Berkeley BART station; surrounded by multi-story developments; downtown	0.11		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.85) - Improvement-to-Land Ratio less than 2.0 (1.52) - Currently 1-story restaurant located downtown and along a major transit corridor, and similar to 2428 Shattuck (PLN2022-0036) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Core	3	320	0	33	0	33
85	057 202500400	2020 SHATTUCK AVE	No	66	0.57	0.28	1-story restaurant (Comal – lease signed in Jan 2012; Other Change of Hobbit – lease signed in May 2019); opportunity zone; downtown; Walker's Paradise (99), Excellent Transit (73)	0.12		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (66) - Existing FAR is less than 1.50 (0.57) - Improvement-to-Land Ratio less than 2.0 (0.28) - Currently 1-story restaurant located downtown and along a major transit corridor, and adjacent/in close proximity to new residential development, similar to 2428 Shattuck (PLN2022-0036) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Core	3	320	0	38	0	38
86	057 202500100	2000 SHATTUCK AVE	No	73	2.66	2.11	Vacant 1-story former bank (former tenant: Citibank – permanently closed), last sold in 2009, currently for lease, Walker's Paradise (99),	0.13		Meets Criteria 2a, 2d, 2e - Building age greater than 30 years (73) - Current one-story commercial structure located on major transit corridor in close proximity to other commercial structures that have been replaced by	Yes	DT/C-DMU Core	3	320	0	41	0	41

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
							Excellent Transit (73); opportunity zone, downtown			large residential developments, such as 2527 San Pablo (ZP2016-0207). - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)								
87	057 205301402	2011 UNIVERSITY AVE	No	-	0.87	1.79	1-story commercial building, 66% of floor area currently leased, downtown, nearby developments include the conversion of a 1-story restaurant into an 82 unit apartment building and a 98 unit apartment building (completed in 2017); Walk Score of 99 (out of 100) "Walker's Paradise", Transit Score of 73 (out of 100) "Excellent"	0.10		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.87) - Improvement-to-Land Ratio less than 2.0 (1.79) - Current 1-story commercial building located downtown and along a major transit corridor, and adjacent/in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	DT/C-DMU Oute	3	229	0	0	22	22
88	055 189600200	2414 SHATTUCK AVE	No	74	0.66	2.16	1-story doctor's office, downtown	0.03		Meets Criteria 2a, 2b, 2d, 2e - Building age greater than 30 years (74) - Existing FAR is less than 1.50 (0.66) - Current 1-story office building located downtown and along a major transit corridor, and in close proximity to new residential development, similar to 3031 Telegraph (ZP2020-0069) and 2317 Channing (ZP2020-0090) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	BC/C-DMU Corr	3	150	0	0	5	5
89	057 205100500	1926 SHATTUCK AVE	No	-	0.98	1.32	Low level commercial – restaurant; downtown, adjacent to UC buildings	0.08		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.98) - Improvement-to-Land Ratio less than 2.0 (1.32) - Current 1-story commercial building located downtown and along a major transit corridor, and in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	DT/C-DMU Corr	3	150	0	0	11	11
90	055 189101101	2115 HASTE ST	No	-	-	-	Parking lot, downtown	0.09		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible.	Yes	HDR/C-DMU Corr	3	150	0	0	13	13

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
91	055 189201600	2349 SHATTUCK AVE	No	93	1.03	1.87	1-story retail (Pegasus Books – tenant since July 2000) + office space, opportunity zone, Walker's Paradise (98), Excellent Transit (72), downtown	0.21		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (93) - Existing FAR is less than 1.50 (1.03) - Improvement-to-Land Ratio less than 2.0 (1.87) - Current 1-story retail building located downtown and along a major transit corridor, and in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	HDR/C-DMU Corr	3	150	0	31	0	31
92a	055 189301300	2327 SHATTUCK AVE	No	-	-	1.98	1-story vacant 835 sf bar/restaurant (former Venus Restaurant), last sold in Apr 2015, opportunity zone, Walker's Paradise (99), Excellent Transit (73), downtown; same owner as adjacent site (055 189301200)	0.03	G	Meets Criteria 2c, 2d, 2e, 2f - Improvement-to-Land Ratio less than 2.0 (1.98) - Currently vacant 1-story bar/restaurant located downtown and along a major transit corridor, and in close proximity to new residential development, similar to 2428 Shattuck (PLN2022-0036) and 1955 San Pablo (PLN2022-0026) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	Yes	DT/C-DMU Oute	3	225	0	6	0	6
92b	055 189301200	2333 SHATTUCK AVE	No	-	-	3.24	2-story single-tenant commercial building (Union Bank since 2007); 22 covered + 8 surface parking spaces; opportunity zone; Walker's Paradise (99), Excellent Transit (73), downtown; same owner as adjacent site (055 189301300)	0.21	G	Meets Criteria 2d, 2e, 2f - Current two-story commercial structure located on major transit corridor in close proximity to other commercial structures that have been replaced by large residential developments, such as 2527 San Pablo (ZP2016-0207). - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate) - Lot consolidation potential (common owners)	Yes	DT/C-DMU Oute	3	225	0	48	0	48
93	057 205300100	1950 SHATTUCK AVE	No	100	1.07	1.97	1-story commercial complex; free-standing retail; half vacant, other half restaurants, downtown, across the street from UC Berkeley, dense urban infill location; lease signed in 2021, property last sold in 2009	0.15		Meets Criteria 2a, 2b, 2d, 2e - Building age greater than 30 years (100) - Existing FAR is less than 1.50 (1.07) - Improvement-to-Land Ratio less than 2.0 (1.97) - Current two-story commercial structure located on major transit corridor in close proximity to other commercial structures that have been replaced by large residential developments, such as 2527 San Pablo (ZP2016-0207). - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Oute	3	219	0	32	0	32
94	055 189301100	2107 DURANT AVE	No	-	-	0.05	Parking lot, downtown	0.14		Meets Criteria 1, 2c, 2d, 2e - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.14) - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Oute	3	225	0	30	0	30

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
95	055 189300100	2190 BANCROFT WAY	No	68	0.73	3.14	1-story restaurant (Great China), downtown	0.18		Meets Criteria 2a, 2b, 2d, 2e - Building age greater than 30 years (68) - Existing FAR is less than 1.50 (0.73) - Current 1-story restaurant located downtown and along a major transit corridor, and adjacent/in close proximity to new residential development, similar to 2428 Shattuck (PLN2022-0036) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Oute	3	225	0	39	0	39
96	057 205301100	2017 UNIVERSITY AVE	No	96	0.49	1.12	1-story multi-tenant commercial (Red Tomato Pizza House – moved in April 2016); parking behind accessed from Berkeley Way, Walker's Paradise (99), Excellent Transit (72), downtown	0.2		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (96) - Existing FAR is less than 1.50 (0.49) - Improvement-to-Land Ratio less than 2.0 (1.12) - Current 1-story multi-tenant commercial building located downtown and along a major transit corridor, and in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Oute	3	225	0	45	0	45
97	057 205300801	2029 UNIVERSITY AVE STE 201	No	69	0.81	2.01	2-story commercial - ground floor retail, commercial office above. Surface and covered parking in rear. Downtown.	0.27		Meets Criteria 2a, 2b, 2d, 2e - Building age greater than 30 years (69) - Existing FAR is less than 1.50 (0.81) - Current 2-story commercial building located downtown and along a major transit corridor, and in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Oute	3	225	0	59	0	59
98	057 202501900	2058 UNIVERSITY AVE	No	104	1.02	0.42	1-story retail (strip center), downtown, adjacent to 6-story and 3-story mixed-use buildings, sold twice since 2018; leased to Goodwill since 2009	0.19		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (104) - Existing FAR is less than 1.50 (1.02) - Improvement-to-Land Ratio less than 2.0 (0.42) - Current 1-story retail building located downtown and along a major transit corridor, and adjacent/in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Core	3	317	0	59	0	59
99	064 423600400	3048 ASHBY AVE	No	58	0.14	0.43	Chevron gas station and parking lot	0.31		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (58) - Existing FAR is less than 1.50 (0.14) - Improvement-to-Land Ratio less than 2.0 (0.43) - Current single-story gas station and parking lot located along a major transit corridor, and in close	Yes	NC/C-N	3	50	0	0	15	15

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										proximity to new high density residential development support additional residential development on this site, similar to 2176 Kittredge (ZP2019-0027), 2527 San Pablo (ZP2016-0207), and 1740 San Pablo (ZP2017-0014), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
100	057 202301601	2109 MILVIA ST # A	No	-	4.19	-	1-story 196 sf food kiosk (Yummy House) + surface parking lot; currently for sale – advertised as a "Rare Downtown Berkeley development site opportunity in heart of Theater District"	0.16		Meets Criteria 2d, 2e - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	DT/C-DMU Core	3	315	0	51	0	51
101	055 183700200	2566 TELEGRAPH AVE STE D	No	-	1.18	1.01	1-story standalone multi-tenant commercial building (Ahn Taekwondo Institute CA -move date Oct 2021; Royal Indian Bal – move date Dec 2017); last sold in 2004; Walker's Paradise (98), Good Transit (62) – leased 2,500 sf of rtail space in March 2019	0.14		Meets Criteria 2b, 2c, 2d, 2e - Building age greater than 30 years (104) - Existing FAR is less than 1.50 (1.18) - Improvement-to-Land Ratio less than 2.0 (1.01) - Current 1-story retail building located along a major transit corridor, and in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	BC/C-T	3	160	0	0	22	22
102	055 187602300	2510 DURANT AVE	No	-	1.36	1.18	2-story standalone retail (Games of Berkeley)	0.17		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (1.36) - Improvement-to-Land Ratio less than 2.0 (1.18) - Current 2-story retail building located in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	BC/C-T	3	160	0	0	27	27
103	055 187701100	2347 TELEGRAPH AVE	No	92	0.93	3.68	1-story Bank of America	0.24		Meets Criteria 2a, 2b, 2d, 2e - Building age greater than 30 years (92) - Existing FAR is less than 1.50 (0.93) - Current one-story commercial structure located on major transit corridor in close proximity to other commercial structures that have been replaced by large residential developments, such as 2527 San Pablo (ZP2016-0207). - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-T	3	160	0	38	0	38
104a	057 208500702	1187 UNIVERSITY AVE	No	-	-	1.88	1-story laundromat, last sold in Oct 2016, 10 surface parking spaces, no lease or tenant data available on CoStar, Walker's Paradise (97), Good Transit (65); lot owned by same owner as adjacent lot (057 208500801)	0.08	AO	Meets Criteria 2c, 2d, 2e, 2f - Improvement-to-Land Ratio less than 2.0 (1.88) - Current 1-story laundromat located on a major transit corridor in close proximity to other residential development, such as 1931 San Pablo (PLN2022-0026), and to similar projects, such as 2942 College (ZP2021-0072) and 1650 Shattuck (ZP2020-0022) make development feasible	No	BC/C-U	3	150	0	0	12	12

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)								
104b	057 208500801	1181 UNIVERSITY AVE	No	-	-	4.03	1-story restaurant (Eat @ Thai – tenant since Jul 2016), no sale data available on CoStar; Walker's Paradise (97), Good Transit (65); lot owned by same owner as adjacent lot (057 208500702)	0.11	AO	Meets Criteria 2d, 2e, 2f - Current 1-story multi-tenant commercial building located downtown and along a major transit corridor, and in close proximity to new residential development, such as 1931 San Pablo (PLN2022-0026), and to similar projects, and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C_U	3	150	0	0	16	16
105	057 207000300	1699 UNIVERSITY AVE	No	-	0.14	0.02	1-story auto-related office and 75 space parking lot (Mike's Auto Services)	0.19		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.14) - Improvement-to-Land Ratio less than 2.0 (0.02) - Current auto shop with large parking lot located on a major transit corridor in close proximity to other former auto dealerships and used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244) and 2099 MLK Jr. (ZP2019-081) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	BC/C-U	3	150	0	0	28	28
106	056 197900100	1198 UNIVERSITY AVE	No	-	0.17	0.4	Auto car wash	0.28		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.17) - Improvement-to-Land Ratio less than 2.0 (0.4) - Current car wash on a major transit corridor in close proximity to other former auto-related businesses and used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244) and 2099 MLK Jr. (ZP2019-081) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-U	3	150	0	41	0	41
107	056 200300100	1598 UNIVERSITY AVE	No	-	0.28	0.45	1-story single-tenant restaurant (North Beach Pizza - tenant since Mar 2007) + 25 space parking lot; last sold in Sept 2021; Walker's Paradise (95), Excellent Transit (70)	0.29		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.28) - Improvement-to-Land Ratio less than 2.0 (0.45) - and in close proximity to new residential development, such as 1652 University (PLN2022-0047) and 1698 University (UPMOD2013-0001), and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	No	BC/C-U	3	150	0	43	0	43
108	060 239501700	1501 SAN PABLO AVE	No	79	1.38	1	Vacant 1-story commercial building	0.07		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (79) - Existing FAR is less than 1.50 (1.38) - Improvement-to-Land Ratio less than 2.0 (1) - Currently vacant 1-story commercial building located along a major transit corridor, and in close proximity	No	BC/C-W	3	135	0	0	8	8

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderat								
109	053 166202100	2835 SAN PABLO AVE	No	-	0.94	0.44	Vacant 1-story commercial building (former BPOE Lodge - permanently closed)	0.08		Meets Criteria 2b, 2c, 2d, 2 - Existing FAR is less than 1.50 (0.94) - Improvement-to-Land Ratio less than 2.0 (0.44) Currently vacant 1-story commercial building located along a major transit corridor, and adjacent/in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	BC/C-W	3	135	0	0	11	11
110a	060 239503100	1513 SAN PABLO AVE	No	-	-	1.34	1-story autobody shop	0.05	P	Meets Criteria 2c, 2d, 2e, 2f - Improvement-to-Land Ratio less than 2.0 (1.34) - Current auto shop located on a major transit corridor in close proximity to other former auto dealerships and used car lots that have been replaced by residential developments, such as 2136-2154 San Pablo (ZP2021-0046), and similar to projects at 2701 Shattuck (ZP2016-0244) and 2099 MLK Jr. (ZP2019-081) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-W	3	135	0	0	7	7
110b	060 239503301	1507 SAN PABLO AVE	No	70	1.94	0.87	Vacant 1-story storefront for sale	0.15	P	Meets Criteria 2a, 2c, 2d, 2e, 2f - Building age greater than 30 years (70) - Existing FAR is less than 1.50 (1.94) - Improvement-to-Land Ratio less than 2.0 (0.87) - Currently vacant 1-story commercial building located along a major transit corridor, and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	No	BC/C-W	3	135	0	0	20	20
111	060 239500100	1100 PAGE ST	No	-	-	0.05	Parking lot	0.11		Meets Criteria 1, 2c, 2d, 2e - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.05) - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	BC/C-W	3	135	0	0	14	14

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
112	060 240502401	1229 SAN PABLO AVE	Yes	-	-	-	Vacant 1-story commercial building, for sale sign	0.12		Meets Criteria 2d, 2e - Currently vacant 1-story commercial building located along a major transit corridor, and in close proximity to new residential development, such as 1207 Tenth (ZP2020-0046) and 1201-1205 San Pablo (ZP2021-0070), and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	M/C-W	3	135	0	0	16	16
113	053 166200101	2825 SAN PABLO AVE	Yes	-	-	-	Vacant lot	0.17		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	BC/C-W	3	135	0	0	22	22
114	060 240503101	1205 SAN PABLO AVE	Yes	-	-	-	Vacant lot	0.17		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	M/C-W	3	135	0	0	23	23
115	056 192602000	2309 SAN PABLO AVE	No	-	-	0.08	1-story commercial + parking lot (Afghan Burrito)	0.19		Meets Criteria 2c, 2d, 2e - Improvement-to-Land Ratio less than 2.0 (0.08) - Currently vacant 1-story commercial building located along a major transit corridor, and adjacent/in close proximity to new residential development, similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	BC/C-W	3	135	0	0	25	25
116	053 164100905	901 ASHBY AVE	No	37	0.01	0.46	76 Gas Station	0.24		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (37) - Existing FAR is less than 1.50 (0.01) - Improvement-to-Land Ratio less than 2.0 (0.46) - Current use as a gas station, location on a major transit corridor, and similar development of gas stations, (ZP2019-0027 + ZP2022-0046) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-W	3	135	0	32	0	32
117	057 209601001	833 UNIVERSITY AVE	No	-	0.08	0.15	Chevron Gas Station (on same block as Valero station)	0.24		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.08) - Improvement-to-Land Ratio less than 2.0 (0.15) - Current use as a gas station, location on a major transit corridor, and similar development of gas stations, (ZP2019-0027 + ZP2022-0046) adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-W	3	135	0	32	0	32

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
118	053 162901901	2959 SAN PABLO AVE	No	-	0.1	0.22	1-story commercial/auto-related use (Berkeley Star Smog)	0.25		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.1) - Improvement-to-Land Ratio less than 2.0 (0.22) - Current auto shop located on a major transit corridor in close proximity to other former auto dealerships and used car lots that have been replaced by residential developments, such as 2701 Shattuck (ZP2016-0244) and 2099 MLK Jr. (ZP2019-081) make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-W	3	135	0	34	0	34
119	057 208800400	1900 SAN PABLO AVE	Yes	-	-	-	Vacant lot	0.27		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-W	3	135	0	36	0	36
120	057 210201003	3RD ST	No	-	-	-	Parking lot behind 4th Street, same owner for all parking	0.28		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	No	M/C-W	3	135	0	53	0	53
121	056 193302403	2366 SAN PABLO AVE	No	-	0.13	1.32	1-story commercial building + parking lot (Berkeley Patients Group)	0.33		Meets Criteria 2b, 2c, 2d, 2e - Existing FAR is less than 1.50 (0.13) - Improvement-to-Land Ratio less than 2.0 (1.32) - Currently vacant 1-story commercial building located along a major transit corridor, and similar to 2556 Telegraph (ZP2015-0096), 1776/1782/1790 University (PLN2021-0063), 2847 Shattuck (PLN2022-0031), and 130-134 Berkeley Sq (ZP2021-0158) support additional development of this site and make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	Yes	BC/C-W	3	135	0	44	0	44
122	056 196600100	830 UNIVERSITY AVE	No	-	0.04	-	1-story civic building, City of Berkeley Health and Human Services, City-owned public health center	0.34		Meets Criteria 2b, 2d, 2e - Existing FAR is less than 1.50 (0.04) - Current 1-story civic building located along a major transit corridor and in close proximity to other residential developments, such as 1900 Fourth (ZP2018-0052) and 1914 Fifth (PLN2022-0039), make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	No	BC/C-W	3	135	0	45	0	45
123	057 211701100	1631 5TH ST	Yes	-	-	-	Vacant lot, publicly-owned	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MU/MUR	3	24.4	0	0	3	3
124	057 211700402	1618 6TH ST	No	-	-	1.71	1-story manufacturing (Eppco Machine Shop)	0.15		Meets Criteria 2c, 2d, 2e - Improvement-to-Land Ratio less than 2.0 (1.71) - Current manufacturing shop similar to other proposed residential or mixed-use project, such as 1207 Tenth St (ZP2020-0046), make development feasible.	No	MU/MUR	3	24.4	0	0	3	3

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
125	053 165902900	2819 8TH ST	Yes	-	-	-	Vacant lot used as a parking lot	0.15		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MU/MUR	3	24.4	0	0	3	3
126	056 194500501	2336 5TH ST	Yes	-	-	-	Vacant lot next to 1-story manufacturing and 3-story residential	0.17		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MU/MUR	3	24.4	0	0	4	4
127	058 218301300	VIRGINIA ST	Yes	-	-	-	Vacant lot	0.11		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1	3	6	0	0	1	1
128	058 218400700	1624 ARCH ST	Yes	-	-	-	Vacant lot	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1	3	6	0	0	1	1
129	057 209300300	914 HEARST AVE	Yes	-	-	-	Vacant lot used by 914 Hearst as garden	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-1A	3	15	0	0	2	2
130a	060 249306800	HILL RD	Yes	-	-	-	Same owner owns both adjacent vacant parcels	0.12	AT	Meets Criteria 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	3	6	0	0	1	1
130b	060 249301000	1330 SUMMIT RD	Yes	-	-	-	Vacant lot, different property owner from adjacent parcels	0.14	AT	Meets Criteria 1, 2d, 2e, 2f - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate) - Lot consolidation potential (common owners)	Yes	LDR/R-1H	3	6	0	0	1	1
131	062 293602600	527 SAN LUIS RD	No	-	0.5	-	Vacant lot next to 527 San Luis Rd. (sfr)	0.11		Meets Criteria 1, 2b, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
132	060 249300600	SUMMIT RD	Yes	-	-	-	Vacant lot, same owner owns both adjacent vacant parcels	0.11		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
133	060 249300500	SUMMIT RD	Yes	-	-	-	Vacant lot, same owner owns both adjacent vacant parcels	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
134	063 298602201	52 ESTATES DR	Yes	-	-	-	Vacant lot on Cragmont Ave.	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
135	063 298405300	1139 KEELER AVE	Yes	-	-	-	Vacant lot, property owner different from adjacent lots	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
136	058 224201624	8 MAYBECK TWIN DR	Yes	-	-	-	Vacant lot, property owner different from adjacent lots	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
137	060 249307100	HILL RD	Yes	-	-	-	Vacant lot, property owner different from adjacent lots	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
138	063 295203400	691 CRAGMONT AVE	Yes	-	-	-	Vacant lot	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
139	060 248902100	44 SENIOR AVE	Yes	-	-	-	Vacant lot, property owner different from adjacent lots	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
140	060 249001400	OLYMPUS AVE	Yes	-	-	-	Vacant lot, same property owner as adjacent vacant lot	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible	Yes	LDR/R-1H	3	6	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
141	061 257805200	827 ARLINGTON AVE	Yes	-	-	-	Vacant lot	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
142	063 298001900	1191 SOLANO AVE	Yes	-	-	-	Vacant lot, property owner different from adjacent lots	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
143	063 296305200	10 GREENWOOD CMN	Yes	-	-	-	Vacant lot	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
144	063 299302300	1248 GRIZZLY PEAK BLVD	Yes	-	-	-	Vacant lot, different owners from adj lots, bought in 2014	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
145	060 248205100	1068 AMARILLO AVE	Yes	-	-	-	Vacant lot, different owner from all adjacent parcels	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
146	063 298405200	449 STONEFIELD PL	Yes	-	-	-	Vacant lot, property owner different from adjacent lots	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
147	060 249001500	OLYMPUS AVE	Yes	-	-	-	Vacant lot, same property owner as adjacent vacant lot	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
148	061 258102500	INDIAN ROCK AVE	Yes	-	-	-	Vacant lot on Indian Rock Ave.	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
149	060 248304300	CAMPUS DR	Yes	-	-	-	Vacant lot outside of creek setback, different owner from adjacent parcel	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots	Yes	LDR/R-1H	3	6	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
150	058 224402501	1434 SPRUCE ST	Yes	-	-	-	Vacant lot, different property owner from adjacent parcels	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
151	060 247801503	1436 CAMPUS DR	Yes	-	-	-	Vacant lot	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
152	060 248505600	1375 QUEENS RD	Yes	-	-	-	Vacant lot	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
153	063 298804900	1196 KEITH AVE	Yes	-	-	-	Vacant lot, different owner from adj. lots	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
154	063 298804600	1156 KEITH AVE	Yes	-	-	-	Vacant lot, looks like formerly a structure on the site but since demo'd	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
155	063 314008700	17256 N TRETHEWAY RD	Yes	-	-	-	Vacant lot sold as part of 1040 Overlook Rd in 2021 to investor	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
156	063 297002700	1821 1/2 8TH ST	Yes	-	-	-	Vacant lot, different owner from adj lots	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
157	063 295504001	705 EUCLID AVE	Yes	-	-	-	Vacant lot, steep topography, but developable	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
158	063 298804400	1150 KEITH AVE	Yes	-	-	-	Vacant lot, owned by family member of adjacent lot 1152 KEITH AVE	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
159	062 290202100	583 COLUSA AVE	Yes	-	-	-	Vacant lot	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
160	060 248301600	CAMPUS DR	Yes	-	-	-	Vacant lot	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
161	061 257804600	853 ARLINGTON AVE	Yes	-	-	-	Vacant lot	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
162	062 290002300	1864 YOSEMITE RD	Yes	0	-	-	Vacant lot	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
163	063 298505000	1165 CRAGMONT AVE	Yes	0	-	-	Vacant lot, sold in 2017	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
164	060 248400303	AVENIDA DR	Yes	0	-	-	Vacant lot, different owner from all adjacent parcels	0.15		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
165	060 249306700	HILL RD	Yes	0	-	-	Same owner owns both adjacent vacant parcels	0.15		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
166	063 298503300	2807 SHASTA RD	Yes	0	-	-	Vacant lot, different owner from adjacent lots	0.15		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible	Yes	LDR/R-1H	3	6	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
167	060 249201703	GRIZZLY PEAK BLVD	Yes	0	-	-	Vacant lot, different owners from all adjacent parcels	0.15		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
168	060 249200300	SUMMIT RD	Yes	0	-	-	Developable vacant lot, owned by same owner as adjacent 1427 Summit Rd.	0.15		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
169	060 246302100	2280 EUNICE ST	Yes	0	-	-	Vacant lot	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
170	063 298000501	30 HILL RD	Yes	0	-	-	Vacant lot, owner different from all adjacent lots	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
171	061 259804401	735 ARLINGTON AVE	Yes	0	-	-	Vacant lot	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
172	063 312002702	1410 CALIFORNIA ST	Yes	0	-	-	Vacant lot	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
173	058 221102001	2750 CEDAR ST	Yes	0	-	-	Vacant lot, but different owner from adjacent parcels	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
174	060 249201704	1531 SUMMIT RD	Yes	0	-	-	Vacant lot sold in 2017, different owners from adjacent parcels	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
175	063 314000900	1534 PLEASANT HILL RD	Yes	0	-	-	Vacant lot, different owner from adjacent lots	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots	Yes	LDR/R-1H	3	6	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
176	063 314002902	52 THE CRESCENT	Yes	-	-	-	Vacant lot, purchased by owner of adj lot 52 THE CRESCENT in Oct 2020	0.17		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
177	063 298504400	1197 CRAGMONT AVE	Yes	-	-	-	Vacant lot, ame owner as 1197 CRAGMONT AVE, sold in 2019	0.17		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
178	063 297404000	1039 KEITH AVE	Yes	-	-	-	Vacant lot, steep topography, but still developable	0.18		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
179	063 312006100	323 CHASE ST	Yes	-	-	-	Vacant lot	0.19		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
180	063 298603900	1179 KEITH AVE	Yes	-	-	-	Vacant lot, same property owner as adjacent 2785 SHASTA RD sold in 2017	0.19		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
181	064 422900215	63 VICENTE RD	Yes	-	-	-	Vacant lot	0.23		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
182	063 298305000	193 ORTEGA AVE	Yes	-	-	-	Vacant lot, owner different from all adjacent lots	0.23		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
183	063 297806600	1049 KEELER AVE	Yes	-	-	-	Vacant lot	0.26		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1

			Criteria											Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
184	063 316002202	40 HILL RD	Yes	-	-	-	Vacant lot, same owner as 40 Hill Rd across street	0.26		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
185	063 298000403	1120 STERLING AVE	Yes	-	-	-	Vacant lot, owned by family of 1120 STERLING AVE	0.27		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
186	063 311005302	608 VISTAMONT AVE	Yes	-	-	-	Vacant lot, lots of vegetation/ redwoods, but developable	0.27		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
187	063 312002603	724 WILDCAT CANYON RD	Yes	-	-	-	Vacant lot	0.27		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	2	2
188	062 290100200	1900 YOSEMITE RD	Yes	-	-	-	Vacant lot	0.29		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	2	2
189	062 291403800	699 SANTA BARBARA RD	Yes	-	-	-	Vacant lot; heavy vegetation	0.32		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
190	063 311010900	1 MY WAY	Yes	-	-	-	Vacant lot	0.33		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	LDR/R-1H	3	6	0	0	1	1
191	061 257602305	852 ARLINGTON AVE	Yes	0	-	-	Vacant lot	0.33		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	LDR/R-1H	3	6	0	0	1	1
192	059 228702000	1117 VIRGINIA ST	Yes	0	-	-	Vacant lot, same owner as 1639 San Pablo	0.06		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible	No	MDR/R-2	3	20	0	0	1	1

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
193	060 240200200	1300 CORNELL AVE	No	-	-	0.06	Parking lot	0.11		Meets Criteria 1, 2c, 2d, 2e - Vacant and/or parking lots - Improvement-to-Land Ratio less than 2.0 (0.06) - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	MDR/R-2	3	20	0	0	2	2
194	059 227700908	1226 GLEN AVE	Yes	-	-	-	Vacant lot, different property owner from all adjacent parcels	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-2	3	20	0	0	2	2
195	057 201502403	2127 GRANT ST	Yes	-	-	-	Vacant lot, different owners from adj lots	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-2	3	20	0	0	2	2
196	055 184100500	1240 HILLVIEW DR	Yes	-	-	-	Vacant lot	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-2	3	20	0	0	3	3
197	057 201500900	2114 MCKINLEY AVE	Yes	-	-	-	Vacant lot	0.15		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-2	3	20	0	0	2	2
198	057 206300800	1835 BERKELEY WAY	Yes	-	-	-	Vacant lot used for parking, different owner from adjacent neighbors	0.11		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-2A	3	25	0	0	2	2
199	053 160602500	1626 TYLER ST	Yes	-	-	-	Vacant lot	0.11		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-2A	3	25	0	0	2	2
200	053 159200900	2033 EMERSON ST	Yes	121	0.48	-	Vacant lot	0.11		Meets Criteria 1, 2a, 2b, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible	Yes	MDR/R-2A	3	25	0	0	2	2

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
										- Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)								
201	057 205102900	2011 BERKELEY WAY	No	-	-	-	Parking lot, different owner from adjacent parcels	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	MDR/R-2A	3	25	0	0	3	3
202	055 182300500	2135 BLAKE ST	Yes	-	-	-	Vacant lot	0.16		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	MDR/R-2A	3	25	0	0	3	3
203	058 221101305	LA LOMA AVE	Yes	-	-	-	Vacant lot, but different owners from adjacent parcels	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	MDR/R-2H	3	13.6	0	0	2	2
204	057 209200600	1912 9TH ST	Yes	-	-	0.02	Vacant lot, owned by 1912 Ninth St (adjacent to south)	0.08		Meets Criteria 1, 2c, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	HDR/R-3	3	40	0	0	3	3
205	057 209601201	1925 6TH ST	Yes	-	-	-	Vacant lot	0.13		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	HDR/R-	3	40	0	0	5	5
206	055 183102500	2316 DWIGHT WAY	No	71	0.29	1.6	1-story medical office, deep setback, parking lot	0.18		Meets Criteria 2a, 2b, 2c, 2d, 2e - Building age greater than 30 years (71) - Existing FAR is less than 1.50 (0.29) - Improvement-to-Land Ratio less than 2.0 (1.6) - Current surface parking lot and one-story medical office on a major transit corridor in close proximity to similar site that has been replaced with a large residential development: 3031 Telegraph (ZP2020-0069) - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	HDR/R-3	3	40	0	0	7	7
207	055 181601900	Lot adjacent to 2539 M L KING JR WAY	Yes	-	-	-	Vacant lot	0.12		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current and adjacent uses make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	No	HDR/R-4	3	75	0	0	9	9

			Criteria												Unit Count			
	APN	Address	Vacant Lot	Bldg Age	Extg FAR	Imp-Land Ratio	Existing Land Use	Acres	Consol Lot	Site Criteria Met	RHNA Cycle 5	GP/Zoning	Priority	Avg Density	Lower	Moderate	Above	Total Potl Units
208	055 188700800	2223 CHANNING WAY	No	-	-	-	Parking lot	0.14		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	HDR/R-S	3	200	0	0	13	13
209	055 188400204	2337 CHANNING WAY	No	-	0.18	0.02	FCCB Church parking lot	0.17		Meets Criteria 2b, 2c, 2d, 2e - Vacant and/or parking lots - Existing FAR is less than 1.50 (0.18) - Improvement-to-Land Ratio less than 2.0 (0.02) - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	HDR/R-S	3	200	0	0	17	17
210	055 187201100	2613 CHANNING WAY	No	-	3.95	-	Parking lot	0.17		Meets Criteria 1, 2d, 2e - Vacant and/or parking lots - Current parking lot similar to redevelopment of other surface parking lots that have been replaced with a residential development: 2100 San Pablo (ZP2018-0222), 2136-2154 San Pablo (ZP2021-0046), and 2147 San Pablo (PLN2022-0020), make development feasible. - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (above moderate)	Yes	RMU/R-SMU	3	200	0	0	33	33
211	053 158702003	3001 SHATTUCK	No	-	-	-	Enterprise Car Rental and parking lot located at major intersection of Shattuck and Ashby	0.23		Meets Criteria 2d, 2e - Current occupied commercial structure located on major transit corridor in close proximity to other commercial structures that have been replaced with large residential developments, such as 2847 Shattuck (PLN2022-0031), 2920 Shattuck (PLN2022-0016), make development feasible - Parcel size is between 0.5 and 10 acres unless for moderate or above moderate income (moderate)	No	NC/C-SA	3	180	0	41	0	41
	TOTAL														3,201	1,867	1,421	6,489

Note on Consolidated Lots: Letter(s) are assigned to groups of adjoining parcels that can be consolidated. For example, parcels 1 and 2 may be Group A. Parcels 3-10 may be Group B, etc. Contiguous parcels with same owners are assigned the same letter.

Table C-11: Projects used in Density Calculations

APN	Address	Units Entitled	Zone	Lot (SF)	Type	Base Density	Density with Bonus (DUA)	Density Bonus (%)
052 153300103	1708 Harmon	82	C-AC	45,612	GLA	78.0	78.0	0%
053 159801600	2970 Adeline St	2	C-AC	3760	MU	23.2	23.2	0%
053 168400100	2801 Adeline	84	C-AC	47916	MU	76.4	76.4	0%
				2.23		59.2		
058 217600101	1752 Shattuck	57	C-C	10600	MU	173.5	234.2	35%
052 157408100	3031 Telegraph	110	C-1	31,604	MF	112.6	152.0	35%
				0.97		143.1		
057 202301701	2002 Addison St	6	Buff C-DMU	6500	MU	180.9	180.9	0%
055 189301800	2124-2126 Bancroft/2121-2123 Durant	50	Buff C-DMU	10270	MU	169.7	212.1	25%
055 189401500	2028 BANCROFT	37	Buff C-DMU	7,215	MF	182.4	223.4	23%
055 189504100	2352 Shattuck	135	Buff C-DMU	30475	MU	154.4	193.0	25%
057 205302201	2012 Berkeley Way	142	buff C-DMU	35445	MF	129.3	174.5	35%
057 202401300	2099 M L K Jr.	72	buff C-DMU	12411	MU	190.5	257.1	35%
				2.35		167.8		
055 189504200	2390 Shattuck	69	Corr / Buff C-DMU	16594	MU	134.2	181.1	35%
055 189600500	2440 Shattuck	40	C-DMU Corr	8559	MU	22.6	29.9	33%
				0.58		78.4		
057 202700202	2210 Harold	38	Outer Core C-DMU	5953	MU	279.0	279.0	0%
057 202900204	2176 Kittredge	165	Outer Core C-DMU	32600	MU	165.0	165.0	0%
057 202901600	2150 Kittredge	169	Outer Core C-DMU	32600	MU	225.8	225.8	0%
057 204600100	1951 SHATTUCK	156	Outer Core C-DMU	17,424	MU	390.0	390.0	0%
057 204600804	2125-2145 University Avenue, 1922 & 1930 Walnut	116	Outer Core C-DMU	35,213	MU	143.5	143.5	0%
057 204601101	1987 Shattuck Av, 2111-2113 University	89	Outer Core C-DMU	13,796	MU	281.0	281.0	0%
				3.16		247.4		
057 202700900	2065 Kittredge	189	core C-DMU	33582	MF	204.3	245.2	20%
057 203100101	2128 Oxford, 2132-2154 Center	283	core C-DMU	35573	MU	274.9	274.9	0%
057 203201700	130-134 Berkeley Sq	50	core C-DMU	4762	MU	457.4	457.4	0%
057 203400800	2023 Shattuck	48	core C-DMU	3662	MU	444.4	600.0	35%
057 202201901	1950 ADDISON	107	Core C-DMU	20,515	MF	189.8	227.7	20%
057 202302500	2072 ADDISON	66	Core C-DMU	10230	MU	281.0	281.0	0%
057 202501300	2000 University	82	Core C-DMU	6258	MU	423.0	571.0	35%
057 202502300	2009 Addison St	45	Core C-DMU	10420	MU	188.1	188.1	0%
057 202600405	2190 Shattuck Ave	274	Core C-DMU	19967	MF	595.7	595.7	0%
				3.33		339.8		
052 156800900	2942 College	4	C-E	6346	MU	28.6	28.6	0%
058 215702600	1711 MLK	1	C-N	6000	MU	51.1	51.1	0%
058 217300500	1650 Shattuck	10	C-NS	4,600		94.7	94.7	

APN	Address	Units Entitled	Zone	Lot (SF)	Type	Base Density	Density with Bonus (DUA)	Density Bonus (%)
				0.39		58.1		
053 159001101	2900-2920 Shattuck	90	C-SA	19524	MU	200.8	200.8	0%
053 159101803	2001 ASHBY	87	C-SA	26303	MF	106.7	144.1	35%
053 159200100	3000 Shattuck	156	C-SA	13561	MU	334.1	501.1	50%
053 159500903	3031 Adeline	42	C-SA	12257	MU	110.6	149.3	35%
054 171900009	2711 Shattuck	22	C-SA	5,674	MF	168.9	168.9	0%
054 171900100	2701 Shattuck Ave	57	C-SA	11,826	MU	155.5	210.0	35%
055 181900102	2628 SHATTUCK	78	C-SA	16340	MU	207.9	207.9	0%
				2.42		183.5		
055 187800400	2439 Durant	22	North C-T	6500	MU	147.4	147.4	0%
055 183700100	2556 TELEGRAPH	24	South C-T	9832	MU	97.5	97.5	0%
055 187500400	2501-2509 HASTE	55	North C-T	18781	MU	127.5	127.5	0%
055 187500800	2510 Channing Way	36	North C-T	8740	MU	179.4	179.4	0%
055 187601901	2532 Durant	7	North C-T	9750	MU	31.3	31.3	0%
055 187602101	2542 Durant Ave	32	North C-T	12792	MF	149.8	149.8	0%
055 187700100	2590 BANCROFT	87	North C-T	13130	MU	213.8	288.6	35%
055 187701902	2580 Bancroft Way	122	North C-T	29,032	MU	135.6	183.1	35%
055 187800300	2338 Telegraph	0	North C-T	12,000	GLA	442.9	442.9	0%
055 188100400	2449 Dwight	51	North C-T	10300	MU	155.4	215.7	39%
				3.00		168.1		
056 200402000	1652 University	3	C-U	7480	MU	17.5	17.5	0%
056 201102600	1776/1782/1790 University	79	C-U	9500	MU	268.1	353.9	32%
056 200400100	1698 University	36	C-1	9,967	MU	118.7	157.3	32.5%
057 201602101	1812 UNIVERSITY	44	C-1	13,800	MU	145.2	145.2	0%
057 207300500	1367 University	40	C-1	5,150	GLA	244.4	329.9	35%
				1.05		158.8		
053 162703701	3015 San Pablo	2	C-W	34210	L/W	127.4	127.4	0%
053 163300101	3000 San Pablo	78	C-W	14000	MU	179.8	242.7	35%
054 174202900	2795 San Pablo	5	C-W	4,076	MU	53.4	53.4	0%
054 174203101	2747 SAN PABLO	39	C-W	17386	MU	76.1	102.7	35%
054 174400700	2720 San Pablo	25	C-W	9576	MU	84.2	113.7	35%
054 174408200	2748 San Pablo	23	C-W	9,966	MU	100.5	100.5	0%
054 178101501	2527 San Pablo	63	C-W	13330	MU	152.5	205.9	35%
054 178501700	2712 San Pablo	194	C-W	20714	MU	272.0	408.0	50%
056 192701800	2371 San Pablo	4	C-W	4,600	MU	56.8	56.8	0%
056 196001404	2001 Fourth Street	152	C-W	71,259	MU	82.2	92.9	13%
056 197701001	2100 SAN PABLO	96	C-W	26670	MU	156.8	156.8	0%
056 197701101	2136-2154 San Pablo	126	C-W	23301	MU	179.6	238.0	32.5%
056 197701300	2198 SAN PABLO	60	C-W	9800	MU	214.1	289.0	35%
056 198304201	2147 San Pablo	44	C-W	14571	MU	103.2	131.5	28%
057 208602501	1835 San Pablo	99	C-W	19353	MU	171.4	222.8	30%
057 208700500	1822-1828 San Pablo	44	C-W	11627	MU	123.9	164.8	33%
057 210000708	1914 Fifth	257	C-W	44,095	MU	253.9	253.9	
057 210100103	1900 Fourth	260	C-W	96266	MU	87.1	117.6	35%
058 212701403	1740 San Pablo Ave	51	C-W	14204	MU	120.4	162.5	35%
060 235400200	1200-1214 San Pablo	104	C-W	24800	MU	134.8	182.0	35%
060 240500100	1201-1205 San Pablo	66	C-W	13000	MU	166.0	220.0	32.5%
053 163400401	3020 San Pablo	29	C-W SP Node	9111	MU	112.7	138.6	23%
				11.61		136.8		
053 163502100	809 FOLGER	1	MU-LI	2,285	MU	19.1	19.1	0%
053 163502200	811 FOLGER	1	MU-LI	2,441	MU	17.8	17.8	0%
053 163502300	813 FOLGER	1	MU-LI	2,597	MU	16.8	16.8	0%

APN	Address	Units Entitled	Zone	Lot (SF)	Type	Base Density	Density with Bonus (DUA)	Density Bonus (%)
053 163502400	815 FOLGER	1	MU-LI	2,752	MU	15.8	15.8	0%
060 235401503	1207 Tenth Street	2	MU-LI	12,800	MU	6.8	6.8	0%
				0.53		15.3		
053 165903000	2817 Eighth St	0	MU-R	7315	MF	23.8	23.8	0%
053 166100303	1030 Grayson St	4	MU-R	5,000	DP	34.8	34.8	0%
056 194302300	2411 Fifth St	3	MU-R	7051	DP	24.7	24.7	0%
056 194401100	2422 Fifth	2	MU-R	6250	MU/DP	27.9	27.9	0%
059 232500400	776 Page	3	MU-R	3937	SFD	33.0	33.0	0%
059 232500501	1442 Fifth	3	MU-R	4350	SFD	30.0	30.0	0%
059 232500605	1444 FIFTH	4	MU-R	5,744	SFD	30.3	30.3	0%
059 232502000	1446 Fifth	4	MU-R	6250	SFD	27.9	27.9	0%
059 233701800	1415 Fifth St	3	MU-R	6,487	SFD/DP	20.0	20.0	0%
				1.20		28.0		
056 194101900	2325 Sixth	1	R1-A	6000	MF	14.6	14.6	0%
058 211900900	1716 Seventh Ave	2	R1-A	4800	SFD	18.2	18.2	0%
				0.25		16.4		
052 156317900	2714 Alcatraz Ave	5	R-2	5,900	MF	36.9	36.9	0%
053 168501100	2139 Oregon	2	R-2	3750	SFD	12.9	12.9	0%
054 180202000	1516 Carleton	3	R-2	8614	SFD	15.1	15.1	0%
				0.42		21.6		
052 152701100	1811 SIXTY-THIRD	3	R-2A	5400	DP/SFD	24.2	24.2	0%
052 153101202	3233 Ellis	3	R-2A	6176		21.2	21.2	0%
052 154401200	1519 Fairview	1	R-2A	6750	SFD/MF	25.8	25.8	0%
052 157403300	3021 DANA	1	R-2A	5,270	MF	25.8	25.8	0%
052 157404400	3028 Regent Street	2	R-2A	5962	DP	14.6	14.6	0%
055 182901100	2215 Parker	2	R-2A	6750	DP	12.9	12.9	0%
057 206201000	1725 Berkeley Way	2	R-2A	3894	DP	22.4	22.4	0%
057 206301100	1825 Berkeley Wy	2	R-2A	4687	DP/SFD	27.9	27.9	0%
057 208601300	1173 Hearst	6	R-2A	13,469	MF	42.0	42.0	0%
057 208601400	1155-73 Hearst Ave	2	R-2A	21673	MF	26.1	26.1	0%
058 217001700	1711 M L KING JR	1	R-2A	6000	MU/MF	50.8	50.8	0%
059 226800601	1506 Bonita Ave.	2	R-2A	13500	MF/DP	25.8	25.8	0%
060 244901300	1915 Berryman	11	R-2A	10406	MF	30.7	46.0	50%
				2.52		26.9		
053 162301201	1331 Ashby Ave.	6	R-3	7392	DP	35.4	35.4	0%
055 186901600	2716-2718 Durant	2	R-3	4590	MF	28.5	28.5	0%
055 188802700	2236 Channing Way	22	R-3	11266	MU	85.1	85.1	0%
057 208901601	1923 NINTH	3	R-3	6110	3-SFD	21.4	21.4	0%
058 218300101	1601 OXFORD	27	R-3	14168	MU	84.3	113.8	35%
055 186300008	2350 Prospect	1	R-3H	2000	GLA	21.8	21.8	0%
055 186400900	2813 Channing	3	R-3H	14158	MF	43.1	43.1	0%
058 218100600	1734 SPRUCE	1	R-3H	6436	MF	47.4	47.4	0%
				1.52		45.9		
055 182102100	2018 Blake	12	R-4	5189	MF	66.7	100.0	50%
055 182201303	2015 BLAKE	161	R-4	34485	MF	150.6	203.4	35%
055 182201800	2000 Dwight	113	R-4	28,380	MF	144.5	173.4	20%
055 182202100	2012 & 2020 Dwight	7	R-4	7260	MF	42.0	42.0	0%
056 197201800	2015 EIGHTH	2	R-4	6500	MF	26.8	26.8	0%
				1.88		86.1		
055 188300500	2414 Dana St	1	R-S	4050	MF	64.5	64.5	0%

APN	Address	Units Entitled	Zone	Lot (SF)	Type	Base Density	Density with Bonus (DUA)	Density Bonus (%)
055 188302700	2328 Channing	20	R-S	6,750	MF	129.1	129.1	
055 188400600	2317 Channing	17	R-S	6507	MF	114.0	114.0	0%
				0.40		102.5		
055 187100600	2631 Durant	56	R-SMU	10400	MF	234.6	234.6	0%
055 188000700	2435 Haste	37	R-SMU	5670	MF	189.5	284.3	50%
				0.37		212.0		

APPENDIX D

Review of the 2015-2023 Housing Element

CONTENTS

Pursuant to Government Code Section 65588(a), each jurisdiction must evaluate the effectiveness of the previous housing element goals, policies, and programs and their appropriateness in contributing to the attainment of the State's housing goals. The City's progress in implementing the housing element programs is also documented in this section, including recommendations on program continuance, modification, or elimination.

D1 Progress Towards Implementation of the 2015-2023 Housing Element

Table D-1 summarizes the housing programs adopted in the 2015-2023 Housing Element, including program objectives and accomplishments demonstrating effectiveness. An evaluation of the appropriateness of each program is included to aid in the development of the 2023-2031 Housing Element programs.

TABLE D-1: REVIEW OF HOUSING PROGRAM ACCOMPLISHMENTS

Program	Objectives	Accomplishments	Continued Appropriateness
Berkeley Housing Authority	Provide housing assistance for low-income residents	The BHA provided rental assistance to residents through the Section 8 and Moderate Rehabilitation Program throughout the planning period (a total of 1,939 units in 2020). The Berkeley Housing Authority (BHA) was selected by HUD to be a Move to Work Agency (MTW) that allows for flexibility programmatically; the cohort for which BHA was selected is "Landlord Incentives" and will allow BHA to attract additional landlords to participate with BHA to house voucher holders in Berkeley. The BHA Board has established a non-profit entity - Affordable Housing Berkeley, Inc. (AHB) – as the development arm of BHA to produce affordable housing units in Berkeley.	Housing assistance to low-income residents will continue being provided through established housing programs and initiatives, as well as through the development of a housing preference policy and housing quality standards. These programs are incorporated into the 2023-2031 Housing Element. See Housing Programs 1- Affordable Housing Berkeley, 2-Housing Choice Vouchers, 10-Housing Preference Policies, and 19-Housing Quality Standards.
Boards and Commissions	Facilitate citizen input in City decisions	The City holds over 100 public meetings annually on topics related to housing, including housing trust fund, zoning ordinance amendments, affordable housing, and development projects.	The 2023-2031 Housing Element recognizes the importance of these boards and commissions but the 2023-2031 Housing Element focuses on specific housing programs with outcomes and schedules. While boards and commissions will continue to meet, this will not be included in the 2023-2031 Housing Element as a program.
Condominium Conversion Ordinance	Control the rate of conversion and collect fees to fund affordable housing.	Between 2015 and 2020, a total of 29 rental units were approved for condominium conversion. The City collects an affordable housing mitigation fee for each converted unit.	The City will continue to implement the Condominium Conversion Ordinance and will be undertaking a feasibility study by 2025 to determine amendments to the Ordinance. However, the 2023-2031 Housing Element focuses on specific initiatives focuses on specific housing programs with outcomes and schedules. As such, this will not be included in the 2023-2031 Housing Element as a program.
Demolition Controls and Unit Replacement Requirement	Maintain the number of housing units in Berkeley and consider changes to the zoning ordinance to establish criteria for demolition and rental unit replacement.	Implementation of a Demolition Housing Mitigation Fee is still actively under consideration by the City Council. Amendments to the Demolition Ordinance are also under consideration by the 4x4 Committee (which includes members of City Council and the Rent Stabilization Board) in 2020 and 2021. Changes in State Law (SB 330) and State Case Law have added to the complexity of this project.	The 2023-2031 Housing Element includes a replacement housing provision as required by AB 1397 (Adequate Sites for RHNA). This program is expanded to incorporate other potential components to be considered by the City. See Housing Program 37-Replacement Housing/Demolition Ordinance.
Energy Conservation Opportunities and Programs	Promote energy efficiency in new and existing construction.	Berkeley's Natural Gas Prohibition (BMC Chapter 12.80) and reach code (BMC Chapter 19.36) became effective on January 1, 2020 and applies to all newly constructed buildings. Building Energy Savings Ordinance (BESO): Requires energy assessments during property sales and energy benchmarking for	Energy conservation efforts are included in the 2023-2031 Housing Element as a resource. See Housing Programs 23-Berkeley Pilot Climate Equity Fund, 24-Berkeley Existing Buildings Electrification (BEBE) Strategy, 25-Building Emissions Saving Ordinance

Program	Objectives	Accomplishments	Continued Appropriateness
		large buildings. (245 energy assessments and 135 large building assessments completed in 2020) BayREN Home+ Program: 58 units received cash rebates in 2020 Bay Area Multifamily Building Enhancements Program: 165 units received energy and water upgrades in 2020 Energy efficiency upgrades completed by CESC (2015-2019): A total of 332 units received efficiency upgrades between 2015 and 2019. CESC closed in 2019.	(BESO), and 26-BayREN Single-Family Homes and Multi-Family Homes Programs.
Fair Housing Assistance, Outreach and Education and programs addressing impediments to Fair Housing	Provide fair housing services and education to mitigate impediments to fair housing.	Throughout the planning period, the City partnered with a fair housing service provider to provide counseling, investigation, and mediation services. Additionally, educational workshops for landlords/property managers were held along with other outreach events. Below is a summary of activities for 2020: • Total of 44 clients served • 25 investigations completed, resulting in protection of rights for 10 clients • 10 fair housing tests conducted (no violations found) • 2 educational workshops conducted	This program is significantly expanded to include additional education and training workshops for tenant-focused CBOs and property owner associations, as well as to rental property owners and residents, and conduct both tenant/landlord mediation sessions and an Equity Study to target program marketing in the 2023-2031 Housing Element to comply with the AFFH requirements. See Housing Program 6-Fair Housing Outreach and Enforcement.
Addressing Impediments to Fair Housing	Maintain the diversity of Berkeley's population	Throughout the planning period, the City annually funded programs serving persons with disabilities and seniors. In 2020, the City funded programs serving people with disabilities at $1,560,733 and programs for seniors at $9,110.	This program is significantly expanded in the 2023-2031 Housing Element to comply with the AFFH requirements. See Programs 16-Home Modification for Accessibility and Safety, 17-Accessible Housing and 18-Senior/Disabled Home Improvement Loan and Table 5.6: Summary of AFFH Actions.
Home Modifications for Accessibility and Safety (Rebuilding Together and CIL)	Provide home modification for accessibility.	Between 2015 and 2020, a total of 249 homes were remodeled or modified to improve accessibility by Rebuilding Together and the Center for Independent Living. Another 6 homes received improvements through Habitat for Humanity and SDRLP.	This program continues to be appropriate and is included in the 2023-2031 Housing Element. See Program 16-Home Modification for Accessibility and Safety.
HHSP: EveryOne Home Plan	Implement the EveryOne Home Plan	The City continued to participate in the Everyone Home Leadership Board throughout the planning period. In 2019, Berkeley became the first jurisdiction in Alameda County to adopt the 2018 Strategic Update to the EveryOne Home Plan.	The 2023-2031 Housing Element focuses on the 1000 Person Plan to End Homelessness, in which specific actions are anticipated to provide shelter and supportive services for the homeless. See Program 13-Homeless Services.
HHSP: Community Agency Contracting	Provide support services to homeless individuals and families.	The City continued to provide support services to homeless individuals through community agency contracts throughout the planning period. Annual funding for community agency contracts increased from $2.8 million in 2015 to $4.2 million in 2019. In 2020, funding was significantly higher at $15.9 million.	This program continues to be appropriate and is included in the 2023-2031 Housing Element.
HHSP: Homeless Housing Locations	Provide emergency shelter, transitional housing and	As of 2020, the City provided 226 (109)* year-round shelter beds, 28 (19)* seasonal shelter beds, 5 (3)* family transitional housing	The 2023-2031 Housing Element focuses on the 1000 Person Plan to End Homelessness, in which specific

Program	Objectives	Accomplishments	Continued Appropriateness
	permanent supportive housing programs	beds, 15 (9)* individual transitional housing beds, 506 permanent supportive housing units, including 277 permanent supportive housing units through HUD Shelter Plus Care grants, 15 additional Square One (City of Berkeley General Fund) units, 164 site-based units, and 60 HUD Mainstream vouchers for Non-Elderly and Disabled (NED) individuals. *Numbers in parentheses are the reduced number of beds in 2020 due to COVID-19 pandemic.	actions are anticipated to provide shelter and supportive services for the homeless. See Program 13-Homeless Services.
HHSP: Centralized bed reservation system	Reduce nightly vacancies in shelters with reservations.	Berkeley continues to have a centralized reservation system to fill unfilled shelter beds resulting in a very low nightly vacancy rate.	The 2023-2031 Housing Element focuses on the 1000 Person Plan to End Homelessness, in which specific actions are anticipated to provide shelter and supportive services for the homeless. See Program 13-Homeless Services.
HHSP: City's Housing Retention Program and ARRA Funding for HPRP	Provide housing retention support to prevent homelessness.	In 2015, the HRP issued 19 grants to individual households totaling $21,346. This program ended in 2015 as funds were shifted to provide rapid rehousing financial assistance.	This program has been discontinued and is not included in the 2023-2031 Housing Element.
HHSP: Priority Home Partnership (PHP) Program	Provide a county-wide prevention and rapid rehousing program.	Throughout the planning period, the City allocated PHP funds to the Coordinated Entry Homeless Services System.	The 2023-2031 Housing Element focuses on the 1000 Person Plan to End Homelessness, in which specific actions are anticipated to provide shelter and supportive services for the homeless. See Program 13-Homeless Services.
HHSP: Relocation Services	Provide tenants and owner relocation counseling.	Approximately 35-45 tenants and 10-20 landlords received assistance on an annual basis through this program.	The 2023-2031 Housing Element focuses on the 1000 Person Plan to End Homelessness, in which specific actions are anticipated to provide shelter and supportive services for the homeless. See Program 13-Homeless Services.
HHSP: Reverse Mortgagee Counseling	Assist low-income elderly homeowners access home equity	The City no longer contracts with ECHO to provide reverse mortgage counseling.	This program has been discontinued and is not included in the 2023-2031 Housing Element.
HHSP: Shelter Plus Care	Provide supportive housing for homeless households.	Through this program, the City provides permanent housing for over 300 households, including 55 new households in 2020. Access to the City of Berkeley Shelter Plus Care Program is managed by the City's Coordinated Entry System (CES) operated by Bay Area Community Services.	This program continues to be appropriate and is included in the 2023-2031 Housing Element. See Program 15-Shelter Plus Care.
Housing code compliance and the Rental Housing Safety Program (RHSP)	Maintain safe housing stock.	The City's Code Enforcement division continues to respond to compliant driven and proactive violations of city codes and conducts follow up inspections to ensure compliance. The City had an average of about 535 new cases annually throughout the planning period.	This program continues to be appropriate and is included in the 2023-2031 Housing Element. See Program 8-Rental Housing Safety.
Housing Mitigation Fees for Non-residential development	Compensate increased demand for housing from new development	The City continues to apply this fee to major commercial development projects. However, due to limited commercial development in the City and because fees are paid in installments	This is included in the 2023-2031 Housing Element as a funding mechanism, but not as a specific housing program.

Program	Objectives	Accomplishments	Continued Appropriateness
		over time, revenues are modest. In 2020, an estimated $400k in revenues was anticipated over the next 12-24 months.	
Housing Trust Fund	Develop and preserve long-term BMR housing.	Between 2015 and 2018, the Housing Trust Fund led to the constructions of a total of 194 affordable units, including 86 very low income and 17 low income units. In 2018, voters passed Measure O that would provide $135 million in bond funds for affordable housing. In 2019, the City awarded $950k in Small Sites Program funds from Measure U1 to the Bay Area Community Land Trust for the renovation and preservation of the 8- unit Stuart Street Apartments, targeted for Berkeley residents making up to 80 percent of Area Median Income. The City also awarded $37 million in local Measure O bond funds to support 6 projects including 430 units. In 2020, the City executed contracts for $21.5 million in development funds for four new construction affordable housing developments.	This program continues to be appropriate and is included in the 2023-2031 Housing Element. See Program 4 – Housing Trust Fund.
Inclusionary Housing/State Density Bonus	Increase the supply of housing affordable to lower-income HHs	The City continues to implement its Inclusionary Housing program and comply with the State density bonus requirements. By 2023, the City plans to revise its Citywide Affordable Housing Requirements to enhance the effectiveness of the program in delivering affordable housing, especially for extremely low-income households.	This program continues to be appropriate and is included in the 2023-2031 Housing Element. See Program 3-Citywide Affordable Housing Requirements.
Mitigating Governmental Constrains	Reduce governmental constraints on production of new housing.	The planning department continued public outreach efforts, interdepartmental roundtable, and expedited project reviews throughout the planning period. Possible constraints continue to be reviewed.	The 2023-2031 Housing Element contains specific programs/actions to address the goal of mitigating governmental constraints, including Zoning Code revisions to comply with new State laws. See Goal F and Housing Programs 29-Middle Housing, 30-Accessory Dwelling Units, and 32-By-Right Approval on Reused Sites for Affordable Housing.
Preserving Units at Risk of Conversion to Market Rate	Preserve affordable housing units at risk of converting to market rate.	The 2015 Housing Element identified only one project at higher risk of conversion, Rosewood Manor. That development is still owned by a mission-oriented nonprofit organization and managed by an expert nonprofit property manager, with no indication of intent to convert.	This program is updated in the 2023-2031 Housing Element to reflect the housing projects that may be considered at risk during the 6th cycle Housing Element period. See Program 5-Preservation of At-Risk Housing.
Priority Development Area Program	Encourage higher density new development near transit.	In December of 2020, the City adopted a new Adeline Corridor Specific Area Plan. In 2020 the City requested the North Berkeley BART Station be classified as a new PDA and has been working with the community on new development standards that comply with AB 2023.	This program is updated in the 2023-2031 Housing Element to reflect the City's new strategy for meeting the 6th cycle Regional Housing Needs Assessment (RHNA). See Program 27-Priority Development Areas (PDAs), Commercial and Transit Corridors.

Program	Objectives	Accomplishments	Continued Appropriateness
		In 2020, the City applied for grant funding to begin work on the San Pablo Avenue PDA. The City continued to implement the Downtown and Southside Plans, including continuing work on the Southside Zoning Modifications project that will allow for more density near campus for student housings.	
Problem Properties Task Force (Team)	Address safety concerns at vacant/blighted properties.	The City continues to activate the PPTF on an as-needed basis for properties with safety concerns.	This program is incorporated with other code enforcement efforts in the 2023-2031 Housing Element. See Programs 19-Housing Quality Standards, 20-Livable Neighborhoods, and 21-Lead-Poisoning Prevention.
Project Review Outreach Efforts	Actively solicit input from Berkeley residents on proposed projects.	Information about all major proposed projects was provided at project sites throughout the planning period.	This is a routine project review process and not included in the 2023-2031 Housing Element as a housing program.
Reasonable Accommodation Ordinance	Process reasonable accommodation requests efficiently.	Reasonable accommodations continue to be available and are processed as-needed by the planning department.	This is a routine implementation of the Municipal Code and is not included in the 2023-2031 Housing Element as a separate program.
Redevelopment Agency Tax increment Set-Aside Funds for Housing Activity	Fund affordable housing through tax increment set-asides funds.	The 2011 Budget Act approved the dissolution of Redevelopment Agencies. In January of 2012 the City elected to serve as the Successor Agency to the RA with an oversight board.	This program is not included in the 2023-2031 Housing Element as a separate housing program. Remaining funds, if any, are included as part of the City's resources for affordable housing.
Rent Stabilization and Tenant Protections	Rent stabilization and good cause for eviction for Berkeley tenants.	The Rent Board continues to provide educational counseling and support for landlords and tenants. Rent Board staff also advised property owners, developers and architects on projects that involve existing residential units and/or existing tenants.	This program continues to be appropriate and is included in the 2023-2031 Housing Element as part of the City's tenant protection efforts. See Program 7-Rent Stabilization and Tenant Protections.
Second Units (Accessory Dwelling Units)	Increase the supply of housing through second dwelling units/ADUs.	The City has adopted amendments to the ADU Ordinance several times over the course of the planning period in response to changes to State law. In December 2019 the City adopted an ADU Urgency Ordinance precluding the development of ADUs on lots that front a street with less than 26 feet in width in the Fire 2 and 3 zones and the ES-R zoning district. On January 8, 2022, the City adopted maximum ADU building heights of 20 feet in areas outside of the Very High Fire Severity Zones, which is more permissive than the State law requirement of 16 feet. The City will monitor the latest hazard and risk science and assessments for natural and manmade hazards in Berkeley. The City adopted separate development standards based on changing understanding of conditions of risk and hazards. Between 2018 and 2021, the City has issued permits for over 400 ADUs.	The 2023-2031 Housing Element includes an ADU program with various components – Zoning Code update to comply with current State law; incentives to facilitate the development ADUs; and monitoring of ADU trends. See Program 30-Accessory Dwelling Units.
Seismic Preparedness Programs	Improve the safety of housing through seismic retrofits.	The City adopted the Mandatory Retrofit Ordinance in 2014 which applies to soft story buildings containing 5 or more units. A total of 245 retrofits have been completed through this program, with 52	This program continues to be appropriate and is included in the 2023-2031 Housing Element. See Program 22-Seismic Safety and Preparedness Programs.

Program	Objectives	Accomplishments	Continued Appropriateness
		required retrofits remaining. The Retrofit Grants program has provided nearly $2 million to property owners, including 45 design grants and 42 construction grants. Of the 593 URM buildings identified, five remain to be retrofitted. In 2020, Berkeley participated in the State's Residential Mitigation Earthquake Brace and Bolt program. 24 homes completed seismic upgrades as part of the program.	
Senior and Disabled Home Improvement Loan Program	Assist senior and disabled HHs preserve their housing.	Between 2015 and 2020, a total of 22 homes were rehabilitated through the Program.	This program continues to be appropriate and is included in the 2023-2031 Housing Element. See Program 18-Senior/Disabled Home Improvement Loan.
Tool Lending Library	Assist Berkeley residents with the preservation of the City's housing stock.	The City continues to operate the Tool Lending Library in order to assist Berkeley residents with home maintenance. A new TLL branch was opened in May 2013, with additional space for an increased tool inventory.	This service continues to operate in the City but is not included in the 2023-2031 Housing Element as a housing program.

D2 Progress Toward Quantified Objectives

As part of the 2015-2023 Housing Element, the City established quantified objects by which to measure the effectiveness of the City's housing policies and programs. These objectives and the City's progress over the planning period are discussed in further detail below.

TABLE D-2: PROGRESS TOWARD QUANTIFIED OBJECTIVES

	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total Units
New Construction					
Objective (RHNA)	532	442	584	1,401	2,959
Achieved (2015-2021)	309	130	106	3,197	3,742
Rehabilitation					
Objective	184	408	29	42	663
Achieved[1]	-	589	22	29	640
Conservation/Retention					
Objective	354	-	-	-	354
Achieved	354	-	-	-	354

Source: City of Berkeley, 2015-2020 Annual Progress Reports

1. *This summary includes units rehabilitated through the following programs:*
   - *Low Income: Housing Trust Fund (8 units), CESC Major Home Repairs (332 units), and Rebuilding Together/CIL (249 units)*
   - *Moderate Income: Senior and Disabled Home Loans*
   - *Above Moderate Income: Condominium Conversions*

See Table D-4 for a complete list of rehabilitation programs.

D2.1 New Unit Construction

New unit construction is one way to gauge the effectiveness of the 2015-2023 Housing Element in encouraging the development of new housing for all income groups in the City. However, many other factors also influence the construction of new housing in the City, including market conditions, site availability. Table D-3 summarizes the number of units permitted in the City by year and income level. The City will continue to prioritize the creation of units for lower and moderate income households through the inclusionary housing and housing trust fund programs.

TABLE D-3: CITY OF BERKELEY HOUSING UNIT PRODUCTION, 2015-2023

Permitted Units by Year	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total Units
2015	70	25	1	392	488
2016	21	-	90	183	294
2017	59	3	-	531	593
2018	11	-	-	332	343
2019	33	-	-	601	634
2020	91	101	-	539	731
2021	24	1	15	619	659
2022					
2023					
Total 2015-2021	309	130	106	3,197	3,742
2015-2023 RHNA	532	442	584	1,401	2,959
Percent of Goal Achieved	58%	29%	18%	228%	126%

Source: City of Berkeley, 2020 Annual Progress Report

D2.2 Rehabilitation

The City of Berkeley has a number of programs that focus on the repair or rehabilitation of the existing housing stock. Some programs result in minor repairs or focus on a particular issue, such as accessibility or seismic safety, while others result in more substantial rehabilitation. Table D-4 provides a summary of the estimated number of units repaired or rehabilitated through each program. The number of units impacted is unknown for some programs; however, the programs are included to illustrate the full scope of programs addressing home repairs.

TABLE D-4: UNITS REPAIRED OR REHABILITATED, 2015-2020

Program Name	Number of Units Repaired/Rehabilitated
Condominium Conversion Ordinance	29
CESC Home Repairs	332
Bay Area Multifamily Building Enhancements Program	165
Rebuilding Together/CIL	249
Housing Code Enforcement	Unknown
Housing Trust Fund	8
Problem Properties Task Force	Unknown
Seismic Preparedness Programs	
EBB Program	24
Mandatory Retrofit Ordinance	245 buildings
Senior and Disabled Home Loans	22
Total	829

Source: City of Berkeley, 2015-2020 Annual Progress Reports

D2.3 Conservation/Retention

The 2015-2023 Housing Element identified six properties totaling 354 affordable units with some risk of converting to market rate housing. All six properties receive federal project-based subsidies and are therefore, at some level of risk annually due to the federal appropriations process. However, all six properties are owned and managed by mission-oriented nonprofit organizations and have indicated no intention of converting units to market rate. No restricted affordable units were converted to market rate housing during the 2015-2023 planning cycle.

D3 Effectiveness in Meeting the Housing Needs of Special Needs Populations

As part of the review of the 2015-2023 Housing Element, the City is required to review the effectiveness of the Housing Element programs in addressing the needs of special needs populations. As shown in Table D-3: Review of Housing Program Accomplishments, the 5th Cycle Housing Element included programs that served special needs populations, including seniors, persons with disabilities, large households, single parent households, farmworkers, persons living in poverty, and persons experiencing homelessness. Some of the accomplishments include:

- Through Rebuilding Together and the Center for Independent Living, a total of 249 homes were remodeled or modified to improve accessibility for seniors and persons with disabilities.

- The City also operates the Senior and Disabled Home Rehabilitation Loan Program which assists senior and disabled homeowners with home repairs. Qualifying homeowners can receive an interest free loan of up to $100,000. A total of 22 loans were issued through the Program between 2015 and 2020.
- Other City programs for seniors and persons with disabilities include the Berkeley Rides for Seniors & the Disabled (BRSD) and Meals on Wheels.
- In 2020, community agency contracts to provide support services to homeless individuals totaled $15.9 million. In addition to other support services, this has resulted in the provision of over 250 emergency shelter and transitional housing beds and over 500 permanent supportive housing units for individuals and families experiencing homelessness.
- The City also continues to participate in the regional Everyone Home Leadership Board to address homelessness and adopted the 2018 Strategic Update to the Everyone Home Plan in 2018.
- In 2018, Berkeley voters approved Measure O, a $135 million bond for affordable housing. Since then, 972 units of affordable housing have either been built (242), are currently under construction (150), or are in predevelopment (580). One project included Berkeley Way and The Hope Center, which opened in 2022, a 100% affordable housing project that includes a new 44-bed shelter and 53 permanent supportive housing studios, in partnership with BRIDGE housing and Berkeley Food & Housing Project.
- In 2022, the City, in partnership with the University of California, funded several transitional housing projects, including $250,000 to open the Sacred Rest Daytime Drop-in Center to serve people experiencing homelessness in the Southside and Telegraph neighborhood; and the opening of the Rodeway Inn, which provides 43 units for people were who were previously unhoused in People's Park.
- Also in 2022, the City opened its first affordable housing project in North Berkeley in over 30 years – Jordan Court. The project provides 34 units of housing for seniors who make 20-60 percent of area median income, with 12 units set aside for seniors experiencing homelessness and mental illness.

APPENDIX E

Affirmatively Furthering Fair Housing

CONTENTS

E1 INTRODUCTION AND OVERVIEW OF AB 686

Assembly Bill 686 (AB 686, 2017) requires the inclusion in the Housing Element an analysis of barriers that restrict access to opportunity[1] and a commitment to specific meaningful actions to affirmatively further fair housing.[2] AB 686 mandates that local governments identify meaningful goals to address the impacts of systemic issues such as residential segregation, housing cost burden, and unequal educational or employment opportunities to the extent these issues create and/or perpetuate discrimination against protected classes.[3] In addition, AB 686:

- Requires the state, cities, counties, and public housing authorities to administer their programs and activities related to housing and community development in a way that affirmatively furthers fair housing;
- Prohibits the state, cities, counties, and public housing authorities from taking actions materially inconsistent with their AFFH obligation;
- Requires that the AFFH obligation be interpreted consistent with HUD's 2015 regulation, regardless of federal action regarding the regulation;
- Adds an AFFH analysis to the Housing Element (an existing planning process that California cities and counties must complete) for plans that are due beginning in 2021; and
- Includes in the Housing Element's AFFH analysis a required examination of issues such as segregation and resident displacement, as well as the required identification of fair housing goals.

The Bill added an assessment of fair housing to the Housing Element which includes the following components:

- A summary of fair housing issues and assessment of the City's fair housing enforcement and outreach capacity;
- An analysis of segregation patterns and disparities in access to opportunities, an assessment of contributing factors, and
- An identification of fair housing goals and actions.

This Appendix E Affirmatively Further Fair Housing contains four sections:

E1 Introduction. Provides an overview of the analysis requirements, data sources, and organization of Appendix E.

E2 Sites Inventory. Provides a summary of the RHNA sites inventory by neighborhood groupings and predominant zoning types to demonstrate how the inventory meets the criteria for AFFH. Refers to data and analysis described in Section E4 Assessment of Fair Housing Issues.

[1] While California's Department of Housing and Community Development (HCD) does not provide a definition of opportunity, opportunity is usually related to access to resources that improve quality of life. HCD and the California Tax Credit Allocation Committee (TCAC) have created Opportunity Maps to visualize place-based characteristics linked to critical life outcomes, such as educational attainment, earnings from employment, and economic mobility.

[2] "Affirmatively furthering fair housing" is defined to mean taking meaningful actions that "overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity" for communities of color, persons with disabilities, and others protected by California law.

[3] A protected class is a group of people sharing a common trait who are legally protected from being discriminated against on the basis of that trait.

E3 Conclusions and Actions. Identifies fair housing issues, their contributing factors, assigns a priority level for each factor and addresses them with specific goals and actions.

E4 Assessment of Fair Housing Issues. Provides a detailed assessment of the City's fair housing issues, including enforcement and outreach, demographic integration and segregation, access to opportunities, and other relevant factors including associated housing needs.

E1.1 ANALYSIS REQUIREMENTS

An assessment of fair housing must consider the elements and factors that cause, increase, contribute to, maintain, or perpetuate segregation, racially or ethnically concentrated areas of poverty, significant disparities in access to opportunity, and disproportionate housing needs.[4] The analysis must address patterns at a regional and local level and trends in patterns over time. This analysis should compare the locality at a county level or even broader regional level such as a Council of Government, where appropriate, for the purposes of promoting more inclusive communities.

For the purposes of this AFFH, "Regional Trends" describe trends in the Bay Area (the members of ABAG) and Alameda County. "Local Trends" describe trends specific to the City of Berkeley.

E1.2 SOURCES OF INFORMATION

The City uses a variety of data sources for the assessment of fair housing at the regional and local level. Sources include:

- California Department of Housing and Community Development (HCD) AFFH Data Viewer
- Housing Needs Data Packets prepared by the Association of Bay Area Governments (ABAG), which relies on 2015-2019 American Community Survey (ACS) data by the U.S. Census Bureau for most characteristics. The ABAG Data Packets also referenced the U.S. Department of Housing and Urban Development (HUD) Comprehensive Housing Affordability Strategy (CHAS) reports (based on the 2013-2017 ACS).
- AFFH Data Report prepared by ABAG, which relies on the 2000, 2010, and 2020 Decennial Census and 2011-2015 ACS.
- U.S. Census Bureau's Decennial Census (referred to as "Census") and American Community Survey (ACS).
- Alameda County 2020 Analysis of Impediments to Fair Housing Choice (2020 County AI)
- City of Berkeley 2015 Analysis of Impediments to Fair Housing Choice (2015 AI).
- Local knowledge.

Some of these sources provide data on the same topic, but because of different methodologies, the resulting data differ. For example, the decennial census and ACS report slightly different estimates for the total population, number of households, number of housing units, and household size. This is in part because ACS provides estimates based on a small survey of the population taken over the course of the whole year.[5] Because of the survey size and seasonal population shifts, some information provided by the

[4] Gov. Code, §§ 65583, subds. (c)(10)(A), (c)(10)(B), 8899.50, subds. (a), (b), (c); see also AFFH Final Rule and Commentary (AFFH Rule), 80 Fed. Reg. 42271, 42274, 42282-42283, 42322, 42323, 42336, 42339, 42353-42360, esp. 42355-42356 (July 16, 2015). See also 24 C.F.R. §§ 5.150, 5.154(b)(2) (2016).

[5] The American Community Survey is sent to approximately 250,000 addresses in the United States monthly (or 3 million per year). It regularly gathers information previously contained only in the long form of the decennial census. This

ACS is less reliable. For this reason, the readers should keep in mind the potential for data errors when drawing conclusions based on the ACS data used in this chapter. The information is included as it provides an indication of possible trends. The analysis makes comparisons between data from the same source during the same time periods, using the ABAG Data Package as the first source since ABAG has provided data at different geographical levels for the required comparisons. As such, even though more recent Census data may be available, 2015-2019 ACS reports are cited more frequently (and 2013-2017 for CHAS data).

The City also used findings and data from the 2020 Alameda County Analysis of Impediments to Fair Housing Choice (2020 County AI) for its local knowledge as it includes a variety of locally gathered and available information, such as a surveys, local history and events that have affected or are affecting fair housing choice. The City also used the HCD's 2020 Analysis of Impediments to Fair Housing Choice for its regional findings and data.

In addition, HCD has developed a statewide AFFH Data Viewer. The AFFH Data Viewer consists of map data layers from various data sources and provides options for addressing each of the components within the full scope of the assessment of fair housing. The data source and time frame used in the AFFH mapping tools may differ from the ACS data in the ABAG package. The City attempted, to the best of its ability, to ensure comparisons between the same time frames. However, in some instances, various time frames are compared (often differing by one year). As explained earlier, the assessment is most useful in providing an indication of possible trends.

For clarity, this analysis will refer to the following Berkeley neighborhoods shown in Figure E-1:

Berkeley Hills,

Cragmont,

Thousand Oaks,

Live Oak,

Northbrae,

Terrace View,

Upper North Berkeley,

Westbrae,

Gilman,

Northwest Berkeley,

4th Street,

Berkeley Marina,

Southwest Berkeley,

North Berkeley,

Northside,

University of California Berkeley,

Panoramic Hill,

Southside,

Downtown Berkeley,

Central Berkeley,

Southwest Berkeley,

South Berkeley,

Le Conte,

Lorin,

Elmwood,

Claremont.

information is then averaged to create an estimate reflecting a 1- or 5-year reporting period (referred to as a "5-year estimate"). 5-year estimates have a smaller margin of error due to the longer reporting period and are used throughout this AFFH analysis.

Figure E-1: City of Berkeley Neighborhoods (2022)

Source: City of Berkeley, 2022.

E2 SITES INVENTORY

HCD requires the City's sites inventory, identified to meet the RHNA, affirmatively furthers fair housing. This includes ensuring RHNA units, especially lower income units, are not disproportionately concentrated in areas with larger populations of interest or special needs populations such as racial/ethnic minority groups, persons with disabilities, R/ECAPs, cost burden renters, etc.

This fair housing analysis evaluates units from BART properties, entitled projects, projects with applications, anticipated projects with pre-applications, and potential additional sites used to meet the City's RHNA. ADUs and Middle Housing (*Program 29 in the Housing Element Update*) are not included in this analysis as the placement of future ADUs and Middle Housing is unknown. However, additional infill ADU and middle housing development, particularly in lower density residential zones, is anticipated based on recent development trends and proposed changes to City zoning policy (see *Figure E.10: Residential Development – Entitlements and Building Permits (2018-2021)*)

For the purposes of analyzing the City's RHNA strategy through the lens of Affirmatively Furthering Fair Housing, the sites inventory is shown at the tract level by neighborhood groupings (Table E-1). Neighborhoods are grouped together and referred to as follows. Predominant zoning types in these areas are also included below:

- ***Northeast Berkeley:*** Berkeley Hills, Cragmont, Live Oak, Northbrae, Terrace View, Thousand Oaks, Upper North Berkeley neighborhoods
    - Predominantly R-1, Single Family Residential
    - R-2, Restricted Two-family Residential
    - R-2A, Restricted Multiple-family Residential
    - Few C-SO (Solano Avenue Commercial), C-NS (North Shattuck Commercial), R-3 (Multiple-family Residential) zones
- ***West Berkeley:*** 4th Street, Berkeley Marina (no sites), Gilman, Northwest Berkeley, Southwest Berkeley neighborhoods
    - Mix of M (Manufacturing), MM (Mixed Manufacturing), MULI (Mixed Use-Light Industrial), MUR (Mixed-Use Residential), C-W (West Berkeley Commercial), R-1A (Limited Two-family residential)
    - Few R-3 (Multiple-family residential), R-4 (Multi-family residential) zones
- ***Central Berkeley:*** Central Berkeley, Northside, North Berkeley, Westbrae neighborhoods
    - Predominantly R-1 (Single Family Residential), R-2 (Restricted Two-family Residential), R-2A (Restricted Multiple-family residential)
    - R-1A, Limited Two-family residential
    - R-3, Multiple-family residential
    - R-4, Multi-family residential
- ***South Berkeley:*** South Berkeley neighborhood
    - Predominantly R-1 (Single Family Residential), R-2 (Restricted Two-family residential), R-2A (Limited Two-family Residential)
    - R-3, Multiple-family Residential
    - R-4, Multi-family Residential
- ***Southeast Berkeley:*** Claremont, Elmwood District, Le Conte, Lorin, Panoramic Hill, Southside neighborhoods
    - Predominantly R-1 (Single Family Residential), R-2 (Restricted Two-family residential), R-2A (Limited Two-family Residential)
    - R-3, Multiple-family Residential
    - R-4, Multi-family Residential
    - R-S, Residential High Density Subarea
    - R-SMU, Residential Mixed Use Subarea

The City's sites inventory is shown in Figure E-2 by Berkeley neighborhood. Please note that the sum of units will not equal total as some tracts may be located in multiple neighborhoods; these units may be accounted for twice.

The RHNA strategy is further analyzed through various AFFH issues in the following sections:

- Section E2.6 *Integration and Segregation*,
- Section E2.7 *Racially or Ethnically Concentrated Areas*,
- Section E2.8 *Access to Opportunities*, and
- Section E2.9 *Disproportionate Housing Needs*.

E2.1 NORTHEAST BERKELEY

Northeast Berkeley tracts generally have smaller racial/ethnic minority populations and LMI household populations compared to the rest of the City. There are no tracts in this area with RHNA units that are considered LMI areas with more than 50 percent low or moderate income households. There is one R/ECAP (Tract 4226) that is located partially in this section of the City in the Terrace View neighborhood. Only one above moderate income unit exists in this R/ECAP. All tracts in this area containing RHNA units are high or highest resource.

There are 297 RHNA units allocated to this area of the City including 139 lower income units (46.8 percent) and 158 above moderate income units (53.2 percent). RHNA units in this area are not disproportionately exposed to adverse existing conditions, but development is more constrained due to its location within a Very High Fire Severity Zone.

E2.2 WEST BERKELEY

West Berkeley tracts with RHNA sites are moderate and high resource. All block groups in this area with RHNA units have non-White populations ranging from 52.5 percent to 78.1 percent and one tract is considered an LMI area with an LMI population of 59.4. There are no R/ECAP tracts with RHNA units in this area of the City.

Due to the availability of larger lots – or contiguous lots under the same ownership that can be consolidated—and land uses and assessed values that indicate vacancy or underutilization, there are significantly more RHNA units allocated to West Berkeley compared to Northeast Berkeley. Of the 3,022 units located in West Berkeley, 1,302 are lower income units (43.1 percent), 499 are moderate income units (16.5 percent), and 1,221 are above moderate income units (40.4 percent). The one moderate resource tract (4220) contains mostly above moderate income units, indicating that the City's strategy does not disproportionately place lower or moderate income units in the tract with a lower TCAC opportunity score. The City's RHNA strategy does place more lower income units in tract 4232, where non-White populations are the largest in West Berkeley, compared to moderate and above moderate income units. However, as discussed above, there are no RHNA units in this area located in a R/ECAP. The RHNA strategy does not exacerbate existing conditions related to fair housing in this area of the City.

E2.3 CENTRAL BERKELEY

Central Berkeley tracts where RHNA units are located are characterized by mostly high resource tracts and two moderate resource tracts. Racial/ethnic minority populations vary in block groups in this area, from 33.3 percent to 57.3 percent, but are generally larger than non-White populations in Northeast Berkeley and smaller than West Berkeley. LMI populations are also variable in Central Berkeley, ranging from 18.8 percent to 81.8 percent. Most tracts with RHNA units in this area of the City are considered LMI areas with low to moderate income households representing more than 50 percent of the total tract population. There is one R/ECAP in Central Berkeley (Tract 4229), that is considered a moderate resource tract with non-White populations ranging from 66.6 to 68.1 percent and an LMI population of 81.8 percent.

There are 6,519 RHNA units located in Central Berkeley neighborhoods, 65.9 percent of which are above moderate income units (4,297 above moderate income units). There are also 1,260 lower income units (19.3 percent) and 962 moderate income units (14.8 percent) in Central Berkeley. Though there are more LMI areas and moderate resource tracts in Central Berkeley compared to Northeast Berkeley and West Berkeley, most allocated units in this area are in the above moderate income RHNA, indicating that the

City's RHNA strategy does not disproportionately place lower and moderate income units in tracts/block groups where fair housing issues are prevalent.

A large proportion of allocated units in Central Berkeley are in a R/ECAP (Tract 4229). There are 2,808 units in this tract, but like the overall distribution of Central Berkeley RHNA units, most are allocated towards the above moderate income RHNA (71.4 percent). Only 10.6 percent of units in this tract are lower income units. It is relevant to point out, that though this tract is considered a R/ECAP, it encompasses Downtown Berkeley and has positive environmental conditions, accessible employment opportunities, and a larger proportion of newer housing units (see Table E-50, Figure E-66, Figure E-70, and Figure E-71). Additional housing units in this tract will further expand housing opportunities for the population, including special needs populations, residing in this neighborhood.

E2.4 SOUTH BERKELEY

TCAC Opportunity category scores for tracts containing RHNA units in South Berkeley include five high resource tracts and one (rapidly changing) moderate resource tract. Block groups in South Berkeley have non-White populations ranging from 35.2 percent to 75.3 percent. Three of the six tracts with RHNA units in South Berkeley are considered LMI areas. There are no R/ECAPs in the South Berkeley neighborhood. In general, overcrowding in South Berkeley tracts is comparable to the Citywide trend, where four percent of households are overcrowded. The rate of cost burdened renters in these tracts is also generally consistent with the Citywide rate of 52.1 percent.

In total, there are 3,211 RHNA units located in South Berkeley neighborhood tracts, including 1,297 lower income units (40.4 percent), 234 moderate income units (7.3 percent), and 1,680 above moderate income units (52.3 percent). Only two of these units are in the moderate resource (rapidly changing) tract. RHNA units in the South Berkeley neighborhood are predominantly in high resource areas with moderate levels of LMI households, overcrowded households, and cost burdened households. Units in this neighborhood are not disproportionately exposed to adverse existing conditions.

E2.5 SOUTHEAST BERKELEY

Southeast Berkeley has the most variable TCAC Opportunity categorizations for tracts containing RHNA units including two highest resource tracts, three high resource tracts, three moderate resource tracts, and one low resource tract. Block groups in Southeast Berkeley also have variable non-White populations ranging from 15.6 percent to 74 percent. Three of the nine tracts with RHNA units in Southeast Berkeley are considered LMI areas and tracts 4227, 4228, and 4236.02 are R/ECAPs.

The City's RHNA allocation places units in all five R/ECAPs located in Berkeley, however this area of the City (surrounding UC Berkeley) is characterized by large student populations (see Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*), cost burdened renters, and severely overcrowded households (see Figure E-82 and Figure E-89). Additional housing units in these tracts would increase housing opportunities in the area and units, specifically lower income units, and—paired with tenant protections, rent stabilization, and anti-displacement policies—would benefit the existing communities residing in these neighborhoods. Discussions with local developers also indicate additional housing opportunities are needed in this area to serve the large student population.

In total, there are 3,966 RHNA units located in South Berkeley neighborhood tracts including 1,581 lower income units (39.9 percent), 422 moderate income units (10.6 percent), and 1,963 above moderate income units (49.5 percent). There are 1,023 RHNA units in Southeast Berkeley R/ECAPs specifically (tracts 4227, 4228, and 4236.02). Most of these units are allocated towards the above moderate income RHNA (41.5 percent), followed by the lower income RHNA (40.2 percent) and the moderate income RHNA

(18.3 percent). The City's sites inventory provides additional housing in these areas but also does not disproportionately expose future lower and moderate income households to adverse conditions.

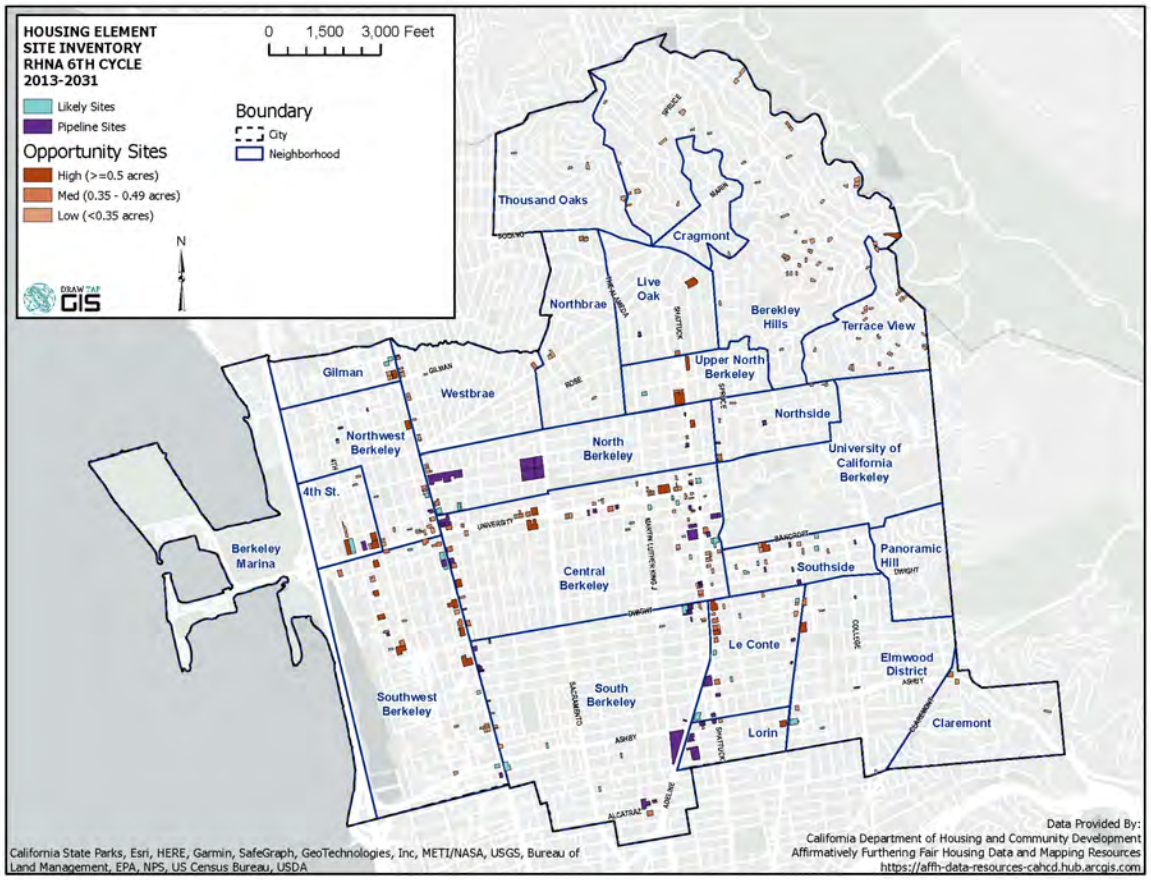
Table E-1: Distribution of RHNA Units by Neighborhood and Tract

Tract	# of HHs	Total Capacity (Units)	Income Distribution			TCAC Opp. Category	% Non-White	% LMI Pop.	R/ECAP?	% Over-crowded	Renter Cost Burden	Owner Cost Burden
			Lower	Mod	Above Mod							
Northeast Berkeley (Berkeley Hills, Cragmont, Live Oak, Northbrae, Terrace View, Thousand Oaks, Upper North Berkeley neighborhoods)												
4211	837	6	0	0	6	High	26.7%-27.3%	20.3%	No	0.6%	21.4%	31.1%
4212	1,466	11	0	0	11	Highest	21.6%-26.0%	8.1%	No	0.0%	26.8%	33.2%
4213	1,578	31	0	0	31	Highest	23.4%-28.0%	16.3%	No	0.4%	34.5%	32.5%
4214	625	7	0	0	7	Highest	18.8%	26.2%	No	0.6%	37.1%	28.1%
4215	1,576	30	0	0	30	High	20.6%-25.5%	11.5%	No	0.0%	37.1%	29.8%
4216	1,537	32	0	0	32	High	26.1%-29.3%	29.2%	No	0.7%	32.8%	27.1%
4217	1,574	177	139	0	38	High	45.6%	44.3%	No	4.2%	63.5%	33.8%
4218	859	2	0	0	2	Highest	26.1%	29.2%	No	1.7%	40.7%	34.2%
4226	26	1	0	0	1	Highest	61.5%	46.2%	Yes	0.0%	0.0%	0.0%
West Berkeley (4th Street, Berkeley Marina (no sites), Gilman, Northwest Berkeley, Southwest Berkeley neighborhoods)												
4220	928	1,812	761	236	815	Moderate	52.5%-64.4%	49.0%	No	5.2%	41.5%	36.1%
4221	1,212	416	106	174	136	High	65.0%-66.6%	49.3%	No	3.8%	53.4%	47.4%
4232	1,142	794	435	89	270	High	68.1%-78.1%	59.4%	No	2.0%	52.7%	42.0%
Central Berkeley (Central Berkeley, Northside, North Berkeley, Westbrae neighborhoods)												
4219	1,732	269	5	40	224	High	33.3%-46.5%	18.8%	No	3.9%	40.3%	32.2%
4222	1,554	1,552	512	104	936	High	45.0%-51.0%	55.8%	No	0.6%	29.4%	45.0%
4223	1,680	58	3	0	55	High	38.8%-53.8%	59.7%	No	3.0%	46.7%	39.3%
4224	2,067	909	41	170	698	High	50.0%-57.3%	68.5%	No	5.6%	57.6%	24.1%
4225	1,439	55	0	0	55	Moderate	38.5%-54.2%	57.2%	No	4.7%	63.1%	54.7%
4229	2,128	2,808	298	505	2,005	Moderate	66.6%-68.1%	81.8%	Yes	11.4%	56.2%	0.0%
4230	2,087	307	74	54	179	High	47.4%	40.4%	No	0.5%	62.8%	33.4%
4231	1,976	561	327	89	145	High	53.4%-56.8%	55.8%	No	0.9%	48.8%	24.0%
South Berkeley (South Berkeley neighborhood)												
4233	1,587	388	37	34	317	High	62.7%-66.6%	48.2%	No	2.5%	67.0%	37.8%
4235	1,486	1,725	816	159	750	High	49.6%-55.0%	49.8%	No	2.0%	53.7%	43.3%
4239.01	818	889	264	41	584	High	35.2%-56.2%	44.2%	No	6.4%	51.2%	24.9%
4240.01	1,426	207	180	0	27	High	63.6%-73.1%	62.4%	No	3.4%	58.4%	27.3%
4240.02	934	2	0	0	2	Moderate (Rapidly Changing)	75.3%	64.4%	No	5.9%	46.5%	45.0%
Southeast Berkeley (Claremont, Elmwood District, Le Conte, Lorin, Panoramic Hill, Southside neighborhoods)												

Tract	# of HHs	Total Capacity (Units)	Income Distribution			TCAC Opp. Category	% Non-White	% LMI Pop.	R/ECAP?	% Over-crowded	Renter Cost Burden	Owner Cost Burden
			Lower	Mod	Above Mod							
4227	1,053	2	0	0	2	Moderate	41.9%-57.1%	78.9%	Yes	19.2%	69.9%	26.6%
4228	1,293	727	212	150	365	Low	71.1%-74.0%	88.5%	Yes	15.1%	68.8%	100.0%
4235	1,486	1,725	816	159	750	High	49.6%-55.0%	49.8%	No	2.0%	53.7%	43.3%
4236.01	1,214	52	4	0	48	High	38.9%	46.8%	No	2.8%	38.0%	47.9%
4236.02	2,193	294	199	37	58	Moderate	51.5%-72.5%	82.7%	Yes	10.6%	64.9%	0.0%
4237	1,305	31	1	0	30	Moderate	52.5%	41.9%	No	2.5%	48.4%	31.2%
4238	1,306	21	0	0	21	Highest	15.6%-21.9%	14.6%	No	0.5%	36.1%	31.0%
4239.01	818	889	264	41	584	High	35.2%-56.2%	44.2%	No	6.4%	51.2%	24.9%
4239.02	712	225	85	35	105	Highest	28.6%-33.0%	30.6%	No	1.7%	36.4%	23.9%

Note: Sum of units will not equal total as some tracts may be located in multiple neighborhoods; these units may be accounted for twice.

Figure E-2: Berkeley Neighborhoods and Sites Inventory



Source: City of Berkeley, 2022

Note: For purposes of the sites inventory analysis, the Ashby and North Berkeley BART sites are considered "Pipeline Sites" because the City and BART have signed a Memorandum of Understanding (MOU) agreement on the development of these lots and are actively working together to release a Request for Qualifications (RFQ) for potential developer teams for the two sites in Summer 2022.

E2.6 INTEGRATION AND SEGREGATION

Race/Ethnicity

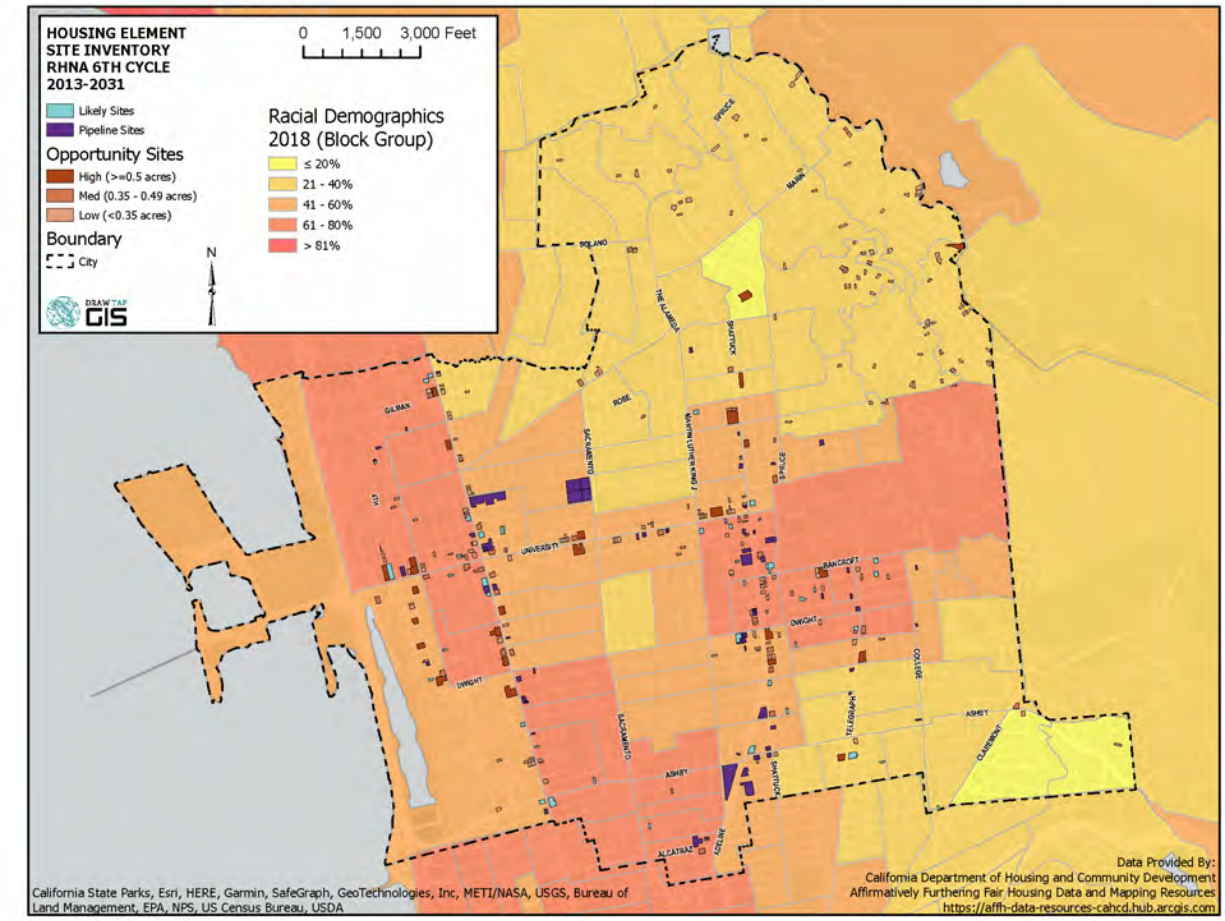
The distribution of RHNA units by income category and racial/ethnic minority population (block group) is shown in Table E-2 and Figure E-3. Most RHNA units are located in block groups where between 41 percent and 80 percent of the population belongs to a racial or ethnic minority group. This generally reflects the overall composition of the City; block groups with non-White populations smaller than 40 percent are concentrated only in the northeastern and southeastern areas of the City. Block groups in the remainder of the City have non-White populations exceeding 40 percent. There are no RHNA units in block groups with racial/ethnic minority populations exceeding 81 percent. Consistent with the overall composition of the City, only 0.2 percent of RHNA units are block groups where less than 20 percent of the population belongs to a racial or ethnic minority group. All of these units are allocated towards the above moderate income RHNA. Areas of the City where racial/ethnic minority populations are fewer (Northeast Berkeley, Claremont neighborhood) are characterized by single-family residential zones (R-1). Single-family homes are generally allocated to the above moderate income RHNA. The placement of above moderate income RHNA units in block groups with smaller racial/ethnic minority populations is a reflection of housing type. It is important to note that as part of the Housing Element, the City is proposing to allow for multi-unit development in all residential zones, including R-1 (see *Program 29-Middle Housing*).

While more above moderate income units are in block groups with smaller racial/ethnic minority populations compared to lower and moderate income units, 46.6 percent of above moderate income units are also in block groups where 61 to 80 percent of the population belongs to a racial/ethnic minority group compared to 56.3 percent of moderate income units and only 40.7 percent of lower income units. According to the 2015-2019 ACS, 46.7 percent of the Berkeley population belongs to a racial or ethnic minority group. The City's RHNA strategy reflects the overall composition of Berkeley, including zoning districts, and does not exacerbate existing segregation conditions related to race or ethnicity.

Table E-2: Distribution of RHNA Units by Racial/Ethnic Minority Population

Racial/Ethnic Minority Population (Block Group)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
<=20%	0	0.0%	0	0.0%	23	0.3%	23	0.2%
21-40%	136	3.0%	116	6.1%	494	6.2%	746	5.2%
41-60%	2,530	56.2%	722	37.7%	3,747	46.9%	6,999	48.6%
61-80%	1,833	40.7%	1,079	56.3%	3,721	46.6%	6,633	46.1%
>81%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-3: Sites Inventory and Racial/Ethnic Minority Population by Block Group (2018)



Source: HCD AFFH Data Viewer (ESRI, 2018), 2022; Veronica Tam & Associates (VTA), 2022.

Persons with Disabilities

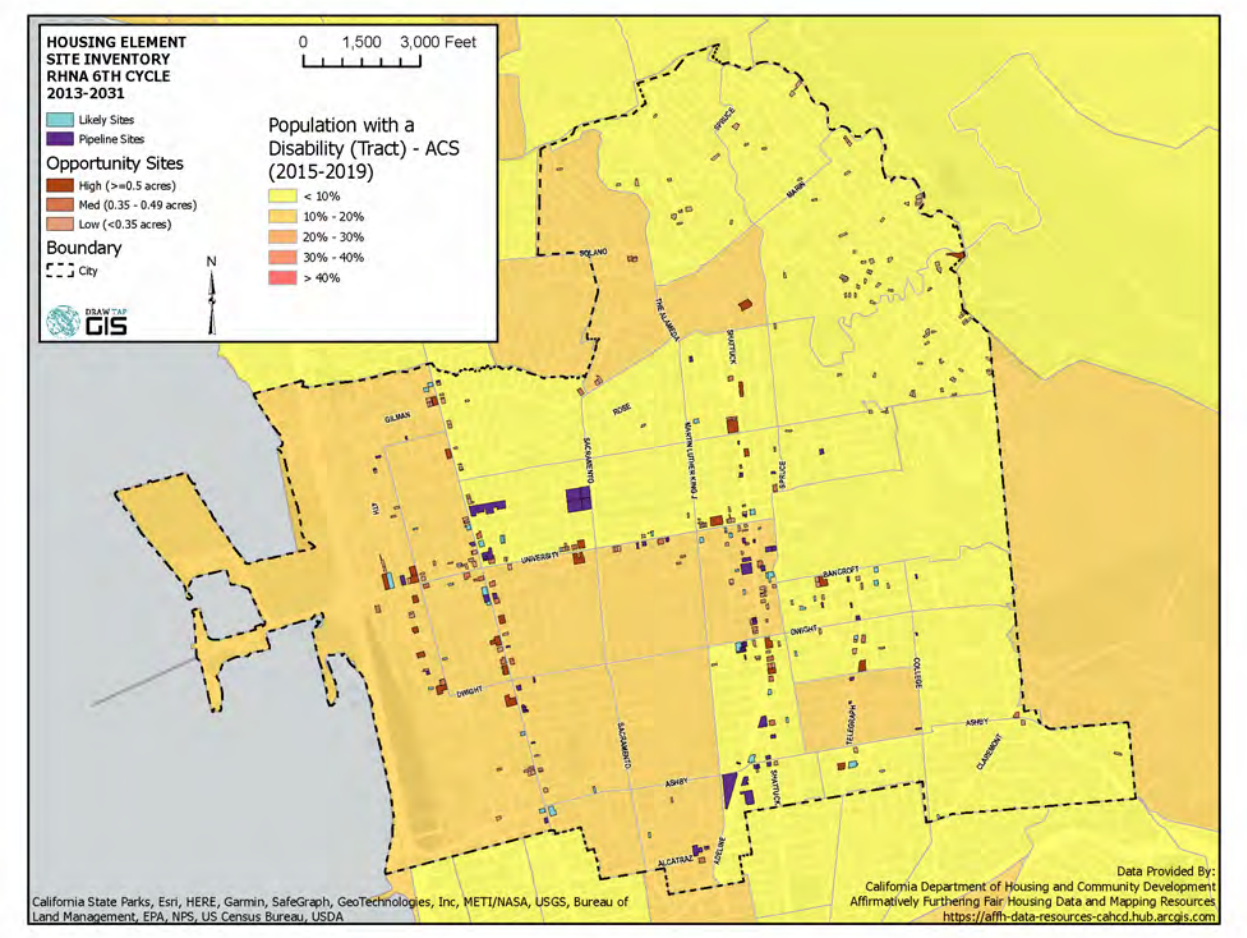
As discussed in Section E4.2 *Persons with Disabilities*, Berkeley has a smaller, but comparable, population of persons with disabilities to the County (8.7 vs. 9.2 percent, respectively). There are no tracts in the City where the population of persons with disabilities exceeds 20 percent. Of the 33 tracts in the City, 13 (39.4 percent) have populations of persons with disabilities exceeding 10 percent. As presented in Table E-3 and Figure E-4, despite the overall composition of the City (more tracts with less than 10 percent persons with disabilities), there are slightly more RHNA units located in tracts where 10 to 20 percent of the population experiences a disability. Approximately 51.3 percent of RHNA units, 49.4 percent of lower income units, 61.6 percent of moderate income units, and 49.9 percent of above moderate income units, are located in tracts where 10 to 20 percent of the population has one or more disability.

The City's RHNA strategy distributes units throughout Berkeley, but areas where higher density housing is feasible, especially West and South Berkeley, tend to have larger populations of persons with disabilities. Topographically, South and West Berkeley is flatter compared to the Northeast and Eastern parts of the City, and also is in proximity to several major transit lines and street corridors, which supports accessibility for persons with disabilities.

Table E-3: Distribution of RHNA Units by Population of Persons with Disabilities

Disabled Population (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
<10%	2,277	50.6%	736	38.4%	4,003	50.1%	7,016	48.7%
10-20%	2,222	49.4%	1,181	61.6%	3,982	49.9%	7,385	51.3%
20-30%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
30-40%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
>40%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-4: Sites Inventory and Population of Persons with Disabilities by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022; VTA, 2022.

Familial Status

Tracts with lower populations of children in married couple households tend to correlate with zoning districts where higher density housing is more feasible. HCD considers a density of at least 30 units per acre to be suitable for lower income units in Alameda County. As such, 39.9 percent RHNA units are in tracts where only 40 to 60 percent of children live in married couple households (Table E-4). As shown in Table E-5, there are more lower income units in tracts where more than 40 percent of children live in single-parent female-headed households. As presented in Figure E-6, there is only one tract in the City where more than 40 percent of children live in female-headed households, but 18.1 percent of lower

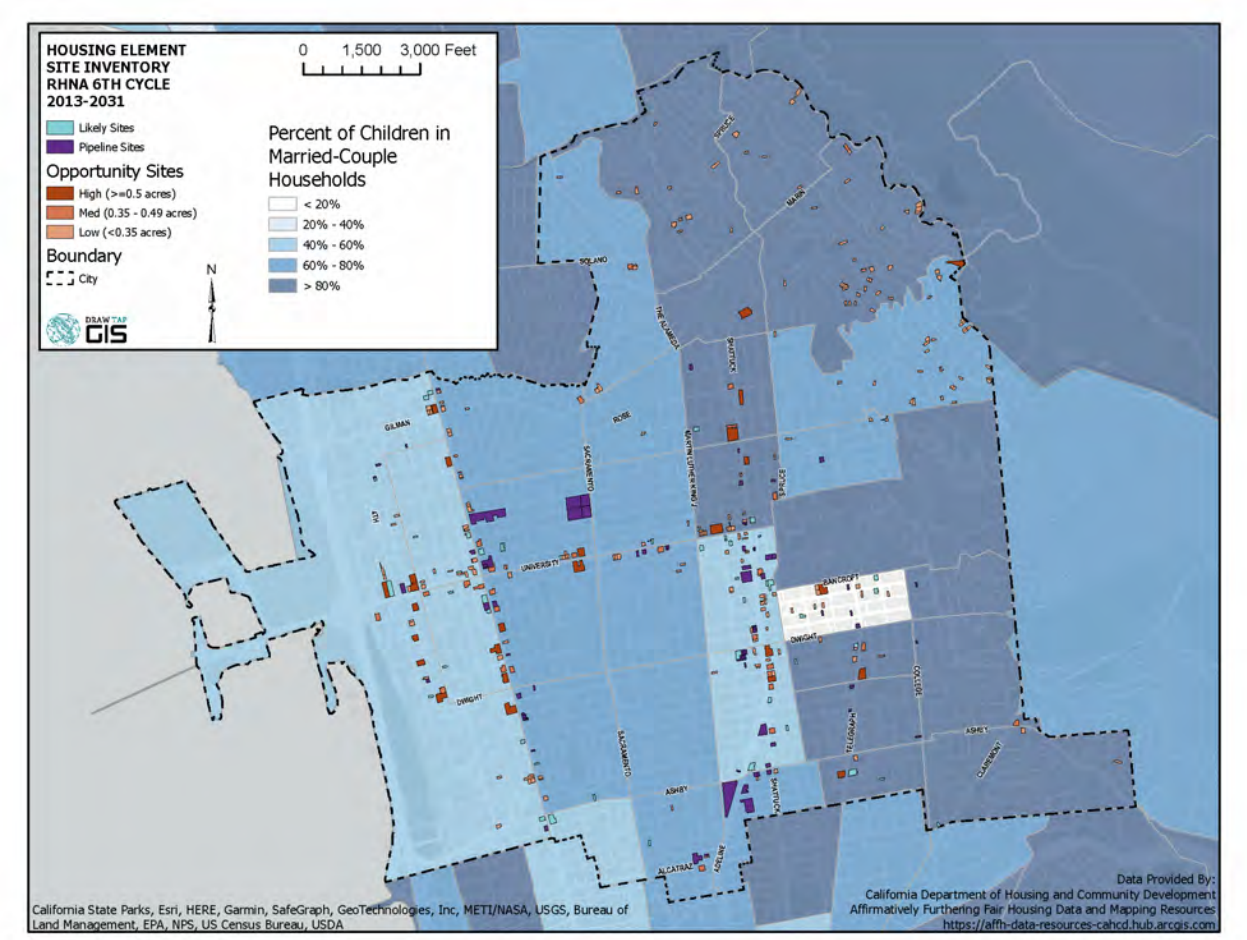
income units, 8.3 percent of moderate income units, and 9.4 percent of above moderate income units are in this tract (Table E-5).

Though this tract has a larger percentage of children in female-headed households, it is considered a TCAC high resource area. The addition of housing units in this neighborhood, specifically lower income units, will increase housing opportunity for current residents. More than 50 percent of renters are cost burdened in this tract, but this area received medium to high scores for economic, education, and environmental opportunities. This tract also had positive scores for accessibility to employment opportunities.

Table E-4: Distribution of RHNA Units by Percent of Children in Married Couple Households

Children in Married Couple HHs (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
20-40%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
40-60%	1,655	36.8%	927	48.4%	3,163	39.6%	5,745	39.9%
60-80%	2,163	48.1%	598	31.2%	3,403	42.6%	6,164	42.8%
>80%	469	10.4%	242	12.6%	1,054	13.2%	1,765	12.3%
No Data	212	4.7%	150	7.8%	365	4.6%	727	5.0%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-5: Sites Inventory and Percent of Children in Married Couple Households by Tract (2019)

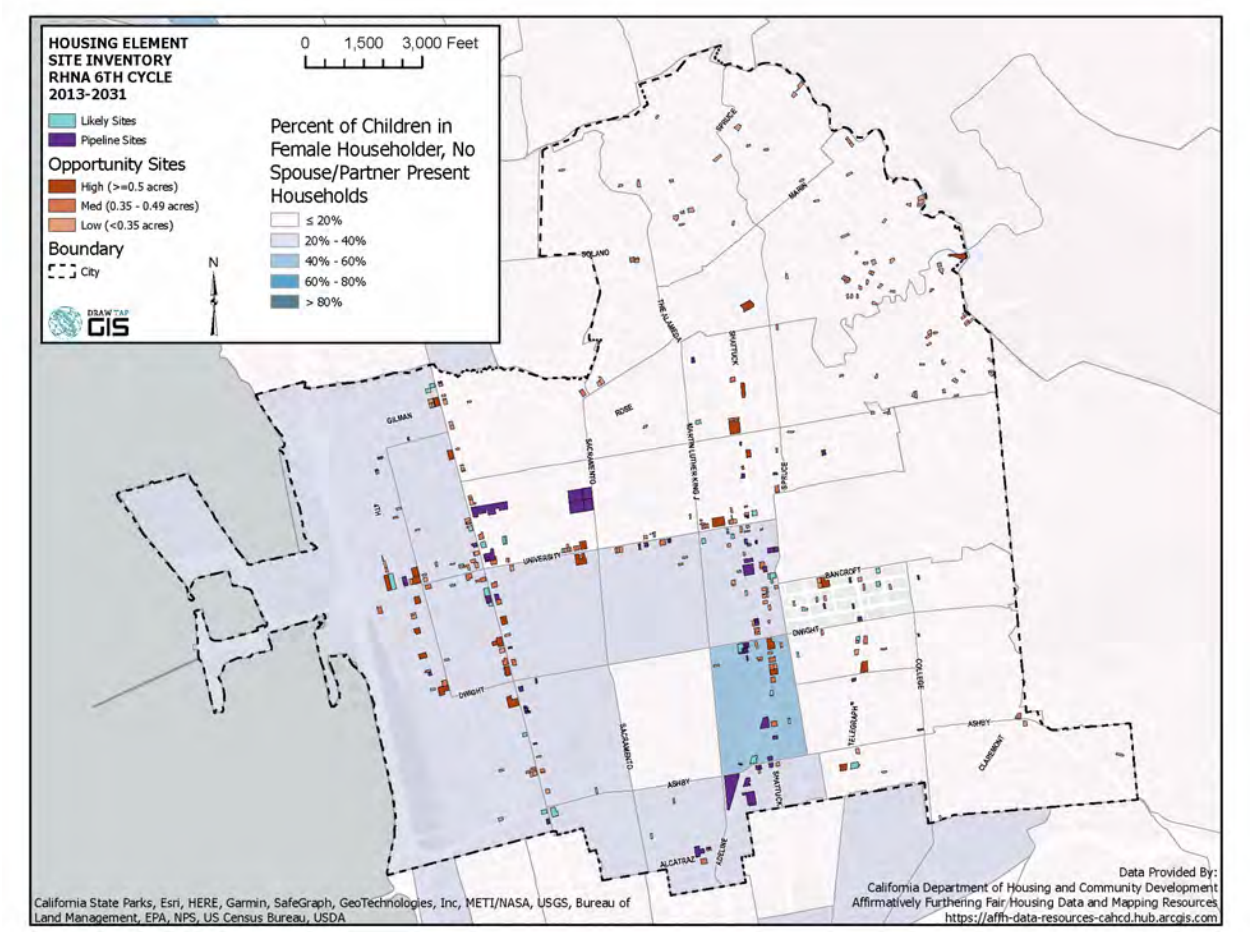


Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022; VTA, 2022.

Table E-5: Distribution of RHNA Units by Percent of Children in Female-Headed Households

Children in Female-Headed HHs (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
<20%	525	11.7%	144	7.5%	1,434	18.0%	2,103	14.6%
20-40%	2,482	55.2%	1,222	63.7%	4,480	56.1%	8,184	56.8%
40-60%	816	18.1%	159	8.3%	750	9.4%	1,725	12.0%
60-80%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
>80%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
No Data	676	15.0%	392	20.4%	1,321	16.5%	2,389	16.6%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-6: Sites Inventory and Percent of Children in Female-Headed Households by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022; VTA, 2022.

Income Level

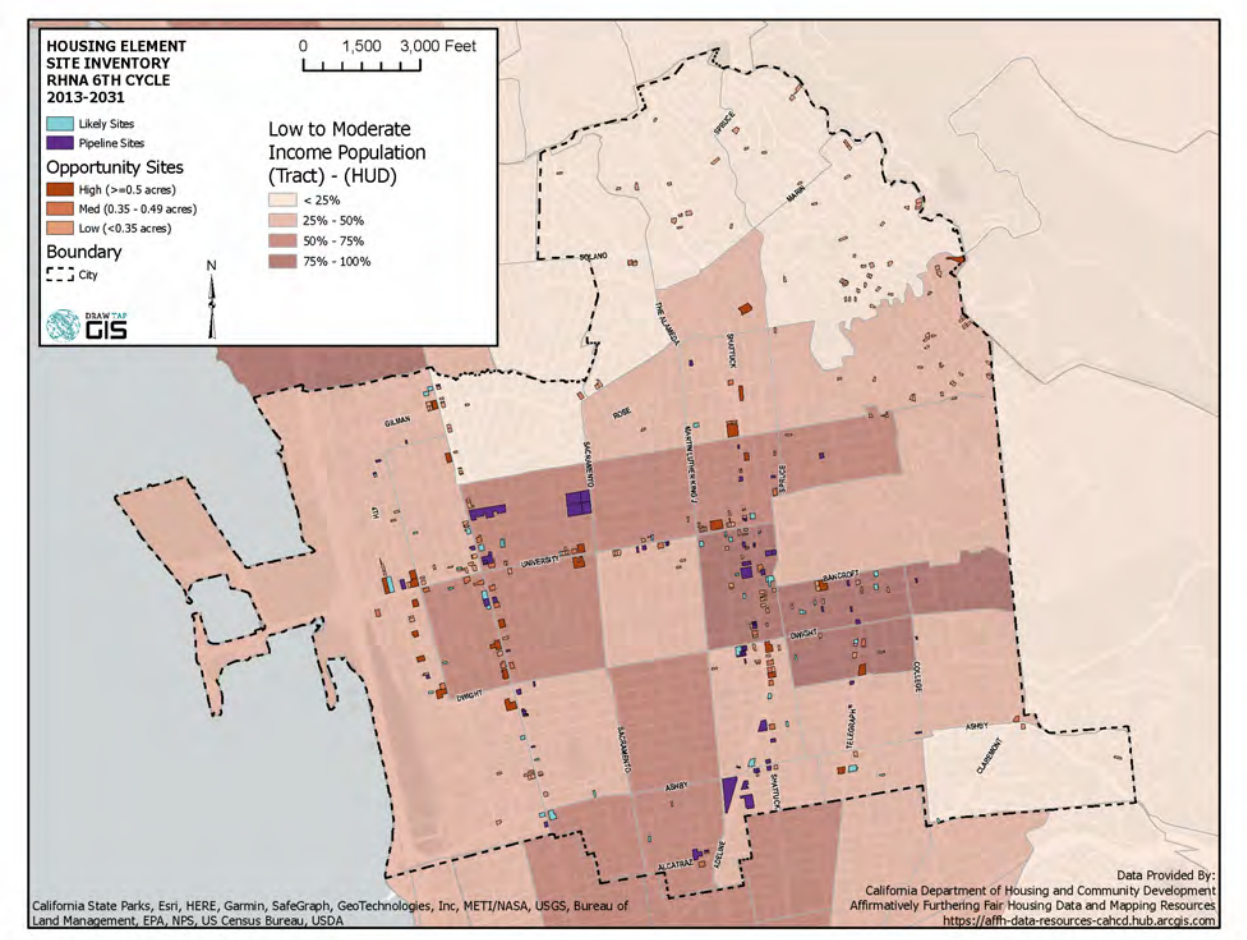
Table E-6 and Figure E-7 show the distribution of RHNA units by LMI population. Approximately 55 percent of all RHNA units are located in LMI tracts where more than 50 percent of households are low or moderate income. A larger proportion of above moderate income units (57.8 percent) and moderate income units (59.7 percent) are in LMI areas compared to lower income units (49.1 percent), indicating the City's RHNA strategy does not disproportionately place lower income units in LMI areas. There are more above moderate income units in tracts where fewer than 25 percent of households are LMI, however this reflects the zoning district composition in the City. Tracts where less than 25 percent of households

are LMI tend to be predominantly single-family residential. Berkeley's RHNA strategy does not exacerbate existing LMI household trends by disproportionately placing lower income units in LMI areas at a higher rate.

Table E-6: Distribution of RHNA Units by LMI Household Population

LMI Household Population (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
<25%	5	0.1%	40	2.1%	323	4.0%	368	2.6%
25-50%	2,287	50.8%	733	38.2%	3,044	38.1%	6,064	42.1%
50-75%	1,498	33.3%	452	23.6%	2,188	27.4%	4,138	28.7%
75-100%	709	15.8%	692	36.1%	2,430	30.4%	3,831	26.6%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-7: Sites Inventory and LMI Households by Tract (2015)



Source: HCD AFFH Data Viewer (HUD 2020, based on 2011-2015 ACS), 2022; VTA, 2022.

E2.7 RACIALLY OR ETHNICALLY CONCENTRATED AREAS

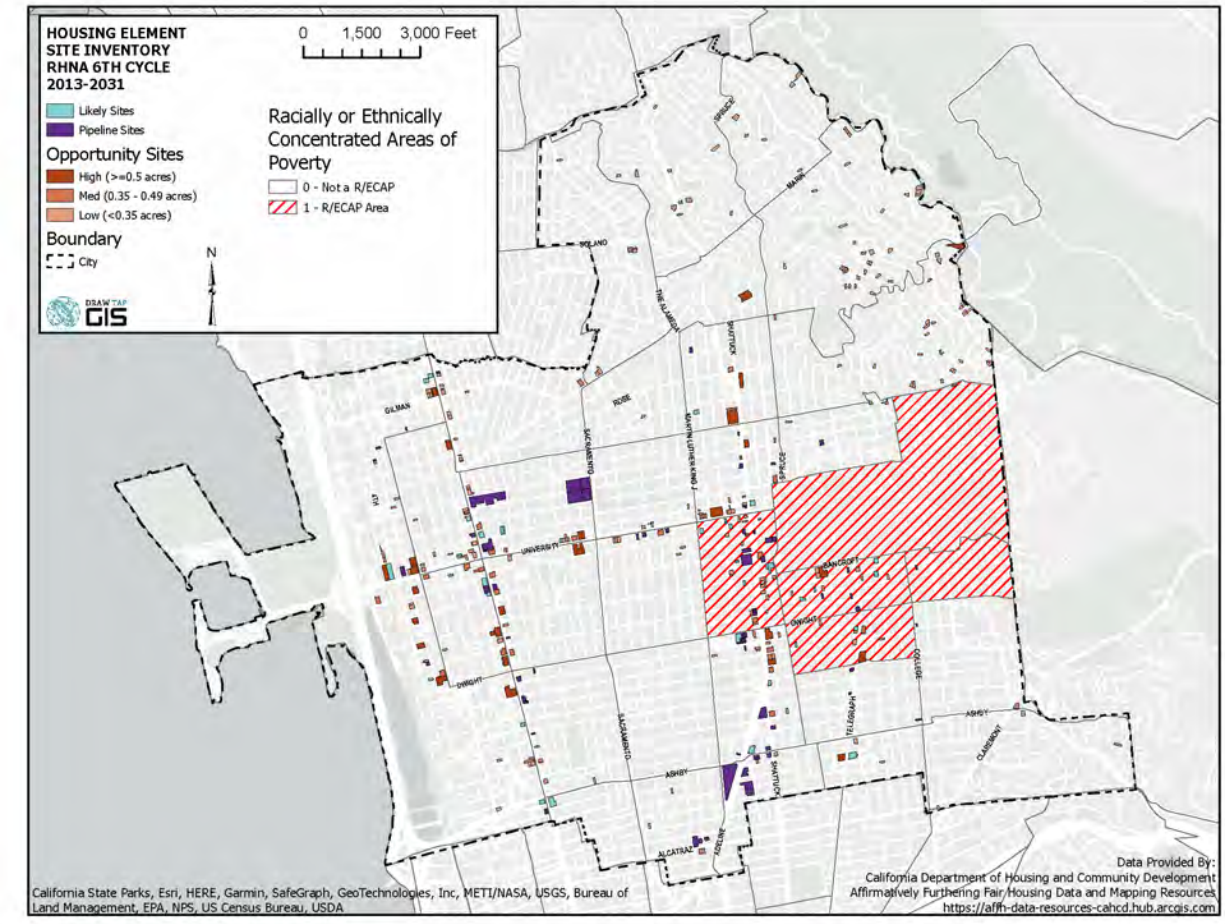
R/ECAPs

As discussed previously, five R/ECAPs have been identified in Berkeley. The City's sites inventory and R/ECAP tracts are shown in Figure E-8. Of all 14,401 units selected to meet the City's RHNA, 26.6 percent are located in R/ECAPs. A significantly smaller proportion of lower income units (15.8 percent) are located in R/ECAPs compared to moderate income units (36.1 percent) and above moderate income units (30.4 percent). This trend shows that the City's RHNA strategy does not disproportionately place lower income units in R/ECAPs and exacerbate existing fair housing conditions.

Table E-7: Distribution of RHNA Units by R/ECAP Tract

R/ECAP (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
Not in R/ECAP	3,790	84.2%	1,225	63.9%	5,554	69.6%	10,569	73.4%
In R/ECAP	709	15.8%	692	36.1%	2,431	30.4%	3,832	26.6%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-8: Sites Inventory and R/ECAPs (2013)



Source: HCD AFFH Data Viewer (HUD, 2009-2013), 2022; VTA, 2022.

E2.8 ACCESS TO OPPORTUNITIES

TCAC Opportunity Areas

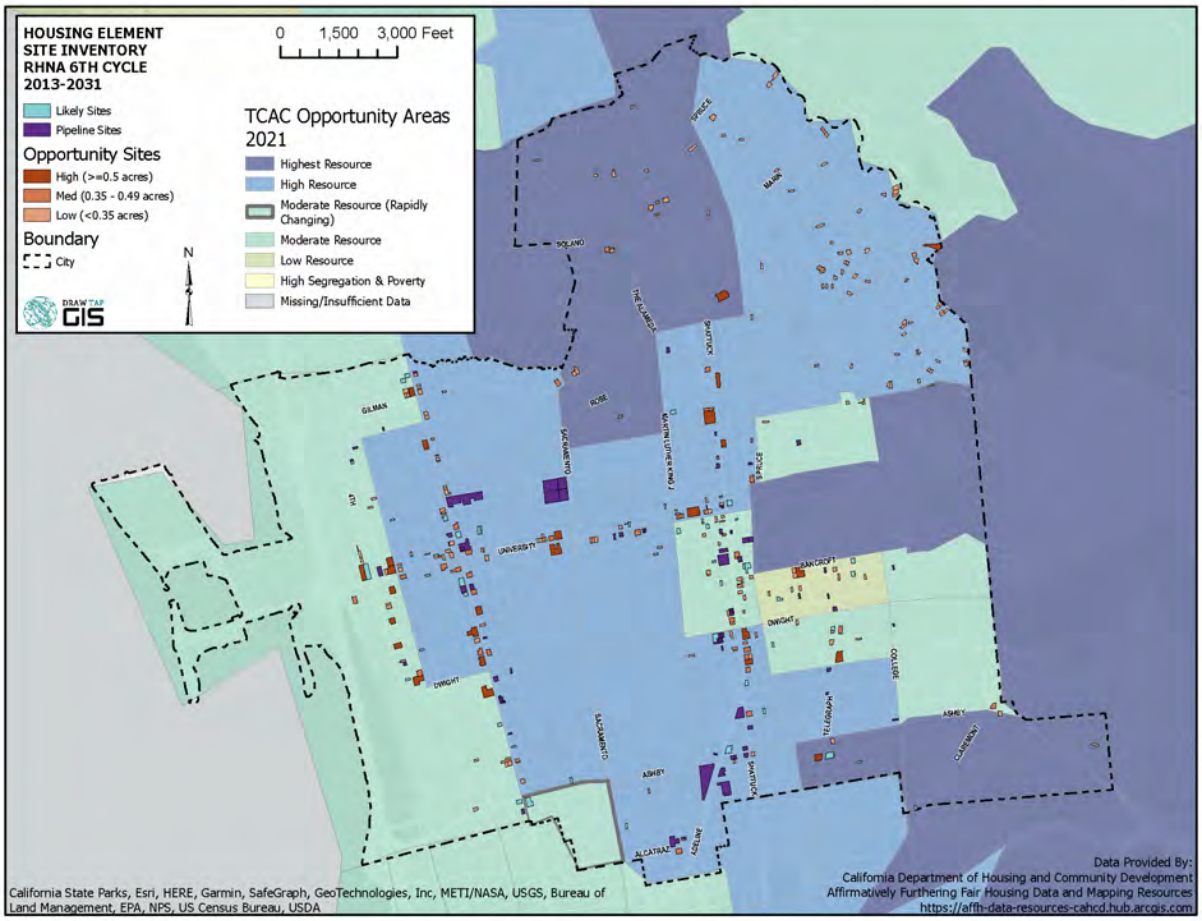
As presented in Figure E-9, Berkeley is comprised of mostly highest and high resource tracts. Consistent with this trend, approximately 60 percent of RHNA units, including 67.3 percent of lower income units, 51.6 percent of moderate income units, and 58.2 percent of above moderate income units, are in highest or high resource tracts. This distribution shows that the City's RHNA strategy helps fair housing conditions by placing future lower income households in high resource areas. There is only one low resource tract in the City, encompassing the Southside neighborhood. The City allocated a mix of units are various income levels in this tract, including 365 above moderate income units, 150 moderate income units, and 212 lower income units. This shows that the City's sites inventory does not disproportionately expose lower or moderate income households to areas with fewer opportunities. The City's RHNA strategy exposes lower income households to high resource areas and therefore affirmatively furthers fair housing.

It is also relevant to note that based on recent development trends in the City, development projects are located throughout Berkeley and are not concentrated in a single area of the City. Figure E.10 shows approved entitlements and building permits in the City from 2018 to 2021. Entitlements and building permits during this period are not concentrated in a single area of the City and include projects in high and highest resource areas. Development trends in Berkeley indicate new housing units will not be concentrated in tracts of a single TCAC categorization.

Table E-8: Distribution of RHNA Units by TCAC Opportunity Area Category

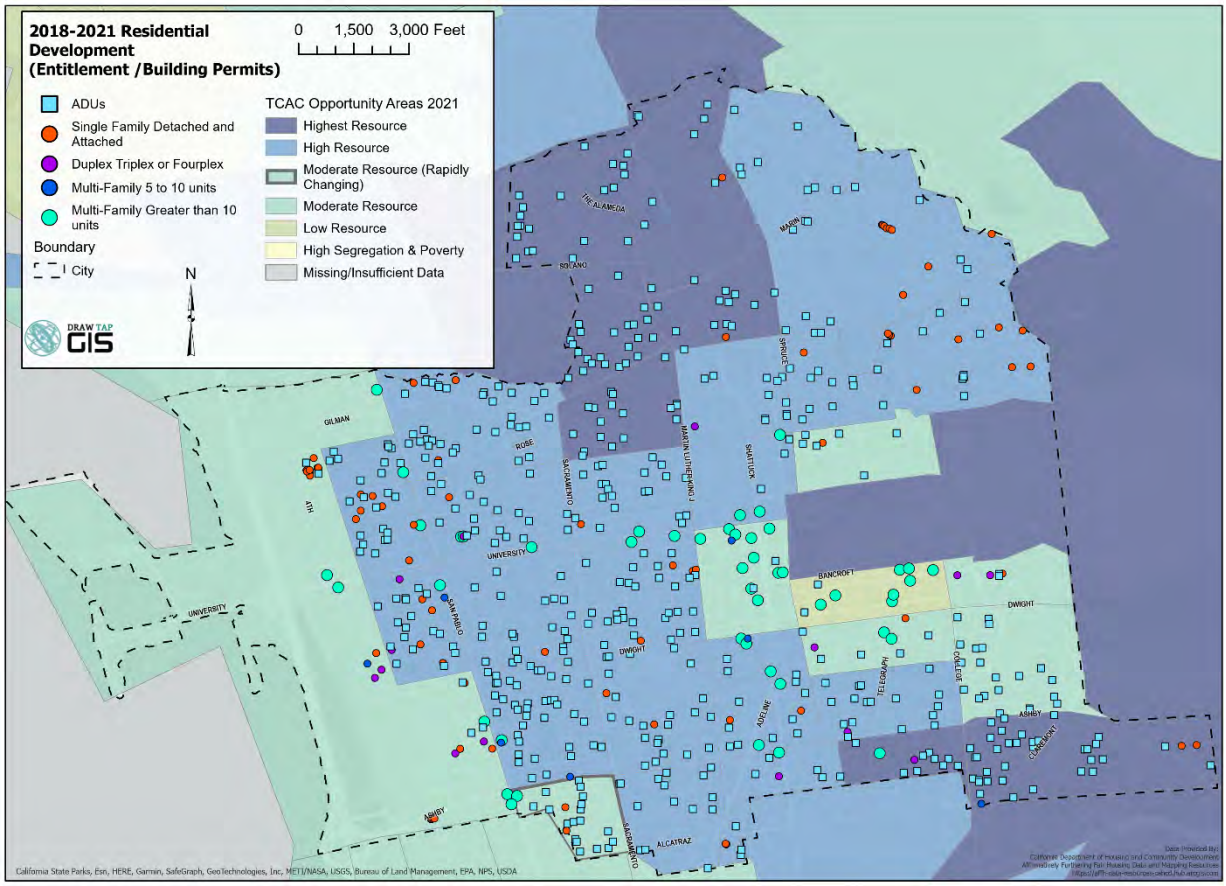
TCAC Opportunity Area Category (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
Highest Resource	85	1.9%	35	1.8%	178	2.2%	298	2.1%
High Resource	2,943	65.4%	954	49.8%	4,472	56.0%	8,369	58.1%
Moderate Resource	1,259	28.0%	778	40.6%	2,968	37.2%	5,005	34.8%
Moderate Resource (Rapidly Changing)	0	0.0%	0	0.0%	2	0.0%	2	0.0%
Low Resource	212	4.7%	150	7.8%	365	4.6%	727	5.0%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-9: Sites Inventory and TCAC Opportunity Area Composite Score by Tract (2021)



Source: HCD AFFH Data Viewer (HCD and TCAC, 2021), 2022; VTA, 2022.

Figure E.10: Residential Development – Entitlements and Building Permits (2018-2021)



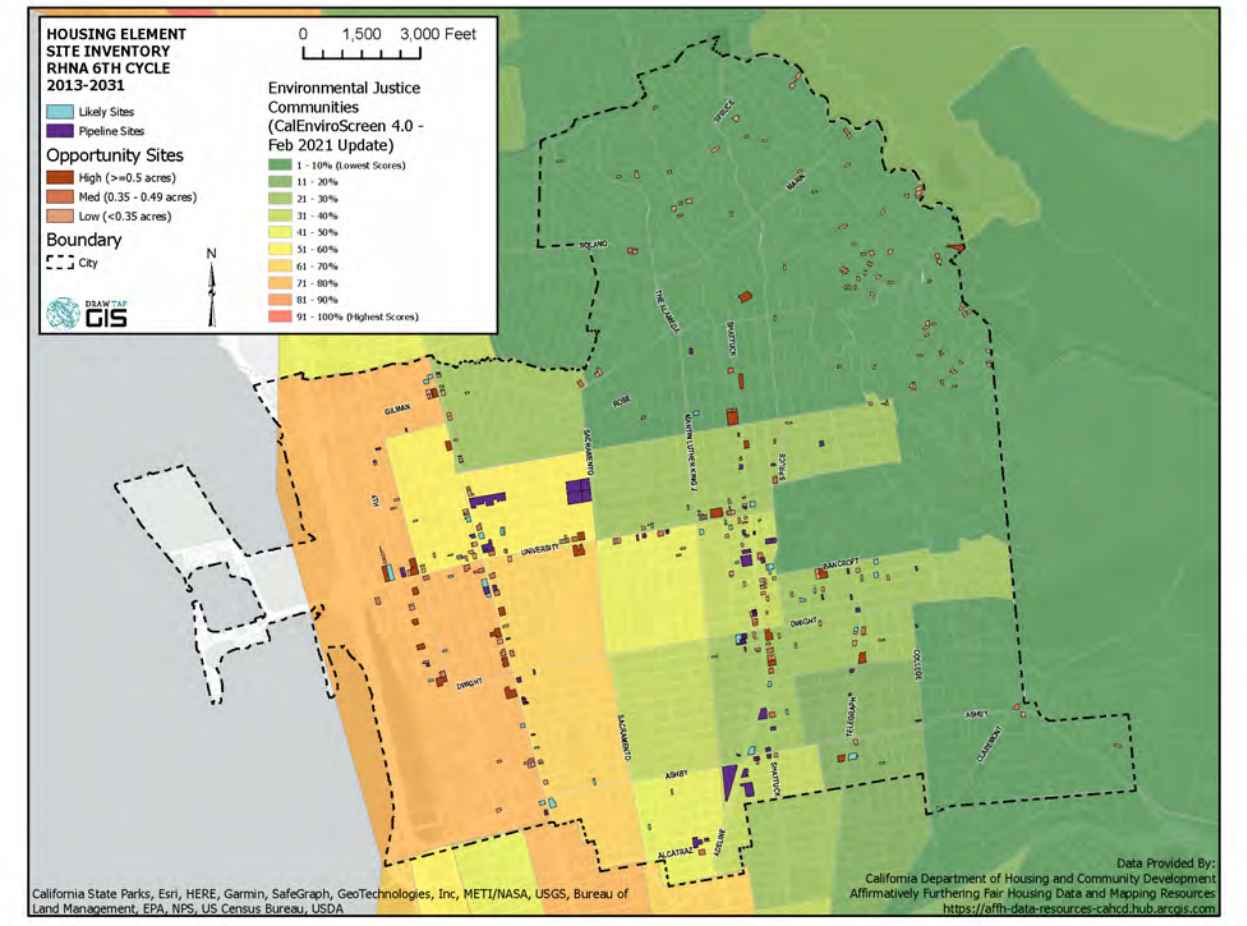
Environmental (CalEnviroScreen 4.0)

Table E-9 and Figure E-11 show the distribution of RHNA units by CalEnviroScreen 4.0 percentile scores. As discussed in this AFFH analysis previously, the central and western sections of the City have higher (worse) CalEnviroScreen 4.0 scores compared to the northeastern, eastern, and southeastern areas of the City. This pattern correlates with several other segregation trends in the City, including historical redlining. More than half (53.7 percent) of RHNA units fall into the 21st to 40th percentile range. A larger proportion of above moderate income units (64.6 percent) and moderate income units (59.3 percent) are in tracts scoring in the 40th percentile or below (best scores), compared to lower income units (45.9 percent). As discussed previously, this trend may be in part due to the zoning district composition in the City. Areas where CalEnviroScreen 4.0 scores are the highest are predominantly single-family residential neighborhoods (Berkeley Hills, Thousand Oaks, Live Oak, Claremont) where there is a higher concentration of above moderate income units. Multi-family zoning districts and sites that can accommodate higher density housing, including lower income units, tend to be more concentrated in the central, southern, and western areas of the City. These areas are also in closer proximity to major vehicular and transit corridors, and is more topographically flat than in the northeastern and eastern portions of the city.

Table E-9: Distribution of RHNA Units by CalEnviroScreen 4.0 Percentile Score

CalEnviroScreen 4.0 Percentile Score (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
1-10%	140	3.1%	0	0.0%	209	2.6%	349	2.4%
11-20%	89	2.0%	35	1.8%	153	1.9%	277	1.9%
21-30%	1,276	28.4%	556	29.0%	2,207	27.6%	4,039	28.0%
31-40%	562	12.5%	546	28.5%	2,589	32.4%	3,697	25.7%
41-50%	254	5.6%	54	2.8%	206	2.6%	514	3.6%
51-60%	618	13.7%	278	14.5%	1,072	13.4%	1,968	13.7%
61-70%	364	8.1%	123	6.4%	464	5.8%	951	6.6%
71-80%	1,196	26.6%	325	17.0%	1,085	13.6%	2,606	18.1%
81-90%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
91-100%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-11: Sites Inventory and CalEnviroScreen 4.0 Percentile Score by Tract (2021)



Source: HCD AFFH Data Viewer (CalEnviroScreen 4.0, 2021), 2022; VTA, 2022.

E2.9 DISPROPORTIONATE HOUSING NEEDS

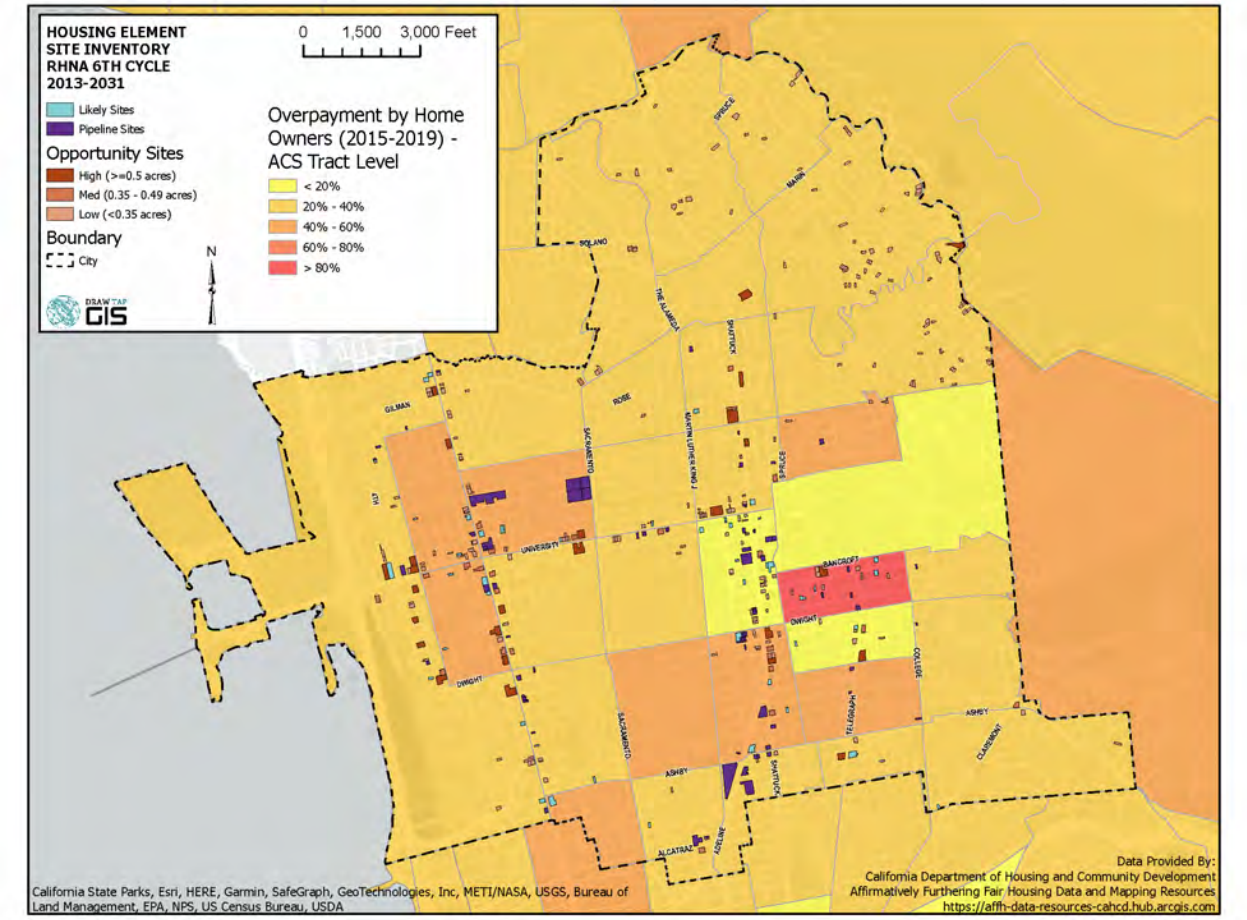
Cost Burden

Cost burdened households by tenure and sites used to meet the City's RHNA are presented in Figure E-12 and Figure E-13. There is one tract (Southside neighborhood) in Berkeley where more than 80 percent of owners are cost burdened. This tract is comprised of nearly all renter-occupied households (97.6 percent) and students (89.9 percent) (see Figure E-72 and Table E-30). Only 4.7 percent of lower income RHNA units are located in this tract compared to 7.8 percent of moderate income units and 4.6 percent of above moderate income units. The City's RHNA strategy does not disproportionately place lower income units in the tract with the highest concentration of costs burdened owners. Most RHNA units are in tracts where 20 to 40 percent of owners are cost burdened, including 42.6 percent of lower income units, 36.5 percent of moderate income units, and 42.1 percent of above moderate income units.

Table E-10: Distribution of RHNA Units by Population of Cost Burdened Owner Households

Cost Burdened Owners (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
<20%	497	11.0%	542	28.3%	2,063	25.8%	3,102	21.5%
20-40%	1,917	42.6%	699	36.5%	3,360	42.1%	5,976	41.5%
40-60%	1,873	41.6%	526	27.4%	2,197	27.5%	4,596	31.9%
60-80%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
>80%	212	4.7%	150	7.8%	365	4.6%	727	5.0%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-12: Sites Inventory and Cost Burdened Owner-Occupied Households by Tract (2019)



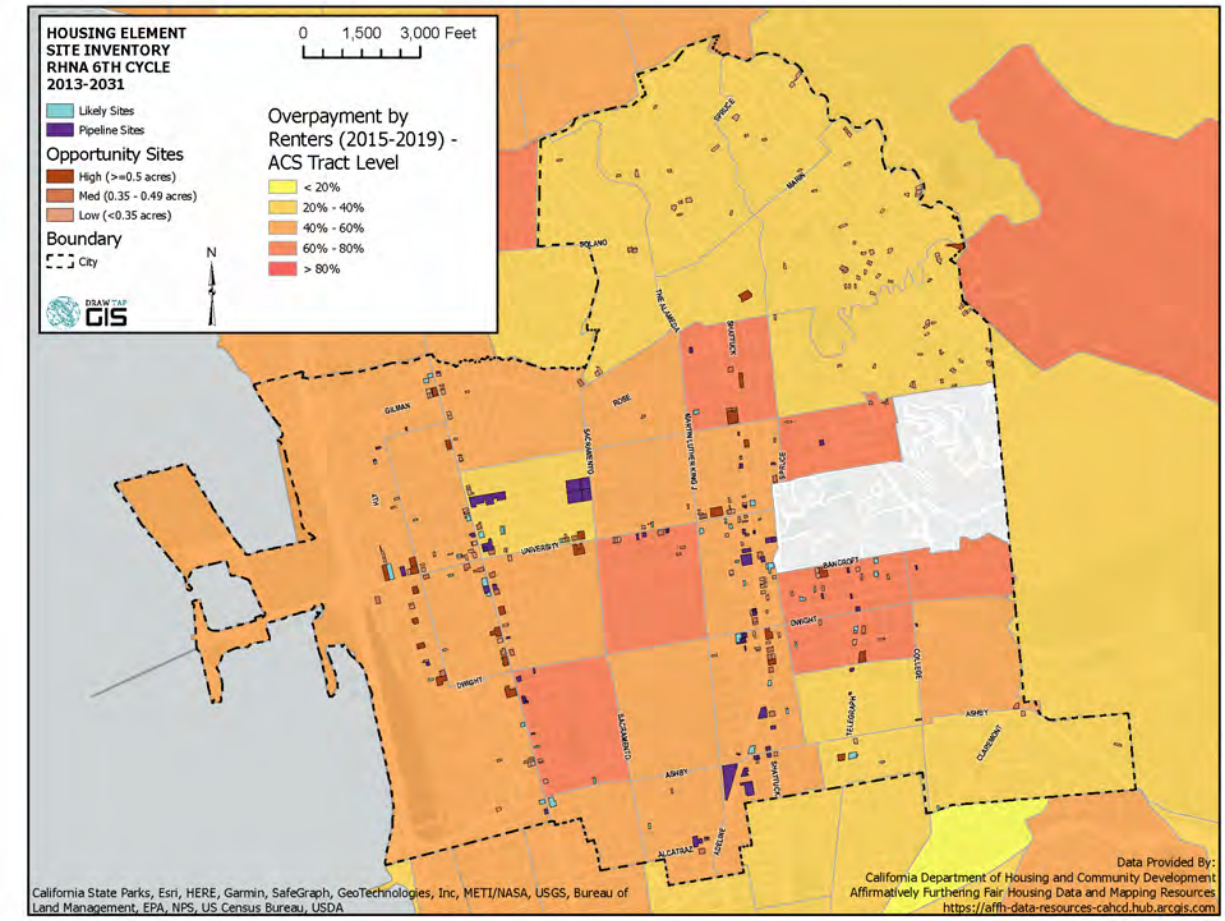
Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022; VTA, 2022.

Most RHNA units (70.9 percent) are in tracts where 40 to 60 percent of renters are cost burdened, including 71.8 percent of lower income units, 76.3 percent of moderate income units, and 69.1 percent of above moderate income units. This is consistent with the overall makeup of the City, where 40 to 60 percent of renters overpay for housing in most tracts. A larger share of above moderate income units and moderate income units are in tracts where more renters are cost burdened compared to lower income units. The City does not disproportionately place lower or moderate income units in tracts where renter cost burden is prevalent. The distribution of units generally reflects the overall composition of Berkeley and does not exacerbate existing conditions related to cost burden.

Table E-11: Distribution of RHNA Units by Population of Cost Burdened Renter Households

Cost Burdened Renters (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
<20%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
20-40%	606	13.5%	179	9.3%	1,452	18.2%	2,237	15.5%
40-60%	3,232	71.8%	1,463	76.3%	5,519	69.1%	10,214	70.9%
60-80%	661	14.7%	275	14.3%	1,014	12.7%	1,950	13.5%
>80%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

Figure E-13: Sites Inventory and Cost Burdened Renter-Occupied Households by Tract (2019)

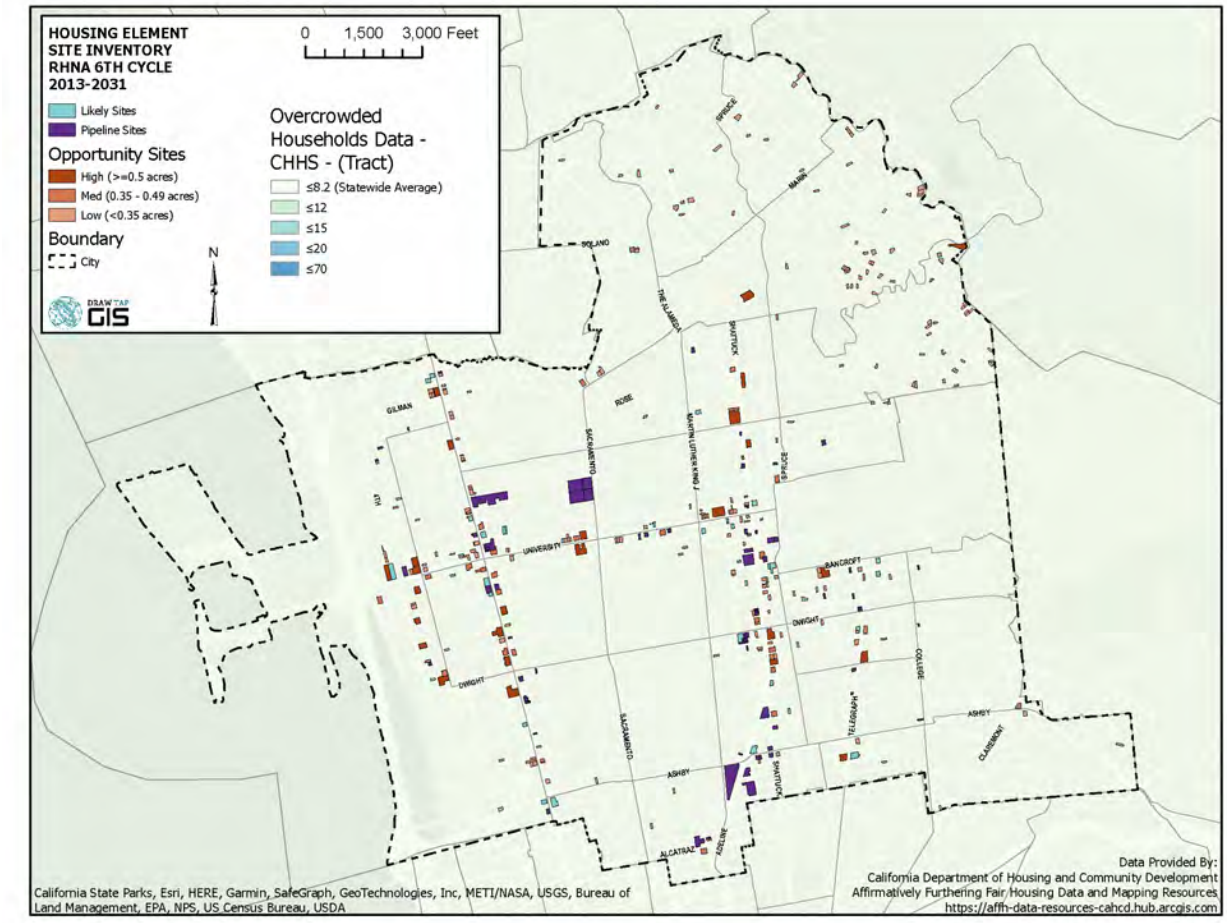


Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022; VTA, 2022.

Overcrowding

There are no tracts in Berkeley where more than 8.2 percent of households, the Statewide average, are overcrowded (Figure E-14). Therefore, the City's RHNA strategy does not exacerbate existing conditions related to overcrowding.

Figure E-14: Sites Inventory and Overcrowded Households by Tract (2017)



Source: HCD AFFH Data Viewer (2020 HUD CHAS Data, based on 2013-2017 ACS), 2022; VTA, 2022.

Displacement

There are 12 tracts in Berkeley that have been identified as sensitive communities at risk of displacement. Most of these tracts are located in the Central Berkeley and South Berkeley neighborhoods. Approximately 54 percent of all RHNA units are in tracts that are not considered sensitive communities including 58.7 percent of above moderate income units and 70.3 percent of moderate income units (Table E-12). A majority (62 percent) of lower income units are located in one of the identified sensitive communities at risk of displacement. In part, this is because Central and South Berkeley neighborhoods are in close proximity to transit access, including Downtown BART and Ashby Stations. As transit priority areas, these areas are developed at higher densities, which can facilitate the development of affordable projects.

Table E-12: Distribution of RHNA Units by Sensitive Communities At Risk of Displacement

Sensitive Community (Tract)	Lower		Moderate		Above Moderate		Total	
	Units	Percent	Units	Percent	Units	Percent	Units	Percent
Not a Sensitive Community	1,711	38.0%	1,347	70.3%	4,689	58.7%	7,747	53.8%
Sensitive Community	2,788	62.0%	570	29.7%	3,296	41.3%	6,654	46.2%
Total	4,499	100.0%	1,917	100.0%	7,985	100.0%	14,401	100.0%

E3 CONCLUSIONS AND ACTIONS

State law requires that jurisdictions identify fair housing issues and their contributing factors, and assign a priority level for each factor. Furthermore, specific goals and actions must be identified that would reduce the severity of each fair housing issue.

E3.1 FAIR HOUSING ENFORCEMENT AND OUTREACH

Issue #1: Insufficient fair housing testing and limited outreach capacity

While ECHO does conduct fair housing testing in the City, none of the tests conducted between 2019 and 2021 found any differential treatment. This finding is at odds with the number of fair housing inquiries per 1,000 residents in the City. Between 2013 and 2021, HCD received 0.48 fair housing inquiries per 1,000 residents in Berkeley, the second highest rate amongst Alameda County cities. Furthermore, despite the higher rate of inquiries, there were no official complaints filed by Berkeley residents through HUD's Office of Fair Housing and Equal Opportunity (FHEO) or ECHO between 2016 and 2021. According to the City's 2015 Analysis of Impediments to Fair Housing, 23 complaints were filed by Berkeley residents between 2010 and 2014, more than half of which were related to disability status. The 2020 Alameda County AI found that the City of Berkeley lacked local private outreach and enforcement.

Contributing Factors	Priority Level	Goals and Actions
Insufficient fair housing testing	Medium	Seek additional grant funding to receive more support from fair housing agencies.
Lack of targeted outreach	High	Ensure adequate resources and staffing levels to conducted targeted outreach, particularly in South Berkeley, Southside, and Downtown.

E3.2 INTEGRATION AND SEGREGATION

Issue #2: Patterns of segregation in the South Berkeley areas

Racial/ethnic minority populations and LMI households are largely concentrated in the same areas of the City (South Berkeley, Southside, and Downtown Berkeley neighborhoods). Renters in these neighborhoods are cost burdened at a higher rate than the remainder of the City. South Berkeley also has a higher concentration of persons with disabilities and children in female-headed households. These areas were redlined or C-graded by the Home Owners Loan Corporation in the 1930s. This is also an area of high segregation and poverty in Berkeley.

Contributing Factors	Priority Level	Goals and Actions
Historical redlining	High	Pursue place-based strategies and outreach programs to both produce more affordable housing and protect tenants from displacement in cost-burdened neighborhoods.
Lack of private investment	High	Seek additional grants to fund affordable housing, in addition to local bond measures and housing trust fund.
Lack of public investment in specific neighborhoods, including services or amenities	Medium	Provide mobility counseling and attract landlords to participate with the Berkeley Housing Authority (BHA) in the housing voucher program, with continued investment in its Housing Quality Standards program to ensure safe and decent living conditions for all voucher holders. Establish a development arm of the Berkeley Housing Authority to develop new affordable units.

E3.3 ACCESS TO OPPORTUNITIES

Issue #3: Lower opportunity areas and environmental conditions concentrated on the western side of the City

The City of Berkeley is comprised of mostly TCAC-designated high resource tracts. Compared to other Alameda County jurisdictions along the coastal East Bay area, such as Oakland and San Leandro, Berkeley residents have better economic, environmental, and education conditions. The Berkeley Marina neighborhood on the western City boundary and tracts surrounding the UC Berkeley campus have lower TCAC-classifications. These tracts are considered moderate resource areas and one is an area of high segregation and poverty. While these tracts tend to have lower TCAC opportunity composite scores and worse environmental conditions according to CalEnviroScreen 4.0 scores, educational opportunities in these areas are high. The Berkeley Marina neighborhood specifically has the lowest CalEnviroScreen 4.0 scores but scored in the highest quartile in TCAC education scores. The City is characterized by high quality public schools throughout the City, and high graduation rates. Transportation opportunities are also highly accessible to residents Citywide. Economic scores in tracts surrounding the UC Berkeley campus are lower compared to the rest of the City. There are also discrepancies amongst environmental conditions in the City. The eastern side has superior environmental conditions compared to the western side, specifically in the Berkeley Marina, Gilman, Northwest Berkeley, 4th Street, and Southwest Berkeley neighborhoods. It is important to note that nearly 40 percent of units selected to meet the RHNA are in tracts with CalEnviroScreen 4.0 scores in the 51st percentile or above (worse), including 50.5 percent of lower income units. However, a majority of sites selected to meet the RHNA are in tracts with CalEnviroScreen 4.0 scores in the 50th percentile or below (best).

Contributing Factors	Priority Level	Goals and Actions
Exposure of some neighborhoods to poor environmental conditions	Medium	Require building upgrades and proactive inspections to reduce exposure to environmental factors as well as eliminate fossil fuels and reduce emissions Citywide, but particularly in residential areas in proximity to manufacturing districts.
Lack of private or public investment in certain neighborhoods	High	Partner with organizations including Rebuilding Together, Habitat for Humanity, and Center for Independent Living to fund home modifications for lower income households. Target outreach for home modification programs in areas identified as low or moderate resources by the California Tax Credit Allocation Committee.
Historical redlining	High	Create opportunity for in-fill middle housing to allow for greater density and flexibility and ownership opportunities in single-family districts.

E3.4 DISPROPORTIONATE HOUSING NEEDS

Issue #4: Concentrations of sensitive communities at risk of displacement in the South and Central Berkeley neighborhoods

As discussed in Section E2.9 *Displacement*, there are 12 tracts that have been identified in the City as areas at risk of displacement. These tracts are generally concentrated in the South Berkeley and Central Berkeley neighborhoods. This section of Berkeley was redlined in the 1930s. Redlined areas, including the sensitive tracts at-risk of displacement, are more prone to racial and economic segregation, economic inequality, and inferior environmental, climate, and health conditions. These areas also tend to have aging housing units and higher rates of cost burden.

Contributing Factors	Priority Level	Goals and Actions
Historical redlining	High	Develop a housing preference policy to assist residents at-risk of displacement, as well as those who have already been displaced, to receive priority for new, local affordable housing units.
Age of housing stock	Medium	Continue applying for grant and state funding to support housing preservation, maintenance, and resiliency. These include programs for seismic safety and preparedness and electrification upgrades and energy efficiency, as well as loans to assist home improvements for senior and disabled populations.
Increasing rental prices and cost burden	High	Create a legal pathway for tenants to have the opportunity to collectively purchase or assign rights to an affordable housing developer when a property owner is ready to sell. Pair with targeted outreach and education to both tenants and property owners.

E4 ASSESSMENT OF FAIR HOUSING ISSUES

E4.1 FAIR HOUSING ENFORCEMENT AND OUTREACH

The City of Berkeley has committed to comply with the federal Fair Housing Act which prohibits discrimination in housing on the basis of race or color, national origin, religion, sex, familial status (families with children), and disability. California law adds protections related to ancestry and marital status, and local Berkeley law protects individuals based on sexual orientation and HIV/AIDS status. As outlined on the City's website, the following activities are illegal if based on one of the protected classes mentioned previously under the Fair Housing Act:

- Refuse to rent or sell housing
- Refuse to negotiate for housing
- Make housing unavailable
- Set different terms, conditions, or privileges for sale or rental
- Provide different housing services or facilities
- Falsely deny that housing is available for inspection, sale or rental
- For profit, persuade owners to sell or rent (blockbusting)
- Deny any access to or membership in a facility or service (such as a multiple listing service) related to the sale of housing
- Refuse to make reasonable accommodations in rules or services if necessary for a disabled person to use the housing
- Refuse to allow a disabled person to make reasonable accommodations to their dwelling
- Threaten or interfere with anyone making a fair housing complaint
- Refuse to provide municipal services, property insurance, or hazard insurance for dwellings, or providing such services or insurance differently

The City of Berkeley has demonstrated commitment to Fair Housing for many years through its funding of community agencies to provide assistance with fair housing complaints, help people find housing, and make new and existing housing more accessible. As a recipient of federal funds, the City of Berkeley also has an obligation to affirmatively further fair housing choice.

Periodically (generally every five years) the City completes an Analysis of Impediments (AI) to Fair Housing Choice, a HUD-mandated assessment of fair housing issues and the development of strategies to

address them. The Analysis of Impediments was last created in 2015. Every year, the City reports on its efforts to implement the Analysis of Impediments in the Consolidated Annual Performance and Evaluation Report (CAPER).

Fair housing enforcement and outreach capacity relates to the ability of a locality and fair housing entities to disseminate information related to fair housing and provide outreach and education to assure community members are aware of fair housing laws and rights. In addition, enforcement and outreach capacity includes the ability to address compliance with fair housing laws, such as investigating complaints, obtaining remedies, and engaging in fair housing testing. Eden Council of Hope and Opportunity (ECHO) Housing provides fair housing services, including fair housing counseling, complaint investigation, discrimination complaint assistance, rental assistance programs, homeseeking services, shared housing counseling and placement, and homebuyer education workshops to Alameda County residents. ECHO is a non-profit agency whose mission is to actively support and promote fair housing through education and advocacy. ECHO also provides fair housing services and classes in English and Spanish, online information in multiple languages, and interpretation and translation services. Workshops educate tenants on fair housing law and include information on discriminatory practices, protections for immigrants, people with disabilities, and families with children, occupancy standards, and landlord-tenant laws.

The East Bay Community Law Center (EBCLC) also provides fair housing services to Berkeley residents. The EBCLC defends eviction lawsuits brought against low income tenants and enforces local rent and eviction ordinances. The program emphasizes defense of long-term tenancies to preserve the value of rent-controlled units. EBCLC also prioritizes subsidized tenancies such as those in Section 8 and conventional public housing programs, as well as on behalf of tenants with disabilities.

In addition to State and Federal fair housing laws, the City of Berkeley has implemented the following ordinances related to fair housing and affordability.

Rent Stabilization and Good Cause for Eviction Ordinance: The City of Berkeley limits rent increases on units built before 1980 to the extent allowed by State law. Landlords may charge market rate rents when a unit is vacated and leased to a new tenant.[6] The Rent Stabilization and Good Cause for Eviction Ordinance also provides eviction controls and defines just causes for eviction. As of April 2022, approximately 19,000 rental units in the City were covered by the rent stabilization ordinance.

Condominium Conversion Ordinance: The City's Condominium Conversion Ordinance limits the number of condominium conversions in the City to a maximum of 100 per year and charges a mitigation fee to offset the loss of affordable housing due to conversions.

Inclusionary Housing Ordinance and Affordable Housing Mitigation Fee: The City of Berkeley adopted an inclusionary housing ordinance in 1973. In response to a 2009 court ruling that invalidated inclusionary requirements for rental housing in California, the City adopted an Affordable Housing Mitigation Fee on new market-rate rental units, which provides revenue to the City's Housing Trust Fund. The Affordable Housing Mitigation Fee and methodology was updated in 2020 by Resolution 68,074 – N.S.

Fair Housing Enforcement

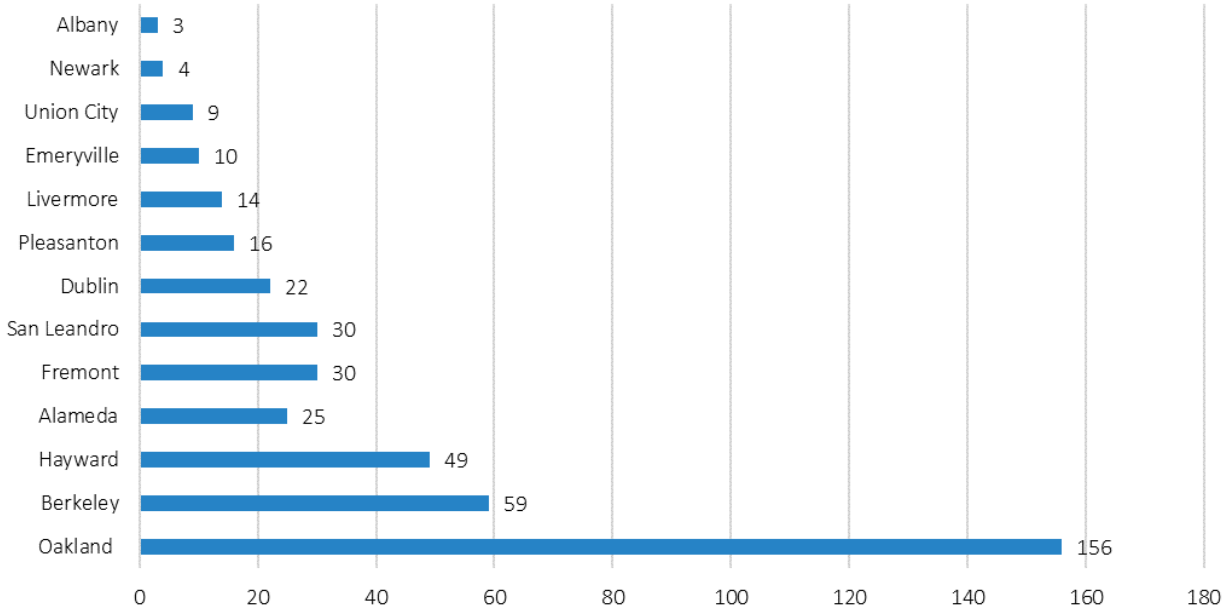
The 2020 Alameda County Analysis of Impediments to Fair Housing Choice identified the following impediments in the County related to fair housing enforcement capacity:

[6] Vacancy decontrol was mandated after the State legislature passed the Costa-Hawkins Rental Act in 1995, which allows rent to increase to market rates when a qualifying vacancy occurs and reinstates rent control for a new tenant.

- Inadequate funding and organizational capacity for fair housing enforcement due to caps on HUD CDBG allocations;
- Lack of private funding sources for fair housing organizations;
- Reduction in the number of fair housing organizations has lessened fair housing activities overall;
- Federal and state funding to Alameda County for affordable housing has declined by 80 percent since 2008 for a deficit of approximately $124 million annually;
- LIHTC production and preservation in Alameda County has increased by 67 percent overall from 2016, but state production and preservation has decreased by 23 percent;
- Alameda County needs 52,291 more affordable rental homes to meet the need;
- Local tax initiatives included Berkeley's Measure O, but the amount of funding available does not meet the demand for affordable housing.

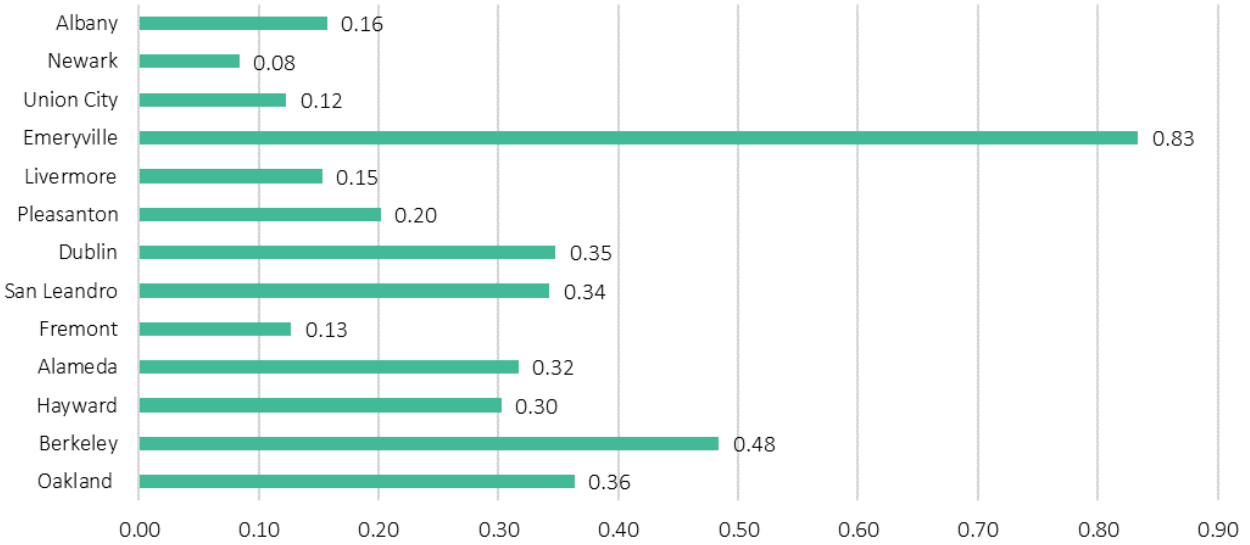
Fair housing inquiries filed through HUD's Office of Fair Housing and Equal Opportunity (FHEO) can be used to identify concerns that residents have about possible discrimination. Fair housing inquiries are not official housing discrimination cases, rather comments or questions posed by residents that may or may not have been pursued as an official complaint. Total fair housing inquiries by City are presented in Figure E-15 and inquiries per 1,000 persons by City are included in Figure E-16. HUD received the highest number of housing inquiries from Oakland residents (156 inquiries), followed by Berkeley (59), and Hayward (49). Despite the high volume of inquiries originating in Oakland, Emeryville had by far the highest volume of inquiries of 0.83 inquiries per 1,000 persons. Berkeley had the next highest volume of inquiries of 0.48 inquiries per 1,000 persons, followed by Oakland (0.36).

Figure E-15: FHEO Fair Housing Inquiries by City (January 2013-March 2021)



Note: Piedmont had no inquiries during this period.
Source: Alameda County AFFH Data Packet (HUD, 2020), 2022.

Figure E-16: FHEO Fair Housing Inquiries per 1,000 Persons by City (January 2013-March 2021)



Note: Piedmont had no inquiries during this period.
Source: Alameda County AFFH Data Packet (HUD, 2020), 2022.

Discrimination complaints from both resident and prospective County tenants can be filed through ECHO, which refers complaints to the Department of Housing and Urban Development (HUD) Fair Housing and Equal Opportunity (FHEO) Office. Complaints filed through FHEO by Alameda County residents from 2017 to 2020 are shown in Table E-13 and complaints filed through ECHO from 2016 to 2021 are shown in Table E-14. A total of 203 complaints were filed through the FHEO between 2017 and 2020. Nearly half of all complaints filed through FHEO were related to disability status. This finding is consistent with federal and state trends. According to the 2020 State AI, 51 percent of housing-related complaints filed with FHEO between 2015 and 2019 were filed under disability claims, making disability the most common basis for a complaint. The second most common complaint in the County was related to retaliation (12.3 percent). Complaints related to race accounted for 11.3 percent of all complaints, most of which (7.9 percent) were related to discrimination against Black residents.

Table E-13: FHEO Complaints – Alameda County (2017-2020)

	2017	2018	2019	2020	2017-2020 Total	
					Cases	% of Total
Color	1	1	1	0	3	1.5%
Disability	32	26	28	15	101	49.8%
Familial Status	10	5	3	2	20	9.9%
National Origin	4	4	0	1	9	4.4%
Hispanic Origin	2	2	0	0	4	2.0%
Race	7	9	5	2	23	11.3%
Asian	0	1	0	0	1	0.5%
Black	5	4	5	2	16	7.9%
Black and White	0	1	0	0	1	0.5%
Native American	1	1	0	0	2	1.0%
White	1	2	0	0	3	1.5%
Religion	1	2	2	0	5	2.5%
Retaliation	7	9	8	1	25	12.3%
Sex	7	5	5	0	17	8.4%
Total Cases	69	61	52	21	203	100%

Source: Alameda County AFFH Data Packet (HUD, 2020), 2022.

Between 2016 and 2021, 1,369 fair housing complaints were filed with ECHO. Complaints related to disability status also made up the highest share amongst complaints filed with ECHO (31.4 percent), followed by a basis not listed (21.9 percent), and race (20.2 percent). Complaints related to race have decreased significantly as of 2021, while complaints on the basis of disability status have increased slightly.

Table E-14: Fair Housing Complaints Filed with ECHO (2016-2021)

	2016-17	2017-18	2018-19	2019-20	2020-21	Total	
						Complaints	Percent
Race	20.3%	23.6%	27.0%	22.2%	9.3%	276	20.2%
National Origin	4.9%	2.8%	2.6%	3.8%	10.7%	70	5.1%
Disability	28.8%	33.3%	33.0%	26.6%	34.0%	430	31.4%
Familial Status	10.1%	11.1%	5.2%	7.6%	7.2%	116	8.5%
Marital Status	1.1%	1.4%	1.5%	1.3%	0.3%	15	1.1%
Religion	0.0%	1.4%	0.0%	13.3%	2.1%	31	2.3%
Sex	3.6%	6.6%	3.4%	11.4%	4.5%	72	5.3%
Source of Income	0.0%	2.1%	1.5%	7.0%	8.9%	47	3.4%
Age	0.5%	0.0%	0.0%	0.6%	3.1%	12	0.9%
Other	30.7%	17.7%	25.8%	6.3%	19.9%	300	21.9%
Total	365	288	267	158	291	1,369	291

Notes:

1. *Complaints were only filed in the City of Alameda (281 complaints), San Leandro (144 complaints), Hayward (124 complaints), and Oakland (820 complaints).*
2. *A flood in 2020 of ECHO's records room may have destroyed records of early 2020 complaints. FY 2019-2020 may be incomplete.*

Source: Alameda County AFFH Data Packet (ECHO Fair Housing, 2021), 2022.

As shown in Figure E-15 and Figure E-16 above, Berkeley had the second highest number of total HCD Fair Housing inquiries and second highest number of inquiries based on cases per population in Alameda County. Between January 2013 and March 2021. FHEO received 59 inquiries from Berkeley residents, or 0.48 inquiries per 1,000 persons. According to 2016-2021 ECHO Fair Housing data, no official fair housing complaints have been filed by Berkeley residents. During this period, 820 complaints were filed by Oakland residents, 281 by City of Alameda residents, 144 by San Leandro residents, 124 by Hayward residents, and 95 by Fremont residents. Fair housing cases filed in Fremont are recorded and handled by Project Sentinel while cases filed in the City of Alameda, San Leandro, Hayward, and Oakland are recorded and handled by ECHO. Of the 1,369 cases filed through ECHO, 56.2 percent were offered counseling, 25.3 percent were found to have insufficient evidence, 5.6 percent were successfully conciliated, three percent were dropped, 8.2 percent were provided landlord education, and 1.5 percent were referred to an attorney, DFEH, or HUD. One case is still pending.

The most recent Alameda County Analysis of Impediments to Fair Housing (2020) stated the following regarding fair housing enforcement capacity:

> *Stakeholders and participating jurisdictions have commented that inadequate funding and organizational capacity are the primary limitations on expanding or improving fair housing enforcement. HUD directs recipients of CDBG funds to use the grant's administrative or social services allocations for fair housing activities, including creation of an analysis of impediments. However, HUD also caps those allocation amounts, which limits participating jurisdictions from using more of these funds on fair housing activities.*
>
> *Participating jurisdictions generally do not use any other public or private source of funding for their fair housing activities. While participating jurisdictions have limited funding to offer fair housing*

organizations, fair housing organizations have other funding sources, such as HUD's Fair Housing Initiatives Program (FHIP); however, these organizations generally do not have many other private funding sources. Other fair housing activities are funded from federal and state resources, such as services provided by the Office of Fair Housing and Equal Opportunity and Department of Fair Employment and Housing.

The number of fair housing organizations and their respective capacities has also constrained the amount of fair housing activities. Participating jurisdictions commented that a reduction in the number of fair housing organizations has lessened fair housing activities overall.

According to HUD guidance, a common factor for fair housing complaints can be a lack of affordable housing supply. According to the California Housing Partnership's Housing Emergency Update for Alameda County, federal and state funding to Alameda County for affordable housing has declined by 80 percent since 2008, leaving a deficit of approximately $124 million annually (California Housing Partnership, 2018). Additionally, while LIHTC production and preservation in Alameda County has increased by 67 percent overall from 2016, the state production and preservation has decreased by 23 percent. Lastly, the report finds that Alameda County needs 52,291 more affordable rental homes to meet the need. To combat this lack of state and federal funding, local tax initiatives have been approved, including the County's Measure AI, Berkeley's Measure O, and Emeryville's Measure C; however, due to the demand for affordable housing, the need still far exceeds these local measures.

Additional information on capacity constraints from ECHO Housing is included below:[7]

- Inadequate funding - funding from a couple jurisdictions in the County is insufficient.
- HUD capping allocation amounts - public services (15%) allocation should be increased.
- Reduction in the number of fair housing organizations in the region - at least two fair housing agencies in the East Bay have closed their doors.
- Lack of affordable housing supply - the affordable housing that is needed is housing that is affordable to persons on public assistance, accessible housing for persons with disabilities, and senior citizens.
- Findings, lawsuits, enforcement actions, settlements, or judgments related to fair housing or civil rights - we have not filed any administrative complaints in recent years. Our mediation attempts, in place of litigation, have been very successful.

Fair Housing Testing

ECHO Housing conducts fair housing testing in Alameda County cities including Alameda, Hayward, Livermore, Oakland, San Leandro, Union City, Pleasanton, and Berkeley. Fair housing audit results for Alameda County cities are presented in Table E-15. ECHO Housing found that tests conducted in Oakland had the highest rate of differential treatment (17.3 percent), followed by Livermore (12 percent), and Hayward (11.4 percent). Of all fair housing audits conducted by ECHO between 2016 and 2021, 11.7 percent showed differential treatment.

Ten fair housing audits were conducted in Berkeley in both the 2019-2020 and 2020-2021 fiscal years. Of all 20 audits conducted, none showed evidence of differential treatment.

Table E-15: ECHO Fair Housing Audit Results – Audits Showing Differential Treatment (2016-2021)

	2016-17	2017-18	2018-19	2019-20	2020-21	Total w/ Differential Treatment

[7] Rocha, Marjorie A., Executive Director, ECHO Housing. 2022. Personal communication with Alameda County Collaborative. March 15.

						Audits	Percent
Alameda	10%	10%	20%	0%	0%	4	8.0%
Hayward	40%	0%	0%	10%	10%	4	11.4%
Livermore	20%	30%	0%	10%	0%	6	12.0%
Oakland	20%	30%	10%	3%	23%	26	17.3%
San Leandro	11%	33%	0%	0%	0%	4	8.7%
Union City	0%	0%	0%	20%	0%	2	6.7%
Pleasanton	--	--	--	10%	0%	1	5.0%
Berkeley	--	--	--	0%	0%	0	0.0%

Source: Alameda County AFFH Data Packet (ECHO Fair Housing, 2021), 2022.

Fair Housing Education and Outreach

During the process of drafting the 2020 Alameda County Analysis of Impediment to Fair Housing Choice, the Alameda County Regional Housing (2019) Survey was distributed throughout the County and 3,296 responses were collected. Community engagement meetings were also held in Berkeley, Oakland, and Hayward. According to the 2020 AI, "these locations were chosen due to their proximity to the highest number of priority groups, including racial and ethnic minorities, people experiencing homelessness, people with disabilities, people residing in R/ECAPs, and people with limited English proficiency. The most northern and central parts of the County have R/ECAPS and large homeless populations, two locations in the northern part of the County, Berkeley and Oakland, and one centrally located in Hayward were chosen. Berkeley was also chosen because a large portion of the population includes people with disabilities." The County prioritized engagement with racial and ethnic minority populations, persons with disabilities, persons residing in R/ECAPs, and people with limited English proficiency due to lack of historical engagement in housing issues and because these groups are most likely to have disproportionate housing needs. The survey was provided in English, Dari, Spanish, Tagalog, Traditional Chinese, and Vietnamese.

The following outreach efforts were conducted by the County and City of Berkeley related to the 2020 AI:

- Published a legal notice advertising community engagement meetings and resident survey in Daily Review, Oakland Tribune, and Fremont Argus on June 28, 2019, and the Alameda Times and Tri-Valley Star on June 29, 2019.
- First 5 Alameda County distributed a newsletter with a link to the survey.
- July 4: Piedmont – 4th of July Parade – Piedmont City staff set up a flyer display.
- July 5: Pleasanton – Alameda County Fair, agricultural display area; 10 a.m.–3 p.m.; County employee engaged with public.
- July 27: Hayward – DSAL Boxing, Hayward Adult School; 1–6 p.m.; DSAL distributed survey flyers.
- August 6: San Lorenzo – National Night Out, St. John's Church; 5–8 p.m.; County employee engaged with public at the table.
- August 16: Ashland – School backpack giveaway.
- August 24: Emeryville Block Party; 11:30 a.m.–4:30 p.m.
- Sent notice to:
    - Housing and Community Development Advisory Committee
    - Alameda County Housing and Community Development staff (then sent to homeless providers and housing developers)
    - Board of Supervisors
    - Urban County cities – Albany, Dublin, Emeryville, Newark, and Piedmont

  - Grantees: HARD, Eden I&R, Alameda County Child Care Council, Deputy Sheriff's Activities League, ECHO, 7th Step Foundation
  - Other Dublin and Tri-Valley services providers/grantees: CityServe, CRIL, Tri-Valley Haven, Legal Assistance for Seniors, Las Positas Community College, Axis Community Health, Open Heart Kitchen
  - Dublin Human Services Commission
  - First 5 Alameda County
- Published notice of availability of Draft Regional Analysis of Impediments for review by the public
- ***Berkeley*** – Emailed contacts about the survey and community engagement meetings; encouraged participation in and forwarding the survey to friends, clients, colleagues, and other organizations.
- ***Berkeley*** – Distributed press release about the survey and the Berkeley-based community engagement meeting.
- ***Berkeley*** – Published notice of availability of Draft Regional Analysis of Impediments for review by the public

E4.2 INTEGRATION AND SEGREGATION

Race/Ethnicity

Ethnic and racial composition of a region is useful in analyzing housing demand and any related fair housing concerns, as it tends to demonstrate a relationship with other characteristics such as household size, locational preferences, and mobility. For example, prior studies have identified socioeconomic status, generational care needs, and cultural preferences as factors associated with "doubling up"- households with extended family members and non-kin.[8] These factors have also been associated with ethnicity and race. Other studies have also found minorities tend to congregate in metropolitan areas though their mobility trend predictions are complicated by economic status (minorities moving to the suburbs when they achieve middle class) or immigration status (recent immigrants tends to stay in metro areas/ports of entry).[9]

To measure segregation in a given jurisdiction, ABAG provided AFFH Segregation Reports that include isolation indices, dissimilarity indices, and Thiel's H indices for ABAG jurisdictions such as Alameda County and the City of Berkeley.

Isolation Index. Isolation indices compare a neighborhood's composition to the jurisdiction's demographics as a whole. The index returns values of 0 to 1, where higher values indicate a particular racial or ethnic group is more isolated from other groups. An isolation index of 0.65 for Latinx residents, for example, indicates the average Latinx resident in the City lives in a neighborhood that is 65 percent Latinx.

Dissimilarity Index. Dissimilarity indices are used to measure the evenness with which two groups (frequently defined on racial or ethnic characteristics) are distributed across the geographic units, such as tracts within a community. The index ranges from 0 to 1, with 0 denoting no segregation and 1

[8] Harvey, H., Duniforn, R., & Pilkauskas, N. (2021). Under Whose Roof? Understanding the living arrangements of children in doubled-up households. Duke University Press, 58 (3): 821–846. https://doi.org/10.1215/00703370-9101102.

[9] Sandefur, G.D., Martin, M., Eggerling-Boeck, J., Mannon, S.E., & Meier, A.M. (2001). An overview of racial and ethnic demographic trends. In N. J. Smelser, W.J. Wilson, & F. Mitchell (Eds.) America becoming: Racial trends and their consequences. (Vol I, pp. 40-102). National Academy Press Washington, D.C.

indicating complete segregation between the two groups. The index score can be understood as the percentage of one of the two groups that would need to move to produce an even distribution of racial/ethnic groups within the specified area. For example, an index score above 0.60 indicates 60 percent of people in the specified area would need to move to eliminate segregation. The following shows how HUD views various levels of the index:

- <0.40: Low Segregation
- 0.40-0.54: Moderate Segregation
- >0.55: High Segregation

Thiel's H Index. The Thiel's H Index is used to measure segregation between all racial/ethnic groups within a jurisdiction by comparing neighborhood diversity to citywide diversity. Neighborhoods are weighted by size so larger neighborhoods are more influential in determining the total measure of segregation. The Thiel's H Index also ranges from 0 to 1, where 0 indicates all neighborhoods have the same demographics as the whole City, and 1 indicates each group lives exclusively in their own, separate neighborhood.

Regional Trends. Isolation, dissimilarity, and Thiel's H indices for the Bay Area are presented in Table E-16. Isolation indices show that Asian/Pacific Islander and Latinx communities have become increasingly isolated since 2000. Conversely, Black and White communities have seen a decrease in isolation during the same period. White populations maintain the highest value of isolation of 0.491, while Black populations are the least isolated (0.053). These values indicate that in the average Bay Area jurisdiction, a White resident lives in a neighborhood that is 49.1 percent White, while a Black resident lives in a neighborhood where only 0.05 percent of the population is Black.

Dissimilarity indices for the Bay Area show that Black and White communities are the most segregated compared to segregation between other non-White and White communities. Asian/Pacific Islander residents are the least segregated from White residents compared to Latinx and Black residents. Segregation between all non-White groups and Whites has decreased in the Bay Area since 2000. Based on HUD's definitions for dissimilarity values, segregation between all non-White and White communities is low.

The Thiel's H index in the Bay Area has declined, indicating there is now less neighborhood-level racial segregation. This pattern is consistent with isolation and dissimilarity index trends described previously.

Table E-16: Racial/Ethnic Segregation Indices – Bay Area (2000-2020)

	2000	2010	2020
Isolation Index			
Asian/Pacific Islander	0.161	0.204	0.245
Black	0.071	0.062	0.053
Latinx	0.199	0.237	0.251
White	0.652	0.572	0.491
Dissimilarity Index			
Asian or Pacific Islander/White	0.194	0.192	0.185
Black/White	0.265	0.249	0.244
Latinx/White	0.232	0.219	0.207
Non-White/White	0.194	0.185	0.168
Thiel's H	0.052	0.048	0.042

Source: ABAG AFFH Data Report (based on Decennial Census 2000, 2010, and 2020), 2022.

White (31.4 percent), Asian/Asian Pacific Islander (API) (30.7 percent), and Hispanic/Latino (22.4 percent) populations make up the largest share of Alameda County (Table E-17). Compared to the Bay Area as a whole, Alameda County has larger Asian/API and Black/African American populations. Nearly

31 percent of the population in the County is Asian and 10 percent is Black compared to only 27 percent and 6 percent, respectively, in the Bay Area. The County also has a smaller White population of 31.4 percent compared to 39.3 percent in the Bay Area.

Of the selected jurisdictions adjacent to Berkeley, Orinda has the largest White population (72 percent) and Richmond has the smallest White population (17.8 percent). Richmond is comprised of a large Hispanic/Latino population, accounting for 42.5 percent the total population.

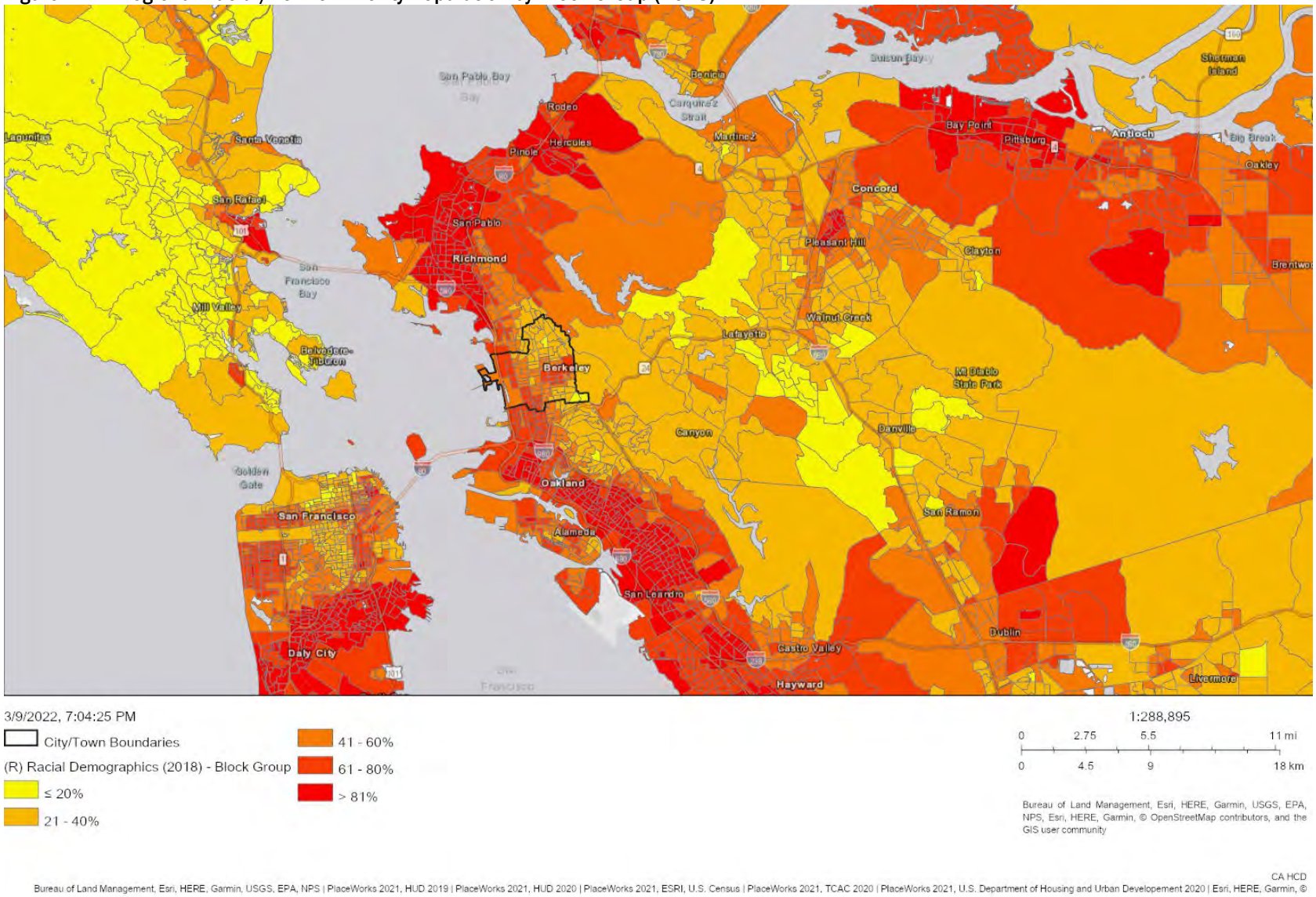
Figure E-17 shows racial/ethnic minority populations by block group in the region. Racial/ethnic minority populations tend to be more concentrated in coastal cities such as Richmond, Oakland, San Leandro, and Daly City. Compared to these jurisdictions, Berkeley and San Francisco have lower concentrations of non-White populations. Most Marin County jurisdictions and inland Contra Costa and Alameda County jurisdictions have much smaller racial/ethnic minority populations. As shown in Figure E-18, most tracts in the region have White predominant populations. There are pockets of tracts with Asian predominant populations located in San Francisco, Daly City, coastal East Bay areas, and central Contra Costa/Alameda County. Hispanic predominant populations are concentrated in and around the cities of San Leandro and Richmond. Black predominant populations follow a similar pattern and are also concentrated around the City of Oakland.

Table E-17: Racial/Ethnic Composition of Berkeley, Alameda County, The Bay Area, and Neighboring Jurisdictions (2019)

Race/Ethnicity	Berkeley	Alameda County	Bay Area	El Cerrito	Emeryville	Oakland	Orinda	Piedmont	Richmond
American Indian and Alaska Native, non-Hispanic	0.2%	0.3%	0.2%	0.5%	0.1%	0.3%	0.0%	0.0%	0.3%
Asian and API, non-Hispanic	21.3%	30.7%	26.7%	30.9%	29.0%	15.9%	16.4%	17.9%	15.5%
Black or African American, non-Hispanic	7.7%	10.3%	5.8%	4.7%	14.7%	23.2%	1.2%	1.4%	19.5%
White, non-Hispanic	53.3%	31.4%	39.3%	47.5%	40.3%	28.3%	72.0%	70.9%	17.8%
Other Race or Multiple Races, non-Hispanic	6.1%	4.8%	4.5%	6.2%	6.3%	5.2%	5.2%	5.6%	4.4%
Hispanic or Latinx	11.4%	22.4%	23.5%	10.2%	9.6%	27.0%	5.3%	4.2%	42.5%
Total	121,485	1,656,754	7,710,026	25,398	11,899	425,097	19,646	11,317	109,884

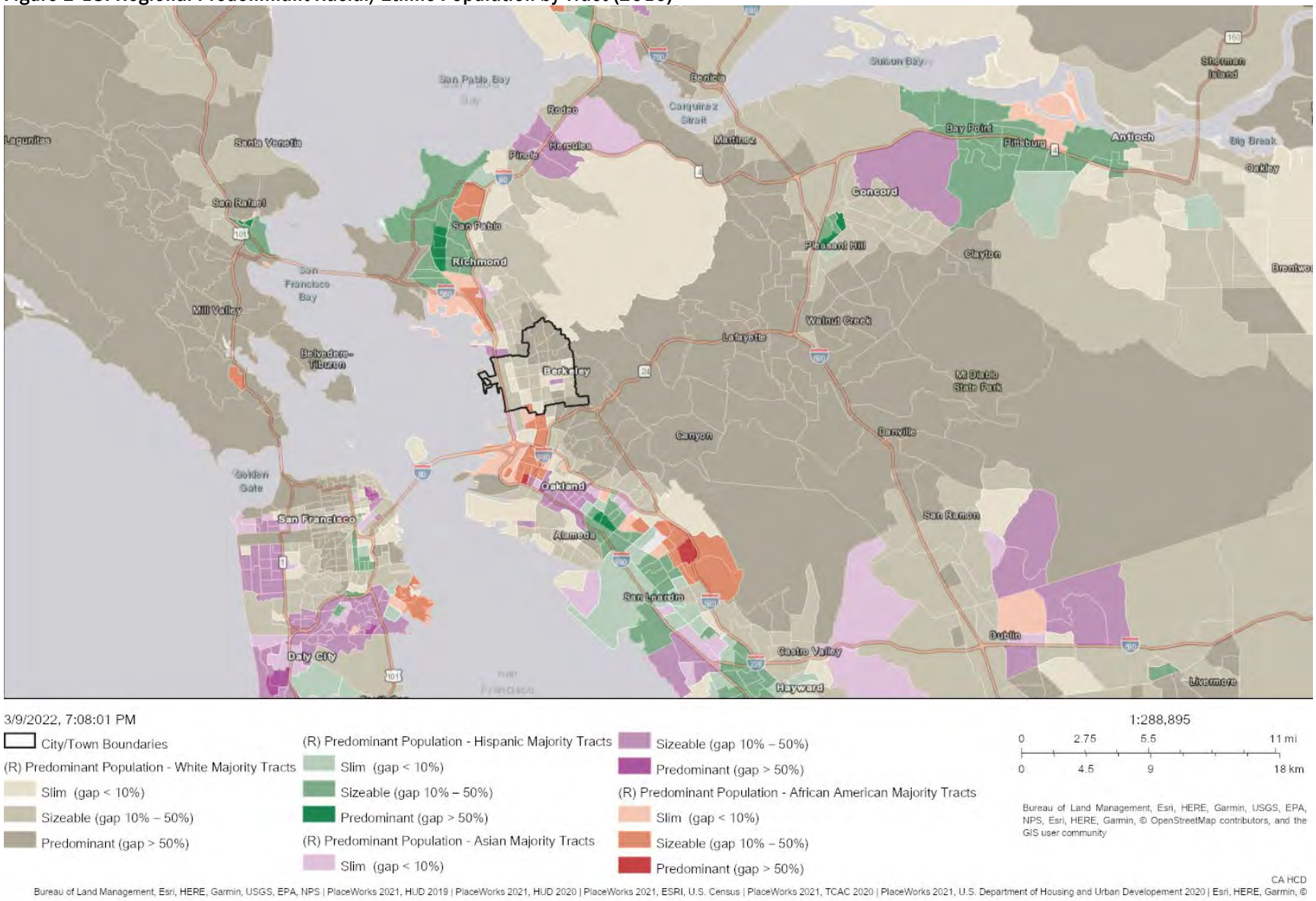
Note: API = Asian Pacific Islander.
Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

Figure E-17: Regional Racial/Ethnic Minority Population by Block Group (2018)



Source: HCD AFFH Data Viewer (Environmental Systems Research Institute (ESRI), 2018), 2022.

Figure E-18: Regional Predominant Racial/Ethnic Population by Tract (2010)

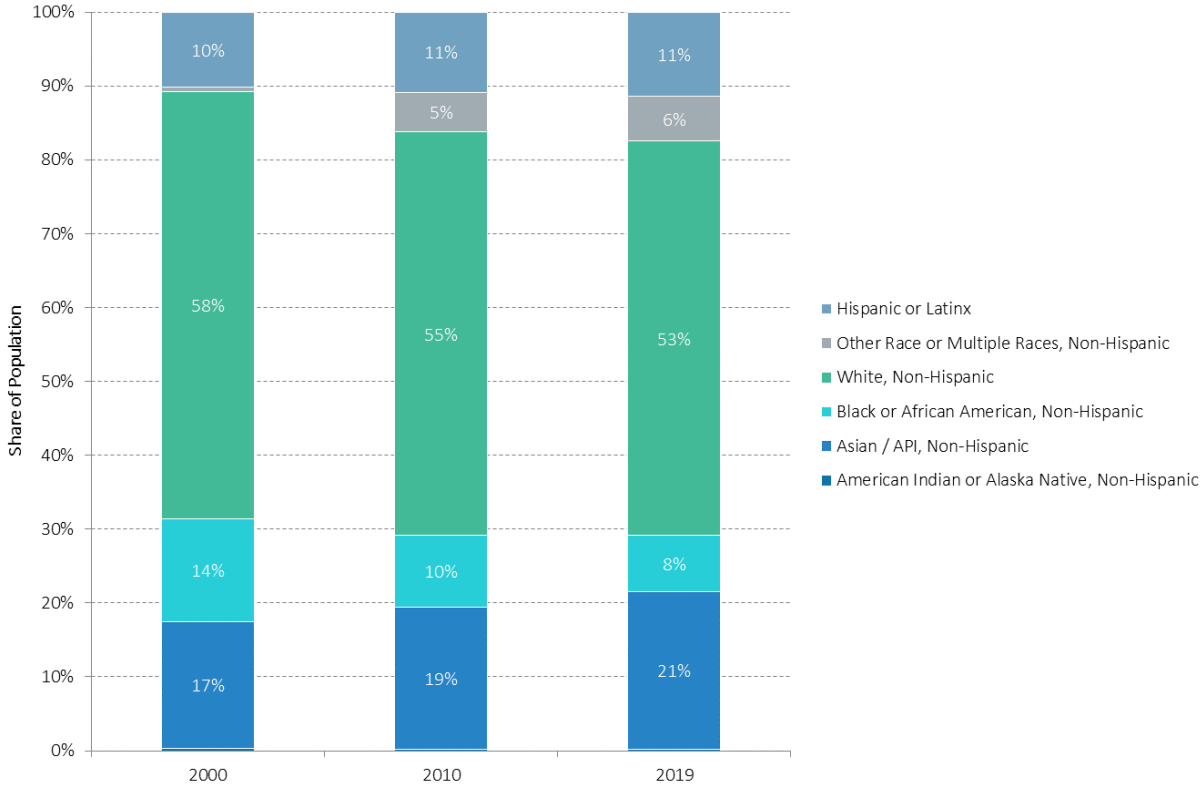


Source: HCD AFFH Data Viewer (PlaceWorks 2021, ESRI, U.S. Census), 2022.

Local Trends. As shown in Table E-17 above, Berkeley has a larger White population compared to both Alameda County and the Bay Area. In the City, 53.3 percent of the population is White, 21.3 percent is Asian or API, and 11.4 percent is Hispanic or Latino. The White population in Berkeley is comparable to El Cerrito, but larger than Emeryville, Oakland, and Richmond and smaller than Orinda and Piedmont.

Figure E-19 shows the racial and ethnic composition trends in Berkeley from 2000 to 2019. Though the White population has decreased since 2000, it remains the predominant population in the City, accounting for 53 percent. The Black population has steadily decreased over the past two decades, representing 14 percent of the population in 2000 compared to only 8 percent in 2019. Conversely, the Asian/API population has increased from 17 percent to 21 percent. The Hispanic population has increased slightly (from 10 percent to 11 percent) during the same period. These trends are consistent with patterns in the County and Bay Area. The Black population in the County and Bay Area was 14.6 percent and 7.3 percent, respectively, in 2000. As of 2019, only 10.3 percent of the County population and 5.8 percent of the Bay Area population is Black or African American. The Asian population in the County increased from 20.3 percent to 30.7 percent during the same period.

Figure E-19: Racial/Ethnic Composition Trends (2000-2019)



Source: ABAG Housing Element Data Package (based on Decennial Census 2000, 2010; 2015-2019 ACS (5-Year Estimates)), 2021.

Isolation, dissimilarity, and Thiel's H indices are presented in Table E-18. Isolation indices for all racial/ethnic groups, except Latinos, are higher in Berkeley than in the Bay Area as a whole. Since 2000, Asian/Pacific Islander and Latino communities have become increasingly isolated. During the same period, isolation of Black and White communities decreased.

Dissimilarity indices indicate that segregation in Berkeley amongst all non-White and White communities is higher than in the Bay Area. Like the region, segregation between Black and White communities is the highest. According to HUD's definitions for dissimilarity, segregation between Black and White

populations in Berkeley is moderate. Segregation is considered low between White and Asian, Latino, and non-White communities. Over the past two decades, Asian and White residents have become increasingly segregated, while segregation has decreased between Black, Latino, non-White and White communities.

Table E-18: Racial/Ethnic Segregation Indices – Berkeley (2000-2020)

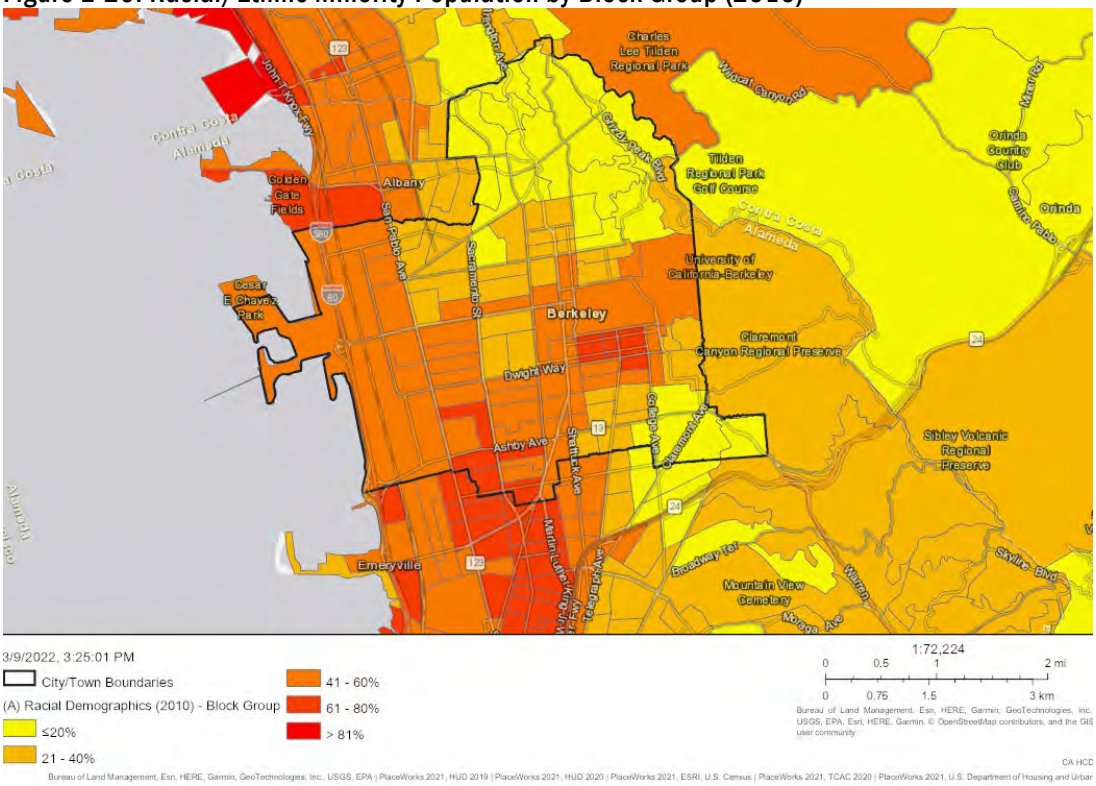
	2000	2010	2020
Isolation Index			
Asian/Pacific Islander	0.232	0.269	0.255
Black	0.316	0.211	0.134
Latinx	0.137	0.14	0.167
White	0.623	0.598	0.543
Dissimilarity Index			
Asian or Pacific Islander/White	0.276	0.324	0.303
Black/White	0.590	0.524	0.418
Latinx/White	0.382	0.310	0.279
Non-White/White	0.338	0.290	0.240
Thiel's H	0.128	0.097	0.065

Source: ABAG AFFH Data Report (based on Decennial Census 2000, 2010, and 2020), 2022.

Figure E-20 and Figure E-21 compare racial/ethnic minority concentrations geographically in 2010 and 2018. The non-White population increased from 45.3 percent in 2010 to 46.7 percent in 2019. This pattern is shown below, where the racial/ethnic minority population increased in most Berkeley block groups between 2010 and 2018. Racial/ethnic minorities are most concentrated in block groups in the Southside, Downtown Berkeley, and UC Berkeley neighborhoods (adjacent to the University of California-Berkeley (UC Berkeley) campus), South Berkeley neighborhood, Gilman neighborhood, and Northwest Berkeley neighborhood. There are only three block groups, two in the southeast corner of the City and one in the Berkeley Hills neighborhood, where less than 20 percent of the population belongs to a racial or ethnic minority group. The Berkeley Hills, Thousand Oaks, Live Oak, Northbrae, and Claremont neighborhoods generally have smaller populations of people of color compared to the remainder of the City.

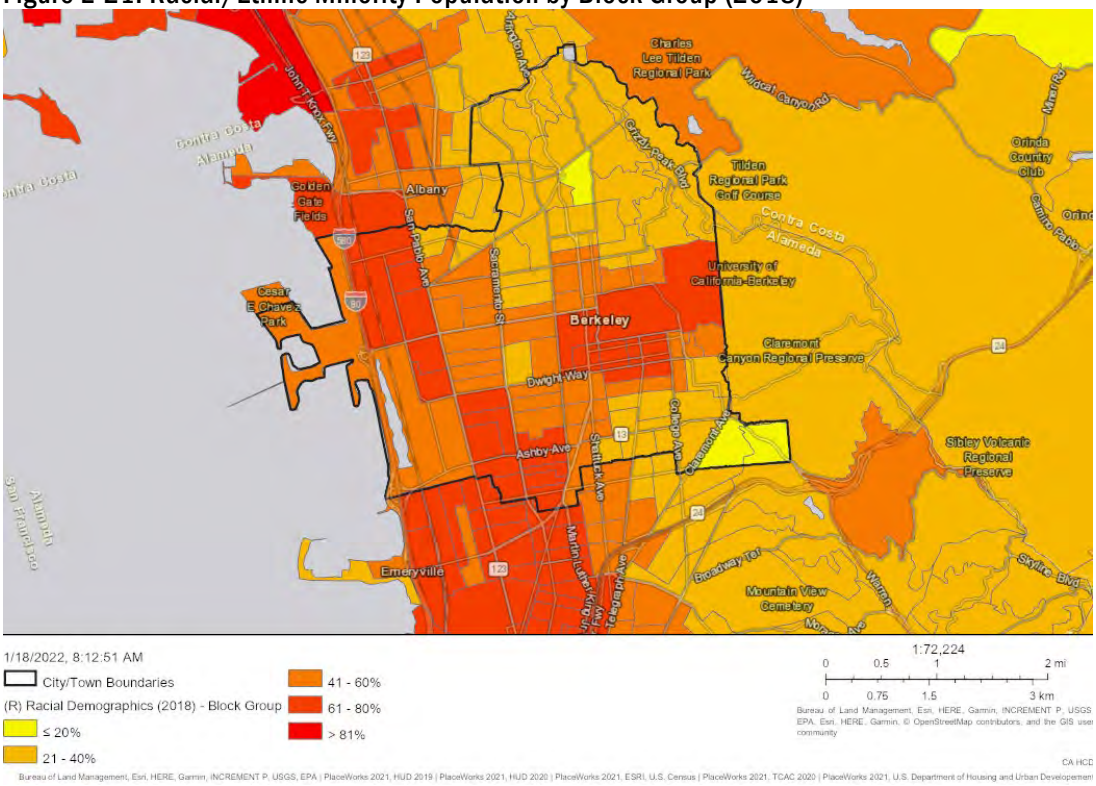
Predominant racial and ethnic populations by tract are included in Figure E-22. Most tracts in the City have predominant White populations. The northeastern section of the City and Claremont neighborhood have the largest White predominant populations, whereas tracts in the central, southern, and western parts of the City, and tracts surrounding UC Berkeley, have smaller White predominant populations. One tract, located southwest of UC Berkeley (Southside neighborhood), has an Asian predominant population, and one tract, located in the southwestern corner of the City (South Berkeley neighborhood), has an African American predominant population.

Figure E-20: Racial/Ethnic Minority Population by Block Group (2010)



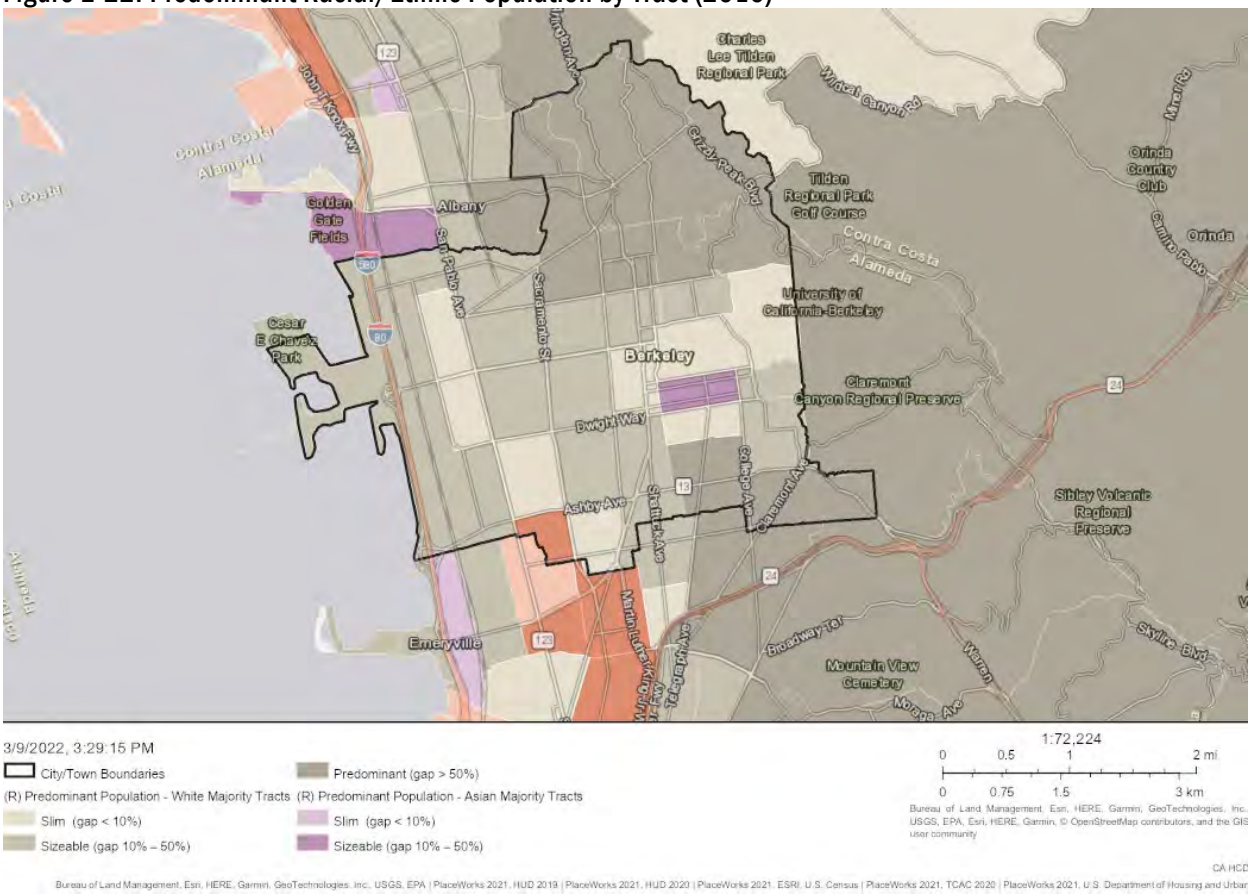
Source: HCD AFFH Data Viewer (ESRI, 2010), 2022.

Figure E-21: Racial/Ethnic Minority Population by Block Group (2018)



Source: HCD AFFH Data Viewer (ESRI, 2018), 2022.

Figure E-22: Predominant Racial/Ethnic Population by Tract (2010)



Source: HCD AFFH Data Viewer (PlaceWorks 2021, ESRI, U.S. Census), 2022.

Persons with Disabilities

Persons with disabilities have special housing needs because of the lack of accessible and affordable housing, and the higher health costs associated with their disability. In addition, many may be on fixed incomes that further limits their housing options. Persons with disabilities also tend to be more susceptible to housing discrimination due to their disability status and required accommodations associated with their disability.

Regional Trends. Nearly 10 percent of the population in the Bay Area experiences one or more disability. Compared to the Bay Area, Alameda County and Berkeley have smaller population of persons with disabilities of 9.2 percent and 8.7 percent, respectively. Typically, elderly populations have higher rates of disability. However, according to the 2015-2019 ACS, 13.5 percent of the population in Alameda County is aged 65 or older compared to 14.5 percent in Berkeley.

Table E-19: Disability Status (2019)

	No Disability	With Disability	Percent with Disability
Berkeley	110,597	10,529	8.7%
Alameda County	1,496,381	151,368	9.2%
Bay Area	6,919,762	735,533	9.6%

Note: Data reflects civilian noninsitutionalized population.
Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

Disability status by race/ethnicity and age for Alameda County is shown in Table E-20. The proportion of persons with disabilities has increased from 8.7 percent in 2010 to 9.2 percent in 2019. The population of children 5 years and younger, 5 to 17, and adults 18 to 34 was higher in 2010 than during the 2015-2019 ACS. A larger proportion of the Black/African American population, Asian population, population of some other race, and Hispanic/Latino population experiences a disability during the 2015-2019 ACS compared to the 2010 ACS. Currently, nearly 50 percent of residents aged 75 and 20.4 percent aged 65 to 74 experience a disability. Disabilities are most common amongst American Indian and Alaska Native populations (18.3 percent), followed by Black or African American populations (16 percent), Native Hawaiian and Other Pacific Islander populations (11.4 percent), and White non-Hispanic populations (10.8 percent).

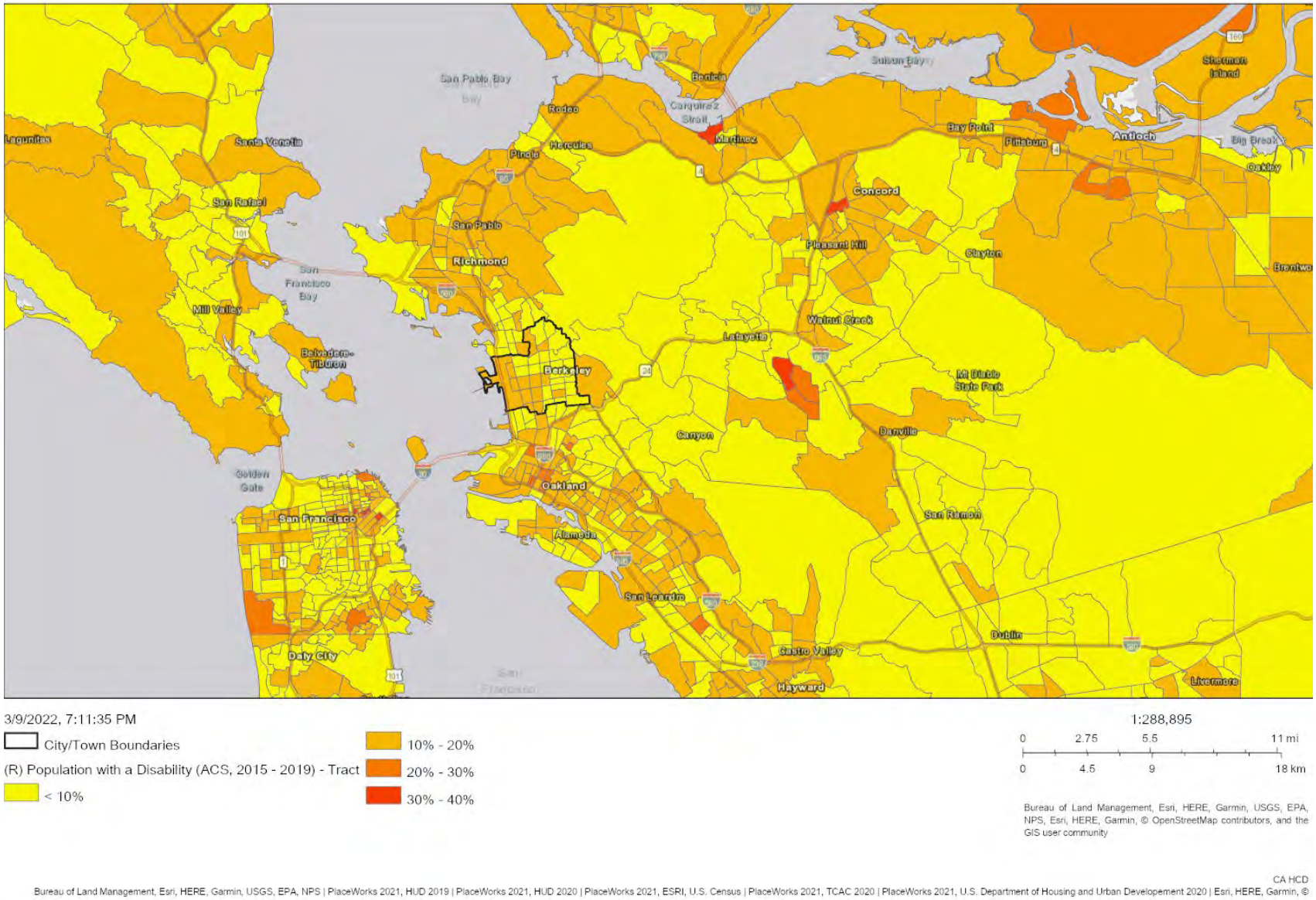
Table E-20: Disability Status by Race/Ethnicity and Age – Alameda County (2019)

	2010		2019	
	Total Population	Percent with Disability	Total Population	Percent with Disability
Race/Ethnicity				
Black or African American alone	182,074	13.5%	173,685	16.0%
American Indian and Alaska Native alone	7,669	18.3%	10,994	18.3%
Asian alone	399,087	5.8%	498,238	6.5%
Native Hawaiian and Other Pacific Islander alone	12,058	12.8%	13,860	11.4%
Some other race alone	129,721	4.8%	178,444	6.3%
Two or more races	83,001	8.1%	106,471	8.0%
White alone, not Hispanic or Latino	509,065	11.0%	517,094	10.8%
Hispanic or Latino (of any race)	338,676	5.7%	369,021	7.3%
Age				
Under 5 years	97,132	0.8%	96,846	0.4%
5 to 17 years	243,258	2.9%	246,829	3.6%
18 to 34 years	375,312	3.6%	414,206	4.4%
35 to 64 years	619,198	8.3%	669,979	7.9%
65 to 74 years	90,338	22.4%	130,769	20.4%
75 years and over	75,297	49.4%	89,120	49.5%
Total civilian noninstitutionalized population	1,500,535	8.7%	1,647,749	9.2%

Source: 2010 ACS (1-Year Estimate) and 2015-2019 ACS (5-Year Estimates).
Note: 5-Year Estimates are not available for 2010 ACS disability status data.

The regional populations of persons with disabilities by tract are shown in Figure E-23. In most tracts, less than 20 percent of the population experiences a disability. There are small concentrations of tracts with populations of persons with disabilities exceeding 20 percent in and surrounding the cities of Oakland, San Francisco, Martinez, Concord, Walnut Creek, and Antioch. Tracts within the City of Berkeley have populations of persons with disabilities comparable to surrounding areas.

Figure E-23: Regional Population of Persons with Disabilities by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

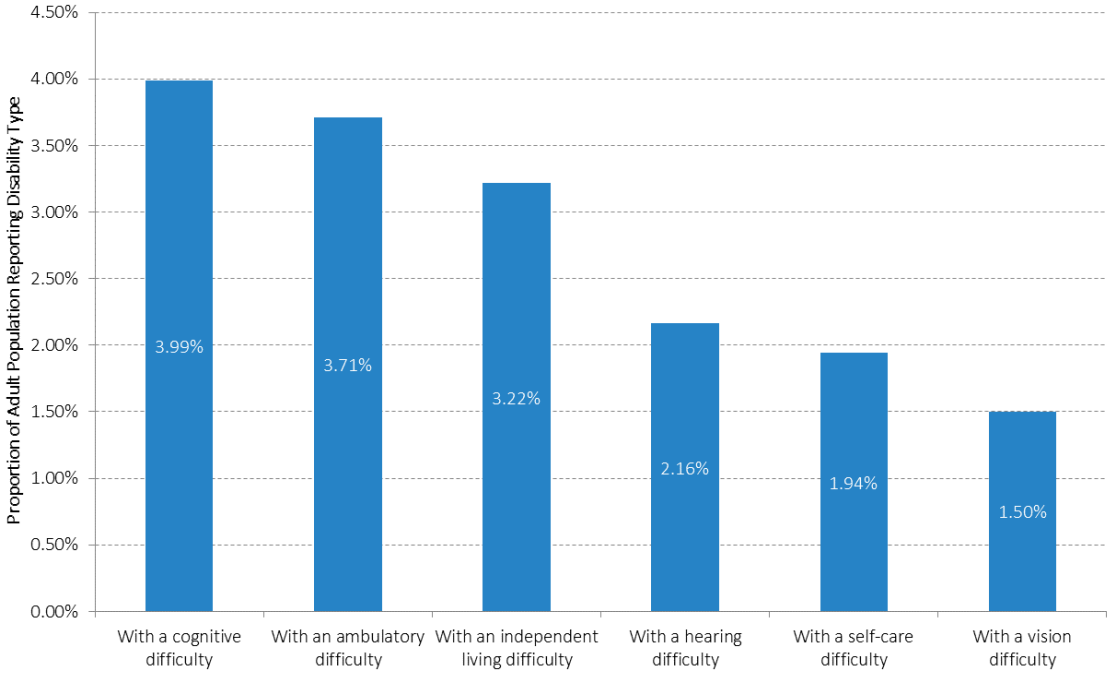
Local Trends. As discussed previously, Berkeley has a population of persons with disabilities of 8.7 percent, smaller than both Alameda County and the Bay Area. Despite having a smaller senior population that Berkeley, Alameda County has a population of persons with disabilities of 9.2 percent.

According to the California Department of Developmental Services (DDS), there are 279 adults and 161 children under 18 in the City with a developmental disability, representing 0.3 percent of the adult population and 1.1 percent of the child population, respectively. The California DDS is responsible for overseeing 330,000 Californians with developmental disabilities including cerebral palsy, intellectual disabilities, Down syndrome, autism, epilepsy, and related conditions.

Disability status often affects employment status. The 2015-2019 ACS estimates that of the population in the labor force, the unemployment rate for persons with disabilities is 12 percent compared to 5 percent amongst persons without a disability.

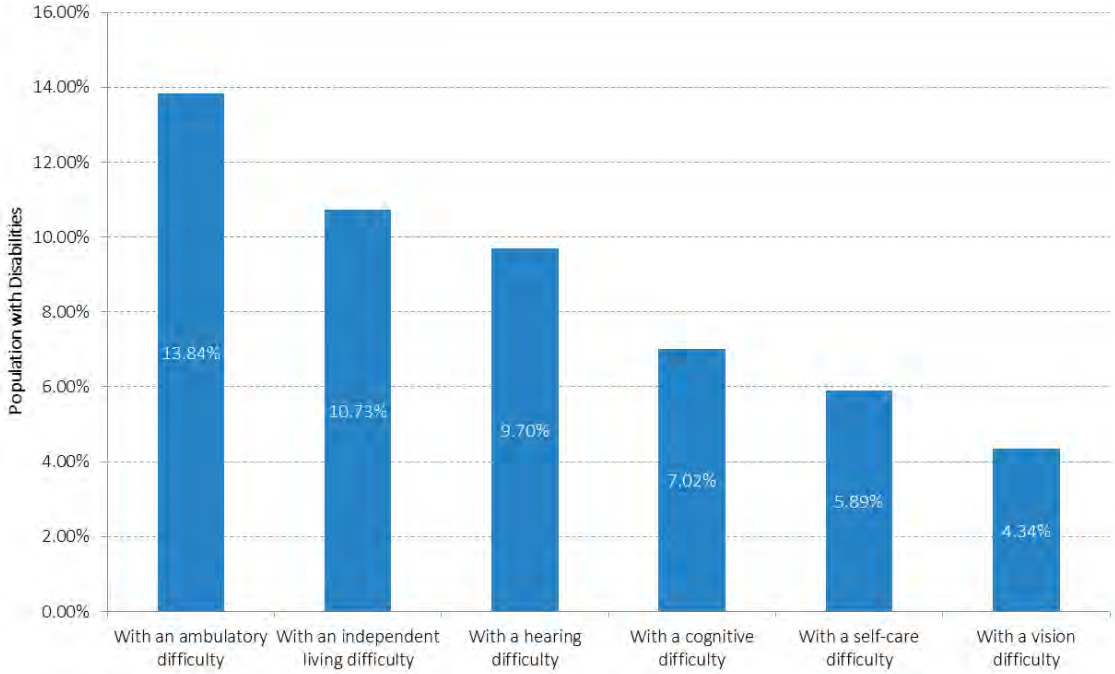
Disability status by disability type for the adult population is presented in Figure E-24. Cognitive difficulties are the most common followed be ambulatory difficulties and independent living difficulties. Ambulatory and independent living difficulties are generally more common amongst the elderly population. Disability by disability type for the senior population is shown in Figure E-26. Approximately 14 percent of the population aged 65 and older experience an ambulatory difficulty. Independent living and hearing difficulties are also common. Of the elderly Berkeley population, 10.7 percent experience an independent living difficulty and 9.7 percent experience a hearing difficulty.

Figure E-24: Adult Population by Disability Type (2019)



Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

Table E-21: Senior Population (65+) by Disability Type (2019)



Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

As shown in Table E-22, the population of persons with disabilities grew from 6.2 percent during the 2010 ACS to 8.7 percent during the 2015-2019 ACS. A significantly smaller share of the Black/African American population experienced a disability during the 2010 ACS (9.2 percent) compared to the 2010-2015 ACS (22.3 percent). A larger proportion of persons aged 5 to 64 experienced a disability in 2019 than in 2010. Currently, like the County, Native Hawaiian and Other Pacific Islander (29.5 percent), Black or African American (22.3 percent), and American Indian and Alaska Native (11.4 percent) populations have the highest rate of disability in the City. Asian, White, and Hispanic/Latino populations, and populations two or more races or a race not listed, all have rates of disability below the citywide average. As discussed previously, Berkeley has a larger elderly population compared to the County. However, seniors in Berkeley experience disabilities at a lower rate compared to the County. Only 39 percent of persons 75 or older and 17.2 percent of persons aged 65 to 74 experience a disability.

Table E-22: Disability Status by Race/Ethnicity and Age – Berkeley (2019)

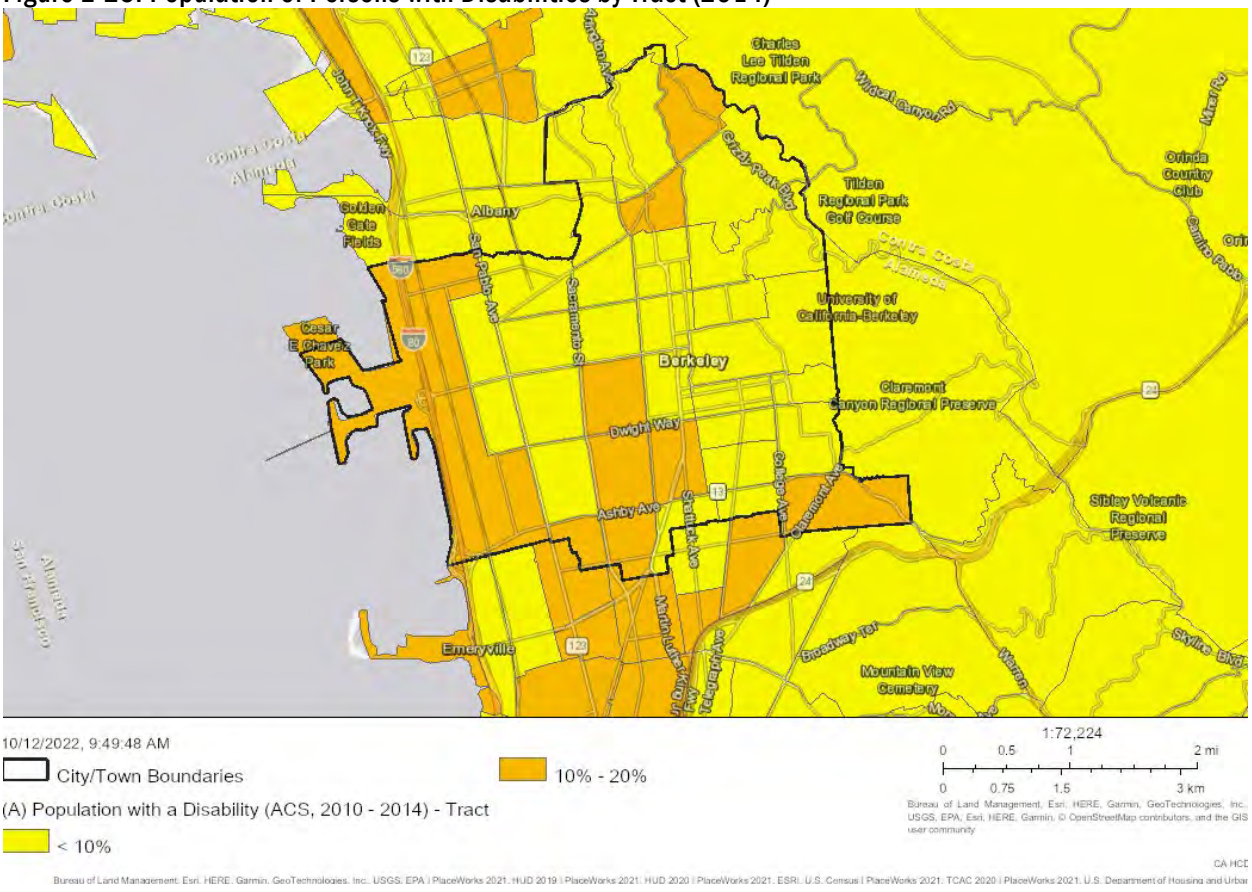
	2010		2019	
	Total Population	Percent with Disability	Total Population	Percent with Disability
Race/Ethnicity				
Black or African American alone	12,364	9.2%	9,492	22.3%
American Indian and Alaska Native alone	NA	NA	634	11.4%
Asian alone	23,274	4.2%	25,437	4.9%
Native Hawaiian and Other Pacific Islander alone	NA	NA	566	29.5%
Some other race alone	NA	NA	4,618	8.2%
Two or more races	4,974	5.0%	9,121	8.1%
White alone, not Hispanic or Latino	60,784	7.2%	64,614	8.3%
Hispanic or Latino (of any race)	NA	NA	13,795	7.6%
Age				
Under 5 years	4,559	1.2%	4,323	0.3%
5 to 17 years	10,227	1.8%	10,834	3.4%
18 to 34 years	48,989	1.1%	52,245	4.6%

35 to 64 years	34,832	6.1%	36,495	9.5%
65 to 74 years	8,394	19.4%	11,128	17.2%
75 years and over	5,255	47.1%	6,101	39.0%
Total civilian noninstitutionalized population	112,256	6.2%	121,126	8.7%

Source: 2010 ACS (1-Year Estimate) and 2015-2019 ACS (5-Year Estimates).
Note: 5-Year Estimates are not available for 2010 ACS disability status data. NA = Not Available.

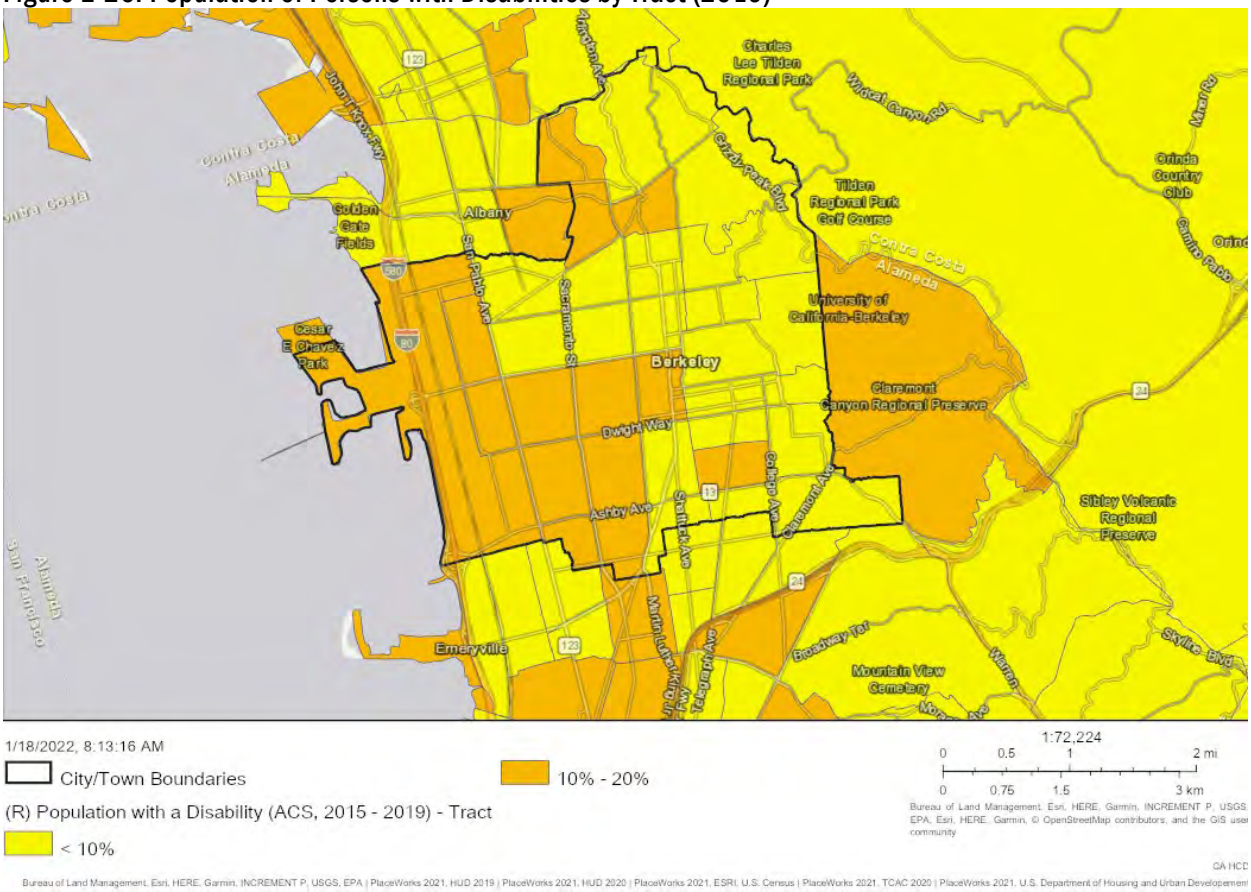
Figure E-25 and Figure E-26 show the population of persons with disabilities by tract in the City using 2010-2014 and 2015-2019 ACS data, respectively. The population of persons with disabilities has increased in several tracts, specifically in the Central and South Berkeley neighborhoods. In general, the western side of the City has a higher rate of persons with disabilities, were between 10 and 20 percent of the population experiences a disability. In most tracts on the eastern side, less than 10 percent of the population experiences a disability. Despite the lower concentration of persons with disabilities, the north-and southeastern corners of the City have smaller populations of seniors aged 65 and older (Figure E-27). The western side of the City has a moderate population of elderly adults, indicating that it is not the senior population alone contributing to patterns of persons with disabilities in the City. The heightened concentration of persons with disabilities on the western side of the City may be, in part, due to the higher concentration of racial/ethnic minorities. As discussed above, Native Hawaiian/Pacific Islander, Black, and American Indian/Alaska Native populations have significantly higher rates of disability compared to the City as a whole.

Figure E-25: Population of Persons with Disabilities by Tract (2014)



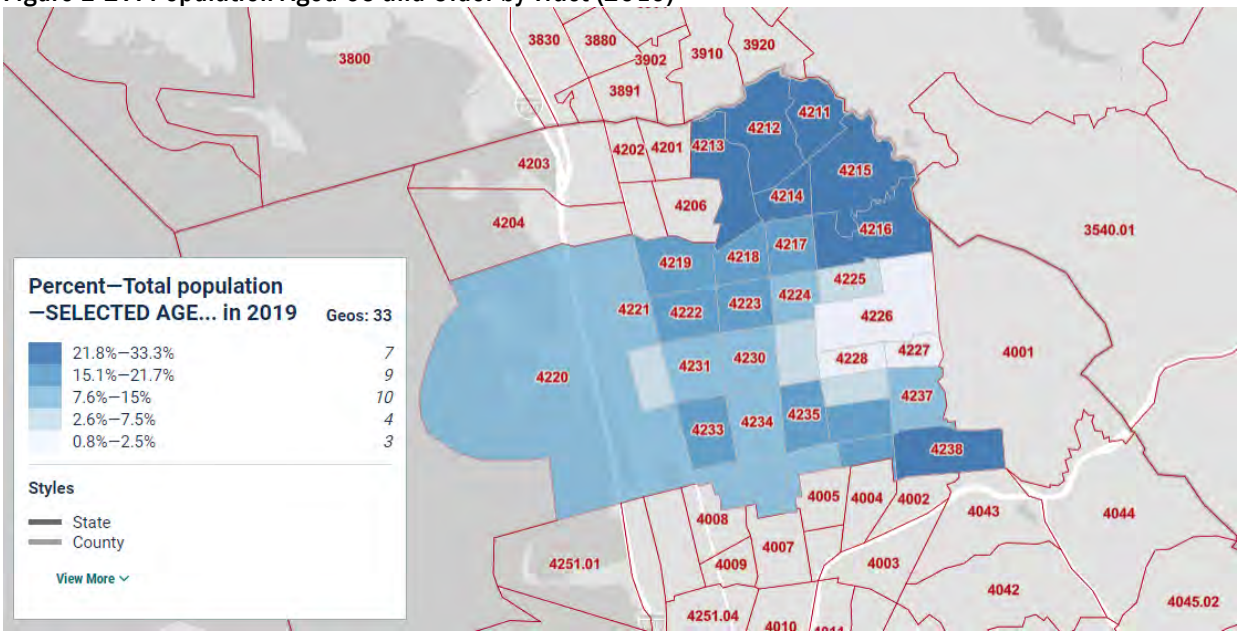
Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Figure E-26: Population of Persons with Disabilities by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Figure E-27: Population Aged 65 and Older by Tract (2019)



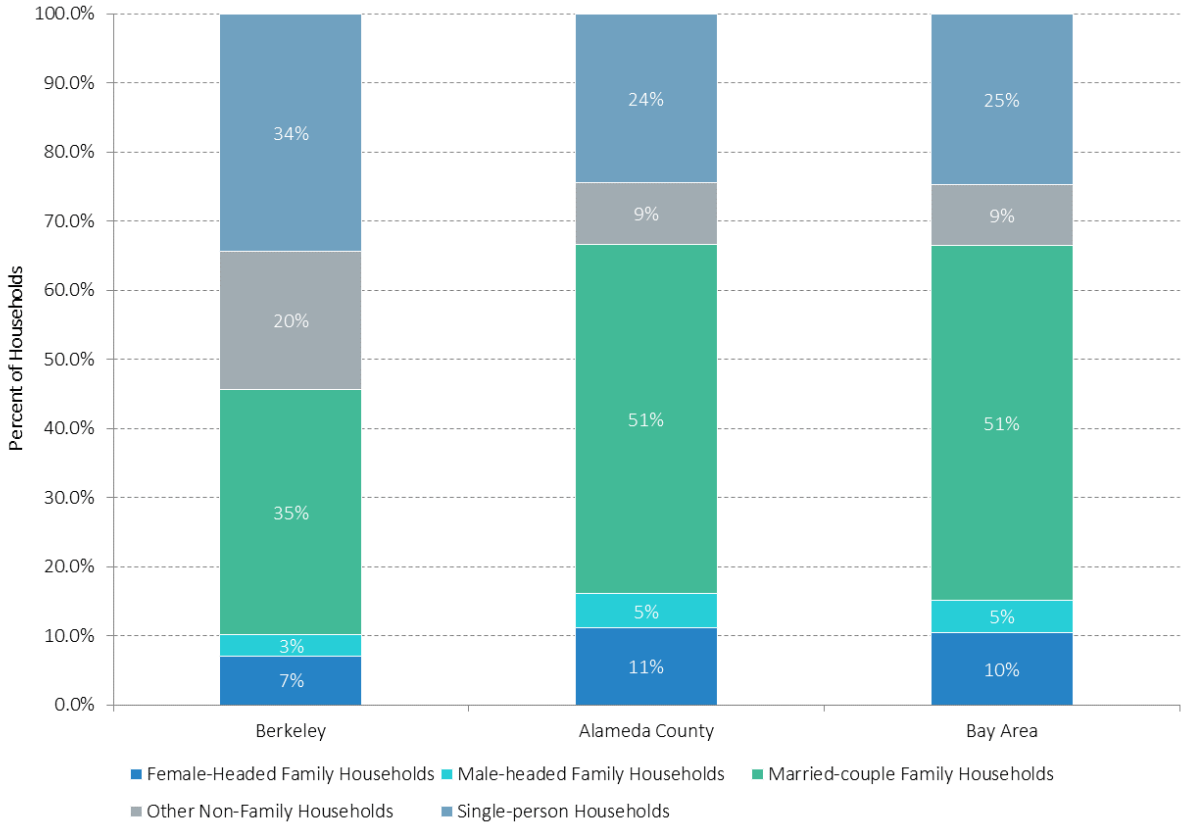
Source: 2015-2019 ACS (5-Year Estimates).

Familial Status

Under the Fair Housing Act, housing providers may not discriminate because of familial status. Familial status covers: the presence of children under the age of 18, pregnant persons, any person in the process of securing legal custody of a minor child (including adoptive or foster parents). Examples of familial status discrimination include refusing to rent to families with children, evicting families once a child joins the family through, e.g., birth, adoption, custody, or requiring families with children to live on specific floors or in specific buildings or areas. Single parent households are also protected by fair housing law.

Regional Trends. The composition of household types in Alameda County is comparable to the Bay Area. In both jurisdictions, approximately half of households are married couple families and a quarter are single-person households (Figure E-28). The County has a slightly higher concentration of female-headed family households compared to the Bay Area (11 percent vs. 10 percent, respectively). Both jurisdictions are comprised of nine percent other non-family households and five percent male-headed family households. Berkeley has a significantly larger proportion of single-person households (34 percent) and other non-family households (20 percent). This trend is likely due to the large percentage of students living in the City. Students and young adults are more likely to live alone or in non-family households.[10] According to the 2015-2019 ACS, only 8.5 percent of the total population Countywide is enrolled in college or graduate school compared to 29 percent in Berkeley. Similarly, 8.5 percent of the Alameda County population and 24.8 percent of the Berkeley population is aged 18 to 24.

Figure E-28: Household Type Composition – Berkeley, Alameda County, and Bay Area (2019)



[10] A nonfamily household consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related.

Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

As shown in Table E-23, Alameda County and the Bay Area have comparable proportions of households with and without children. Approximately 34 percent of households in the County and 32 percent of households in the Bay area have one or more children under the age of 18. Consistent with the household trends described above, Berkeley has a substantially smaller proportion of households with children. Only 19.7 percent of Berkeley households have one or more children. The Census considers 18 to 34-year-olds young adults. Adults aged 34 and older are more likely to be married and/or have children. Only a quarter of the Alameda population is aged 18 to 34 compared to 43.2 percent of the Berkeley population. Additionally, 40.6 percent of the County population and 30 percent of the Berkeley population is aged 35 to 64.

Table E-23: Households by Presence of Children – Berkeley, Alameda County, and Bay Area (2019)

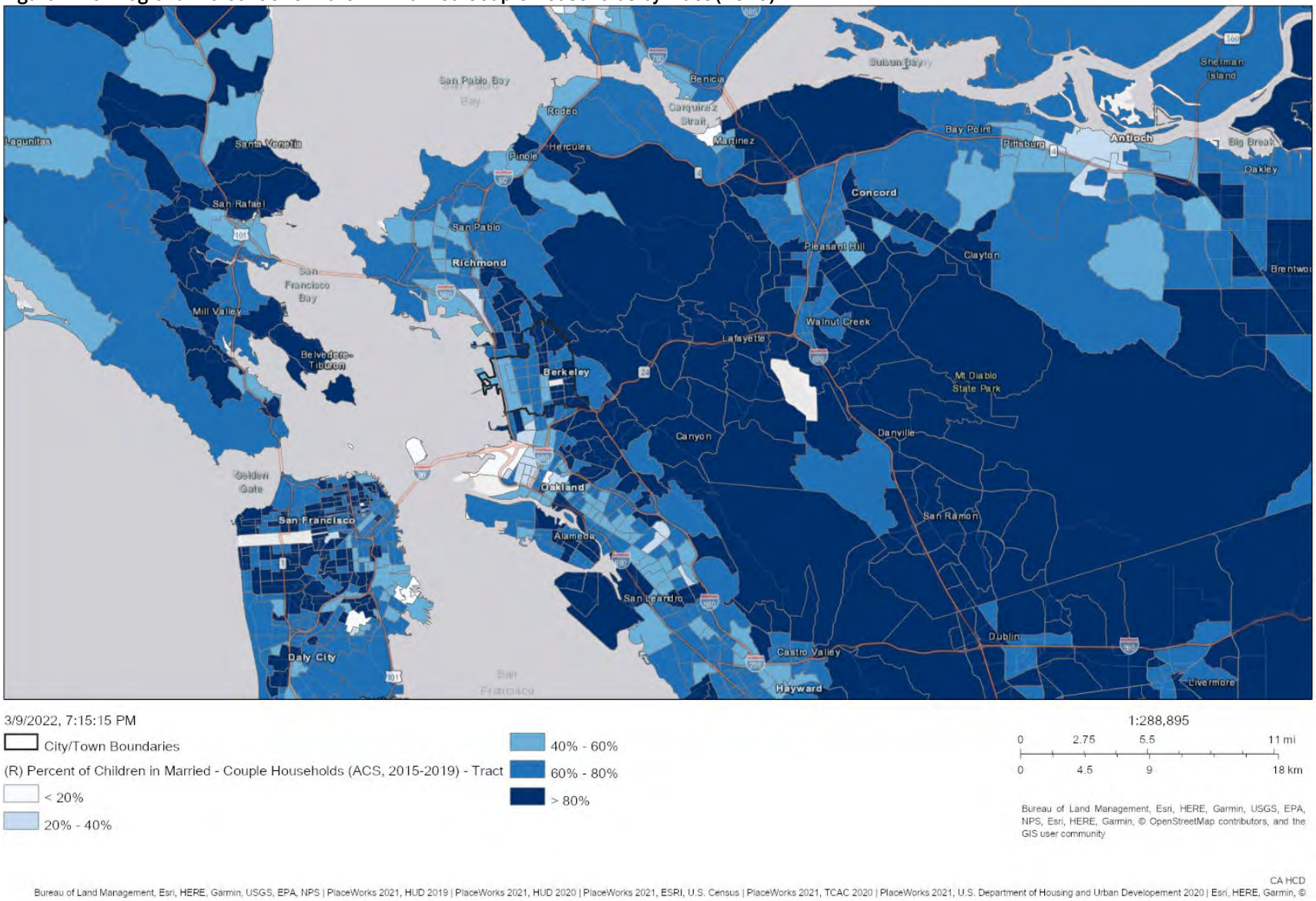
Household Type	Berkeley	Alameda County	Bay Area
With one or more children under 18	19.7%	33.6%	32.0%
With no children	80.3%	66.4%	68.0%
Total Households	45,352	577,177	2,731,434

Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

Figure E-29 shows the percent of children living in married couple households by tract for the region. Tracts with higher percentages of children living in married couple households are scattered throughout the region; however, they are most concentrated in the inland areas of Contra Costa County and Alameda County. Tracts with larger populations of children living in married couple households are also distributed throughout San Francisco and some Marin County jurisdictions. Tracts with fewer children living in married couple households are more concentrated in coastal East Bay cities including Oakland and Richmond. These areas tend to have larger racial/ethnic minority populations (see Figure E-16).

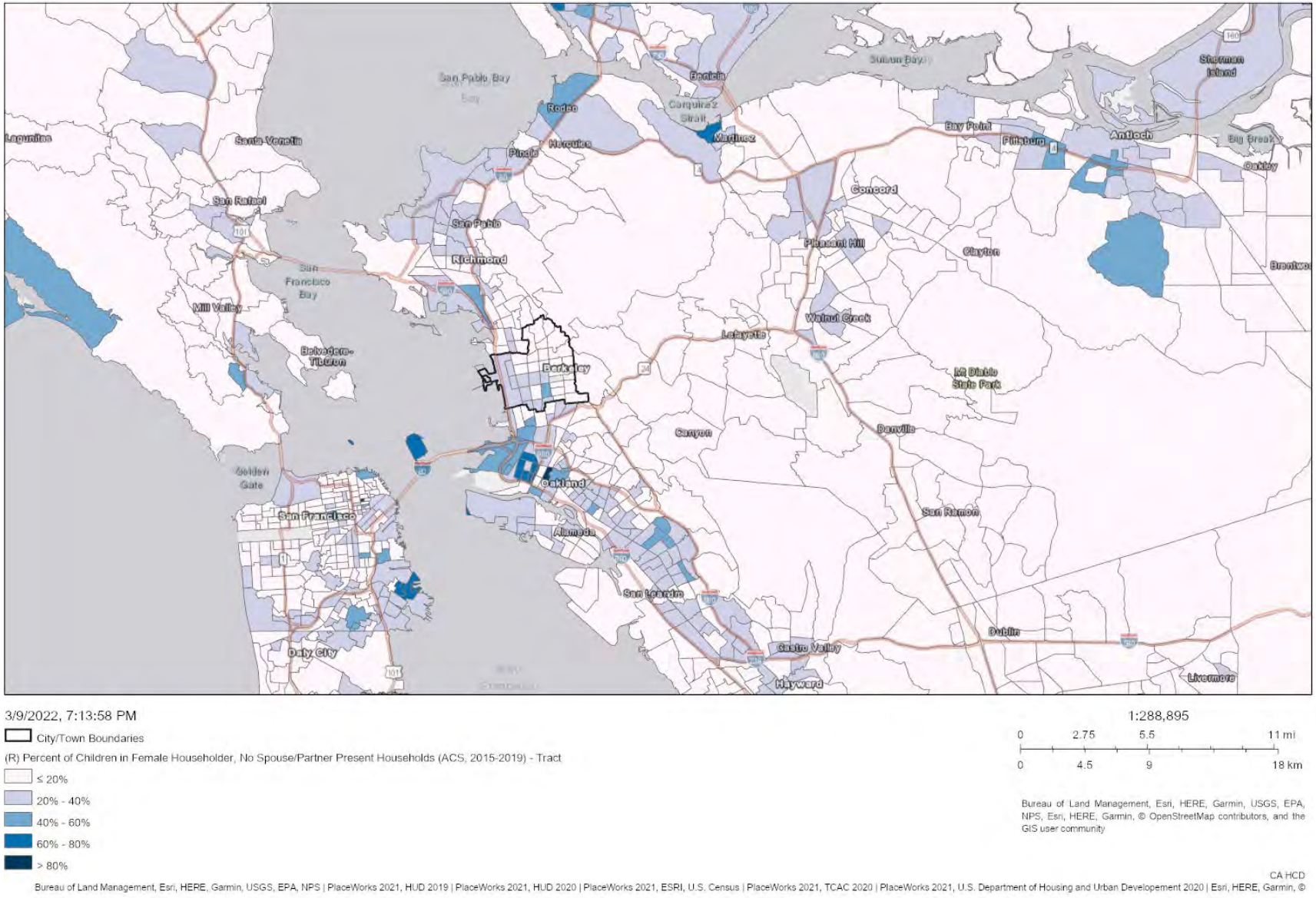
Populations of children living in single-parent female-headed households are shown in Figure E-30. Tracts with larger populations of children in female-headed households are most concentrated on the western side of San Francisco, Oakland, and northern Contra Costa County. The western side of Alameda County has a higher concentration of children in female-headed households compared to central Contra Costa County jurisdictions to the east. As mentioned previously, these areas tend to have higher concentrations of non-White populations (see Figure E-16).

Figure E-29: Regional Percent of Children in Married Couple Households by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Figure E-30: Regional Percent of Children in Female-Headed Households by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Local Trends. Due to the large population of students and young adults, the City has a larger concentration of non-family households including single-person households. As presented in Table E-24, the number of married couple families has increased most substantially since 2010 (+15.5 percent), followed by male-headed families (+9.3 percent), and other non-family households (+7.3 percent). The City saw a decrease in female-headed families (-11 percent) and single-person households (-2.1 percent) during the same period. In 2010, students enrolled in college or graduate school represented 31.3 percent of the population, decreasing to 29 percent in 2019.[11] However, the overall population increased from 34,207 student to 35,210 students, or three percent. The increase in other non-family households and decrease in single-person households may be, in part, due to rising rent prices that may be unaffordable to students. Cost burden and rent increases are further described in Section E4.5 *Cost Burden*, of this Appendix.

Table E-24: Change in Household Type Composition (2010-2019)

Household Type	2010		2019		Percent Change
	Households	Percent	Households	Percent	
Female-Headed Family	3,615	8.4%	3,216	7.1%	-11.0%
Male-Headed Family	1,272	2.9%	1,390	3.1%	9.3%
Married Couple Family	13,928	32.2%	16,092	35.5%	15.5%
Other Non-Family	8,433	19.5%	9,045	19.9%	7.3%
Single-person	15,941	36.9%	15,609	34.4%	-2.1%
Total Households	43,189	100.0%	45,352	100.0%	5.0%

Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021; 2006-2010 ACS (5-Year Estimates).

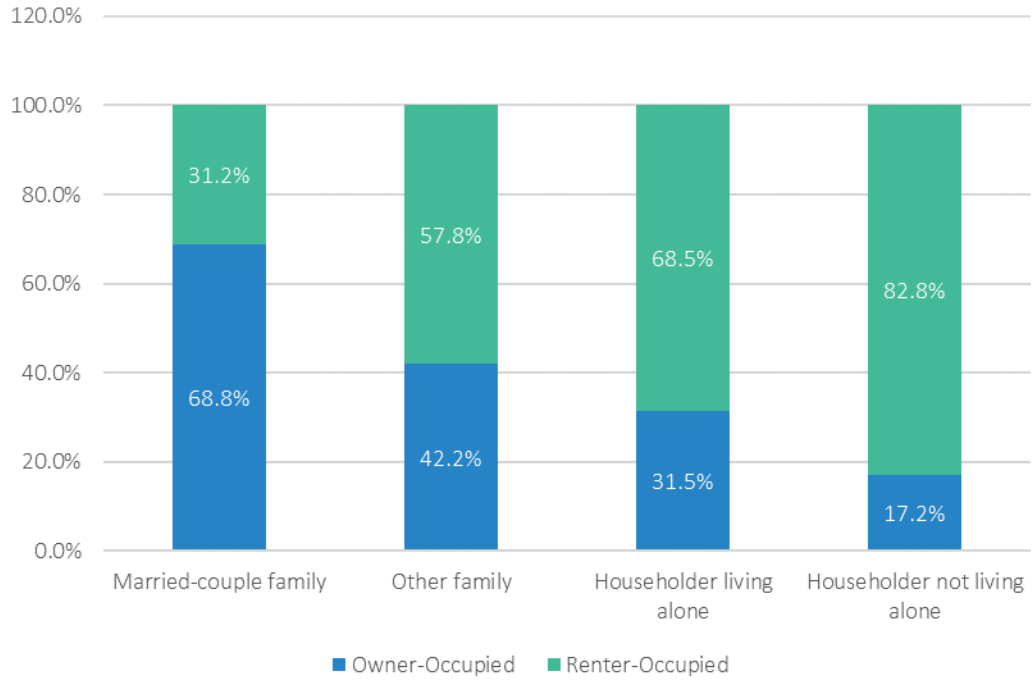
Family households are more likely to own their homes than non-family households. Figure E-31 shows that 68.8 percent of married couple families and 42.2 percent of other families (male- or female-headed households with no spouse) are owners. In comparison, only 31.5 percent of single-person households and 17.2 percent of other non-family households own their home. Despite the increase in married couple families in the City, the proportion of owner-occupied households decreased from 43.3 percent in 2010 to 42.9 percent in 2019. The percentage of married couple families who rent their home increased from 27.5 to 31.5 during the same period. Increasing housing costs, discussed further in Section E4.5 *Cost Burden*, likely contribute to the increase in married couple family renters.

As presented in Table E-23, 19.7 percent of Berkeley households have children, an increase from 19.4 percent in 2010. According to UC Berkeley Career Center data, 66 percent of the 2017-2019 graduating classes stayed in the Bay Area post-graduation.[12] Young adults remaining in the City likely contribute to the increase in married couple family households and households with children.

[11] Based on 2006-2010 and 2015-2019 ACS (5-Year Estimates).

[12] Zhao, Alex (2020). The Daily Californian, Where do UC Berkeley students go? http://projects.dailycal.org/2020/uc-berkeley-students-after-grad/.

Figure E-31: Household Type by Tenure (2019)

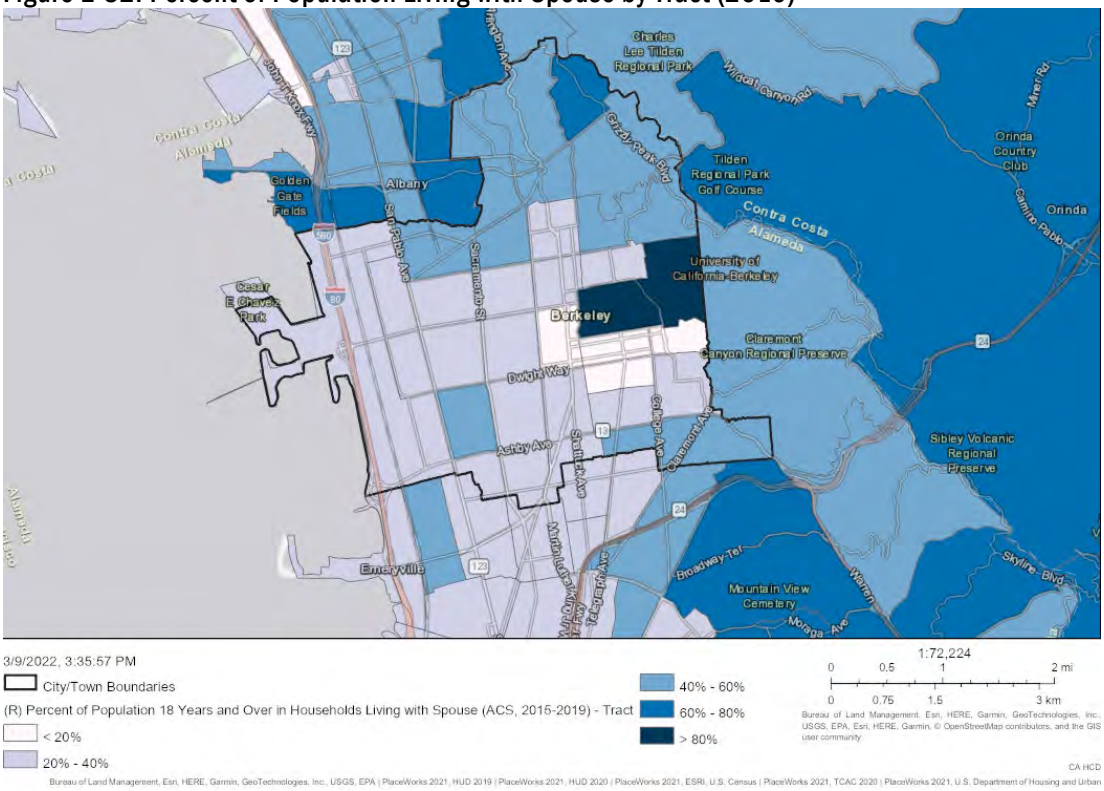


Source: 2015-2019 ACS (5-Year Estimates).

In most tracts, less than 40 percent of the population lives with a spouse. Tracts where fewer than 20 percent of the population live with a spouse have large student populations. Student populations by tract are further described in Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*. While the HCD Data Viewer does show that there is one tract in the City, encompassing the UC Berkeley campus, where more than 80 percent of the adult population lives with their spouse (Figure E-18), according to the 2021 UC Berkeley Long Range Development Plan (LRDP), there are no existing beds (households/population) in Campus Park (western side of tract 4226- dark blue where >80% of population lives with spouse). Furthermore, the only student family housing available is in Albany, north of the City. Based on this knowledge, none of the population in this tract lives with a spouse.

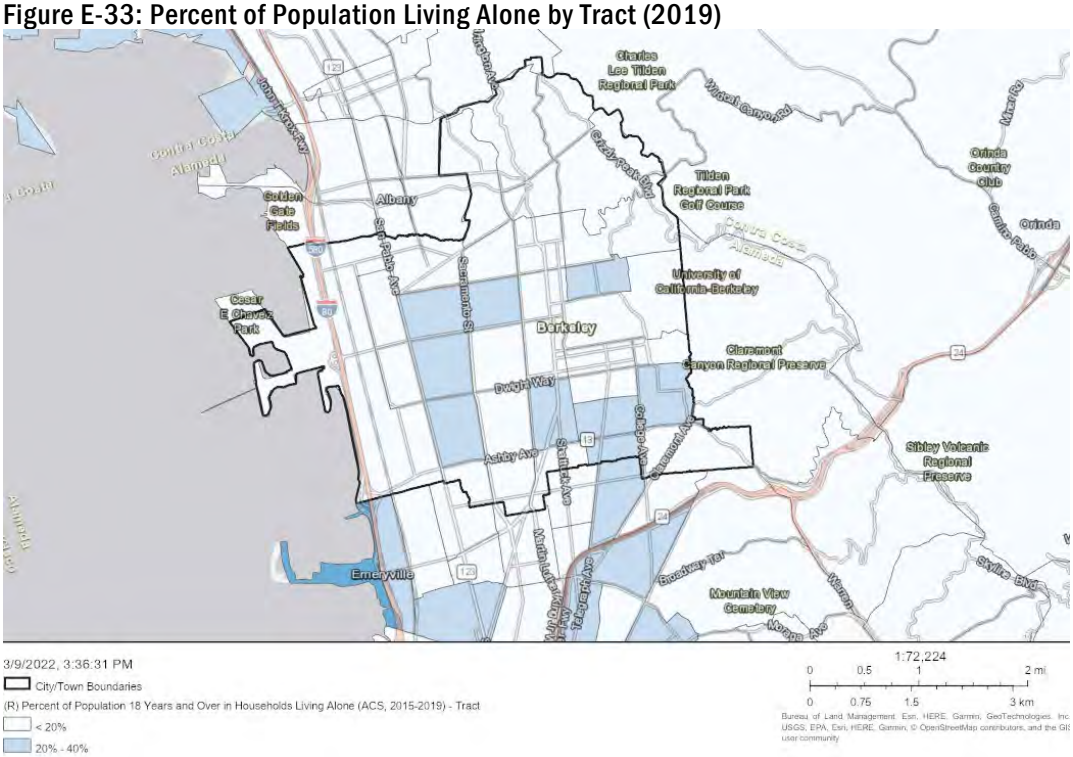
There are no areas in the City where more than 40 percent of the population lives alone (Figure E-33). In most of Berkeley, less than 20 percent of the population lives alone and tracts where 20 to 40 percent of the population lives alone are generally not concentrated in a single area of the City. The Berkeley Hills, Thousand Oaks, Live Oak, Northbrae, and Claremont neighborhoods have larger populations of persons living with a spouse and small populations of persons living alone. These areas have lower concentrations of non-White residents and higher concentrations of elderly adults (see Figure E-21 and Figure E-27). This pattern probably reflects the demographic changes in the City over time, with some of the longest tenure residents being White and are generally aging in place.

Figure E-32: Percent of Population Living with Spouse by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022. Note on UC Berkeley campus: The AFFH Data Viewer data on the UC Berkeley campus is inaccurate. There are no existing beds or population living in Campus Park and three student dormitories (Stern Hall, Bowles Hall, and International House) on Campus West. Student family housing is available only in University Village in the City of Albany.

Figure E-33: Percent of Population Living Alone by Tract (2019)



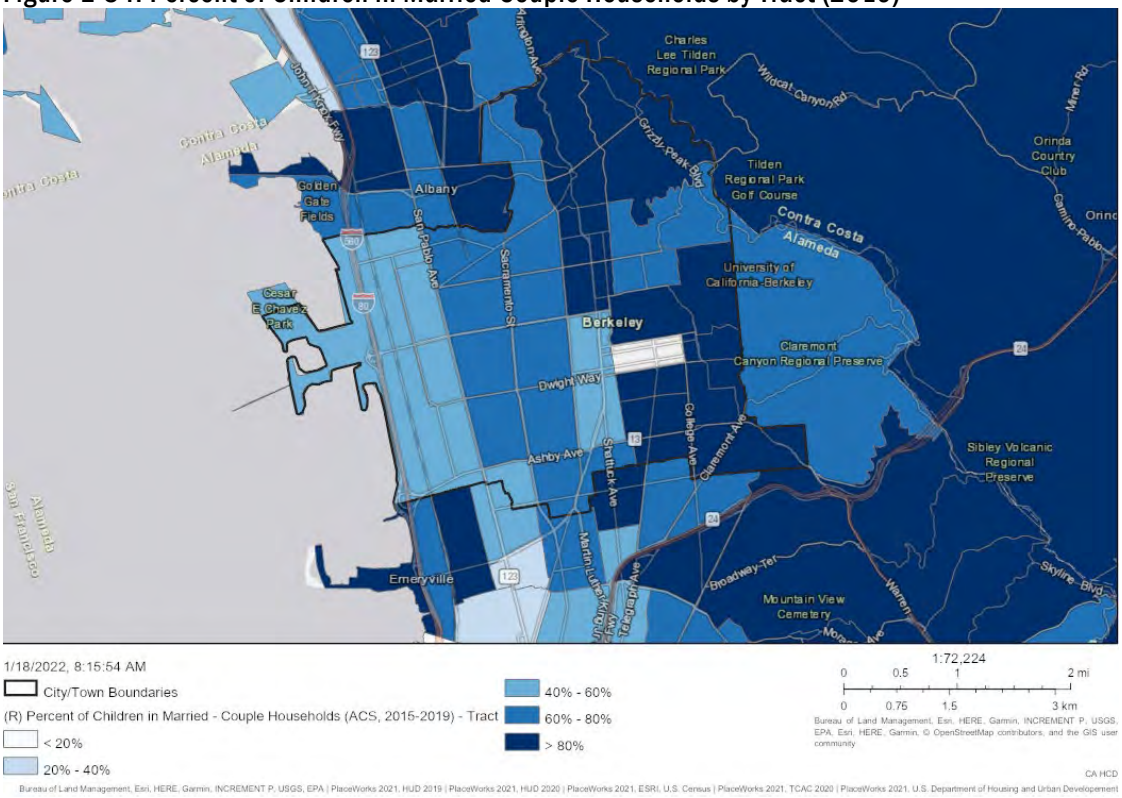
Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Children living in married couple households are most condensed in tracts on the eastern side of the City, particularly the Berkeley Hills, Live Oak, UC Berkeley, Panoramic Hill, Elmwood District, and Claremont neighborhoods (Figure E-34). In five tracts, three on the eastern side of the City, one in Downtown Berkeley, and one in South Berkeley/Le Conte, between 40 and 60 percent of children live in married couple households. Between 60 and 80 percent of children live in married couple households in the remaining tracts. Most tracts where fewer than 60 percent of children live in married couple households also have slightly higher concentrations of persons with disabilities (more than 10 percent) and contain block groups with moderate to high proportions of racial/ethnic minorities (see Figure E-21 and Figure E-26).

Consistent with Figure E-34, Figure E-35 shows that more children on the western side of Berkeley live in single-parent female-headed households compared to the eastern side. There is only one tract in Berkeley where more than 40 percent of children live in female-headed households, located in South Berkeley/Le Conte bound by Dwight Way to the north, Fulton Street to the east, Ashby Avenue to the south, and Martin Luther King Jr. Way to the west. Nearly 50 percent of children in this tract live in female-headed households. This tract does not contain particularly high concentrations of racial or ethnic minority populations (less than 60 percent) or persons with disabilities (less than 10 percent) (see Figure E-21 and Figure E-26). According to the 2015-2019 ACS, 13.6 percent of female-headed households with children and 12.5 percent of female-headed households without children are below the poverty level, fewer than the Citywide average of 19.2 percent.[13]

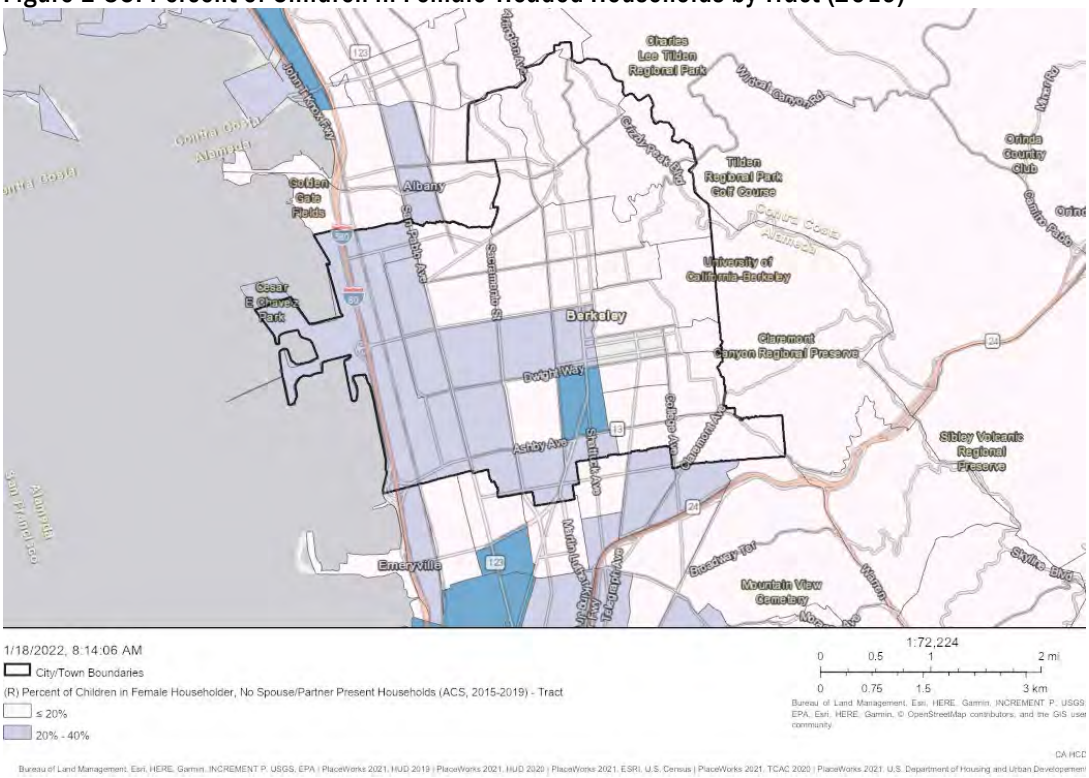
[13] Following the Office of Management and Budget's (OMB) Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using the Consumer Price Index (CPI-U). The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps).

Figure E-34: Percent of Children in Married Couple Households by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Figure E-35: Percent of Children in Female-Headed Households by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Income Level

Identifying low or moderate income (LMI) geographies and individuals is important to overcome patterns of segregation. HUD defines an LMI area as a Census tract or block group where over 51 percent of the households are LMI (based on HUD income definition of up to 80 percent of the Area Median Income (AMI)).

Regional Trends. Lower income households are considered households earning 80 percent or less than the AMI. Since the 2006-2010 ACS (HUD CHAS data), the proportion of households earning 100 percent or more of the AMI has increased from 50.9 percent to 52.7 percent. Based on HUD CHAS data using the 2006-2010 ACS, 39.7 percent of households are considered lower income, a smaller proportion compared to recent HUD CHAS data. Renter-occupied households tend to have lower incomes compared to owner-occupied households. In Alameda County, 38.4 percent of households are considered lower income, including 24.1 percent of owner-occupied households and 54.5 percent of renter-occupied households (Table E-25). There are slightly more owners than renters in the County (53 percent vs. 47 percent, respectively). Approximately 68 percent of owners earn more than 100 percent of the AMI compared to only 35.5 percent of renters.

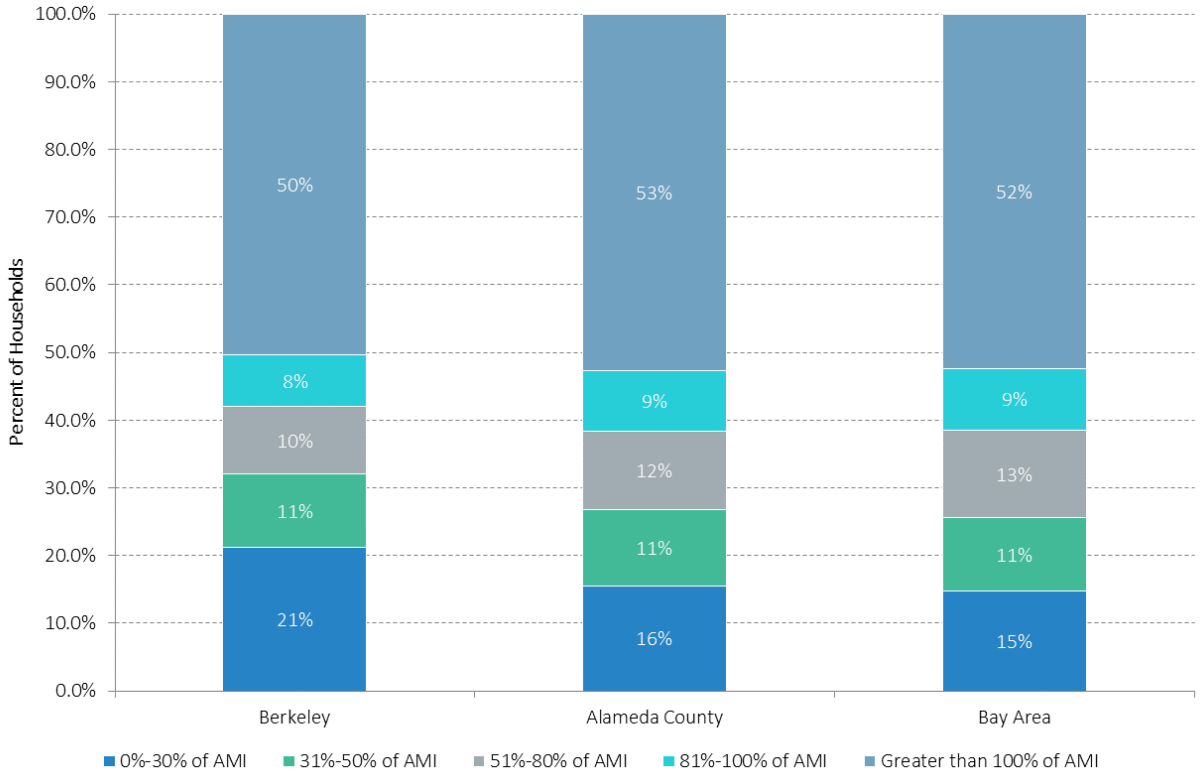
Table E-25: Household Income Level by Tenure – Alameda County (2010 and 2017)

Income Category	Owner-Occupied		Renter-Occupied		All Households		All Households (2010)	
	Households	Percent	Households	Percent	Households	Percent	Households	Percent
0%-30% of AMI	21,310	7.1%	67,065	25.1%	88,375	15.5%	78,920	14.8%
31%-50% of AMI	23,455	7.8%	40,385	15.1%	63,840	11.2%	58,335	11.0%
51%-80% of AMI	27,845	9.2%	38,270	14.3%	66,115	11.6%	73,975	13.9%
81%-100% of AMI	24,140	8.0%	26,855	10.0%	50,995	9.0%	49,855	9.4%
> 100% of AMI	204,915	67.9%	94,830	35.5%	299,745	52.7%	270,935	50.9%
Totals	301,665	100.0%	267,405	100.0%	569,070	100.0%	532,025	100.0%

Source: HUD CHAS Data (based on 2006-2010 and 2013-2017 ACS), 2020.

Figure E-36 compares household income levels for Berkeley, Alameda County, and the Bay Area. Both the Bay Area and Alameda County have slightly higher proportions of households earning more than 100 percent of the AMI compared to Berkeley. There is a higher concentration of lower income households in the City compared to the County and Bay Area. Specifically, 21 percent of Berkeley households are considered extremely low income, earning 30 percent or less than the AMI, whereas only 16 percent of Alameda County households and 15 percent of Bay Area households fall into the same income category.

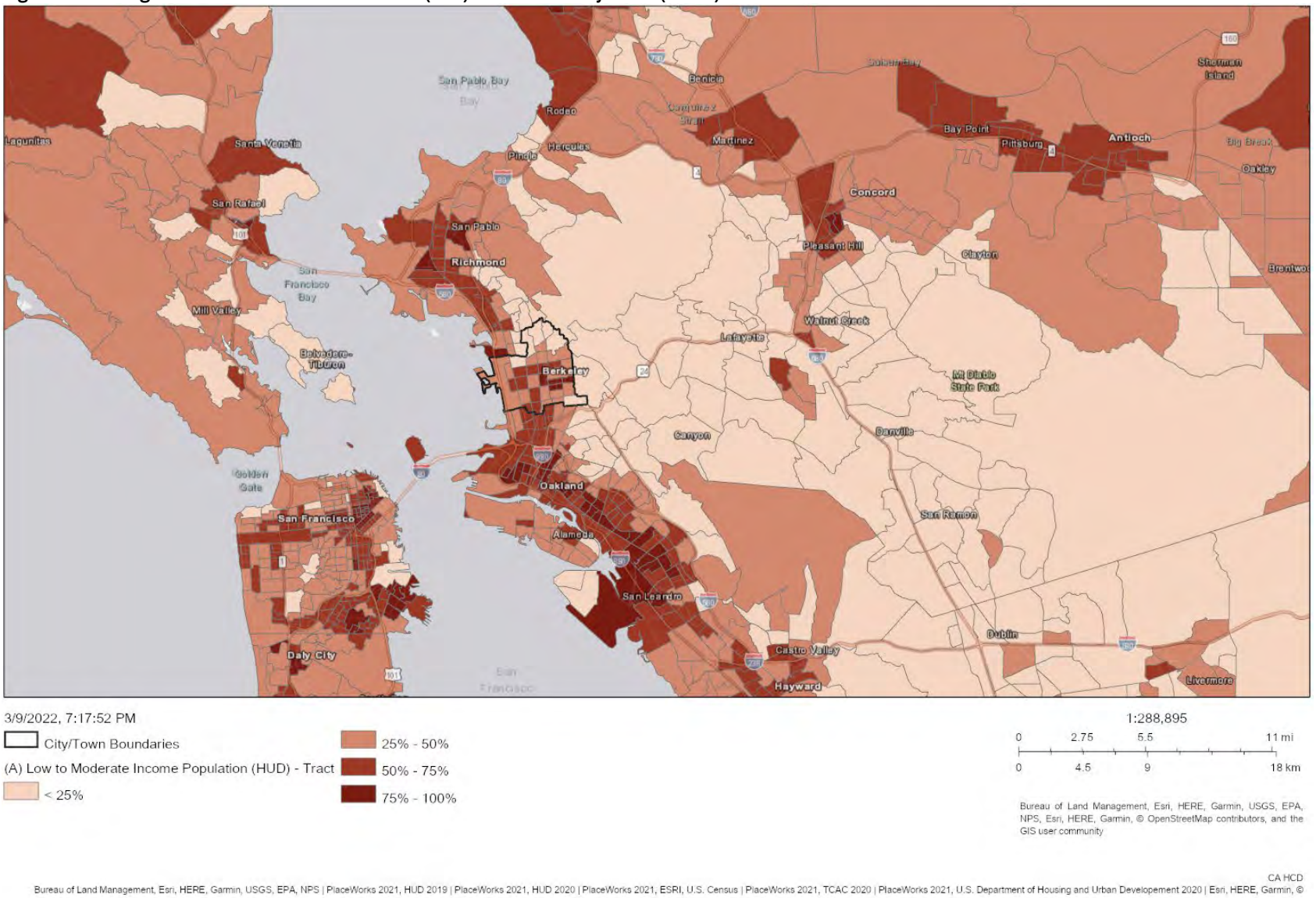
Figure E-36: Households by Household Income Level – Berkeley, Alameda County, and Bay Area (2017)



Source: ABAG Housing Element Data Package (based on 2020 HUD CHAS Data (2013-2017 ACS)), 2021.

Regional LMI households by tract are presented in Figure E-37. LMI areas, where more than 51 percent of households are low or moderate income, are found throughout the region, specifically in San Francisco, Daly City, and coastal Contra Costa and Alameda County (from San Leandro to Richmond). LMI areas are also dispersed to a lesser extent in Marin County and northern Contra Costa County. In general, LMI areas follow patterns similar to racial/ethnic minority populations and populations of children in female-headed households (see Figure E-16 and Figure E-28).

Figure E-37: Regional Low to Moderate Income (LMI) Households by Tract (2015)



Source: HCD AFFH Data Viewer (HUD 2020, based on 2011-2015 ACS), 2022.

Local Trends. Berkeley has a larger population of lower income households compared to the County and Bay Area region (see Figure E-36, above). Like the County, the proportion of households earning 100 percent or more of the AMI has increased since the 2006-2010 ACS. According to 2010 estimates, 44.7 percent of households were considered lower income, a larger proportion than more recent 2017 data. Approximately 42 percent of Berkeley households earn 80 percent or less than the AMI, compared to 38.4 in the County. A smaller proportion of owners, but larger proportion of renters, in the City are considered lower income. Only 18.6 percent of owners are lower income. Nearly 60 percent of renter-occupied households are lower income, likely due to the concentration of students and young adults in the City. Students and young adults tend to have lower paying jobs or no job at all. As mentioned previously, 19.2 percent of the Berkeley population is below the poverty level, significantly higher than 9.9 percent Countywide.

Table E-26: Household Income Level by Tenure (2010 and 2017)

Income Category	Owner-Occupied		Renter-Occupied		All Households		All Households (2010)	
	Households	Percent	Households	Percent	Households	Percent	Households	Percent
0%-30% of AMI	1,140	5.8%	8,510	32.7%	9,650	21.2%	8,665	20.1%
31%-50% of AMI	1,035	5.3%	3,880	14.9%	4,915	10.8%	4,555	10.5%
51%-80% of AMI	1,449	7.4%	3,104	11.9%	4,553	10.0%	6,095	14.1%
81%-100% of AMI	1,204	6.2%	2,259	8.7%	3,463	7.6%	3,845	8.9%
> 100% of AMI	14,699	75.3%	8,245	31.7%	22,944	50.4%	20,030	46.4%
Totals	19,527	100.0%	25,998	100.0%	45,525	100.0%	43,190	100.0%

Source: ABAG Housing Element Data Package (based on 2020 HUD CHAS Data (2013-2017 ACS)), 2022; HUD CHAS Data (based on 2006-2010 ACS).

Berkeley has a college and graduate student population of 29 percent, significantly higher than 8.5 percent Countywide. As shown in Table E-27, young adults aged 18 to 34 have the highest poverty rate and represent the largest proportion of the Citywide population. It is important to note that the ACS does not include persons in college dormitories when estimating poverty status, although less than 25 percent of UC Berkeley students currently live in dormitories and the majority live in off-campus housing.

Poverty status of students and young adults alone, however, may not accurately represent the population living below the poverty level. A 2017 study found that the median family income of a UC Berkeley student is $119,000 and more than half are in the top 20 percent of income earners, while only 7.3 percent of students come from families in the bottom 20 percent (approximately $20,000 or less per year).[14] While this may reveal that ACS poverty estimates are inflated, it also indicates upward mobility may be hindered for lower income students. Student poverty and mobility is further discussed in Section E4.6 *Student Poverty and Mobility* of this Appendix.

Table E-27: Poverty Status by Age (2019)

	Total Population		Percent Below Poverty Level
	Persons	Percent	
Under 18 years	14,618	13.4%	5.7%
18 to 34 years	40,890	37.5%	38.2%
35 to 64 years	36,446	33.4%	8.4%
65 years and over	17,229	15.8%	8.5%
Population for whom poverty status is determined	109,183	100.0%	19.2%

[14] Chetty, R. (Stanford University and National Bureau of Economic Research (NBER); Friedman, J. N. (Brown University and NBER); Saez, E. (UC Berkeley and NBER); Turner, N. (US Treasury); Yagan, D. (UC Berkeley and NBER). (2017). Mobility Report Cards: The Role of Colleges in Intergenerational Mobility. https://www.nytimes.com/interactive/projects/college-mobility/university-of-california-berkeley.

Note: Includes only population for whom poverty status is determined. Excludes institutionalized persons, persons in military group quarters and in college dormitories, and unrelated individuals under 15 years old.
Source: 2015-2019 ACS (5-Year Estimates).

Isolation, dissimilarity, and Thiel's H indices are described in detail in Section E4.2 *Race/Ethnicity*. Isolation indices, presented in Table E-28, show that above moderate income households are most isolated in Berkeley, followed by very low income households. Between 2010 and 2015, isolation indices have decreased for households of all income levels except very low income. Isolation values indicate that on average, an above moderate income Berkeley resident lives in a neighborhood that is 51.2 percent above moderate income. Isolation indices for very low income and above moderate income residents are higher in Berkeley compared to the Bay Area as a whole.

As shown by 2010 and 2015 dissimilarity indices for Berkeley, segregation between lower income and higher income residents has decreased. However, 33.4 percent of lower income residents and 40.6 percent of very low and extremely low income residents would have to move to a different neighborhood to create perfect income category integration. Berkeley has significantly higher income segregation than the Bay Area. Based on HUD's definition of the index, income segregation in the County is low, whereas very low income and above moderate income households in Berkeley are moderately segregated.

The Thiel's H index in Berkeley has declined, indicating there is now less neighborhood-level income segregation. This pattern is consistent with isolation and dissimilarity index trends. However, Berkeley's Thiel's H index of 0.109 in 2015 remains higher than 0.043 in the Bay Area.

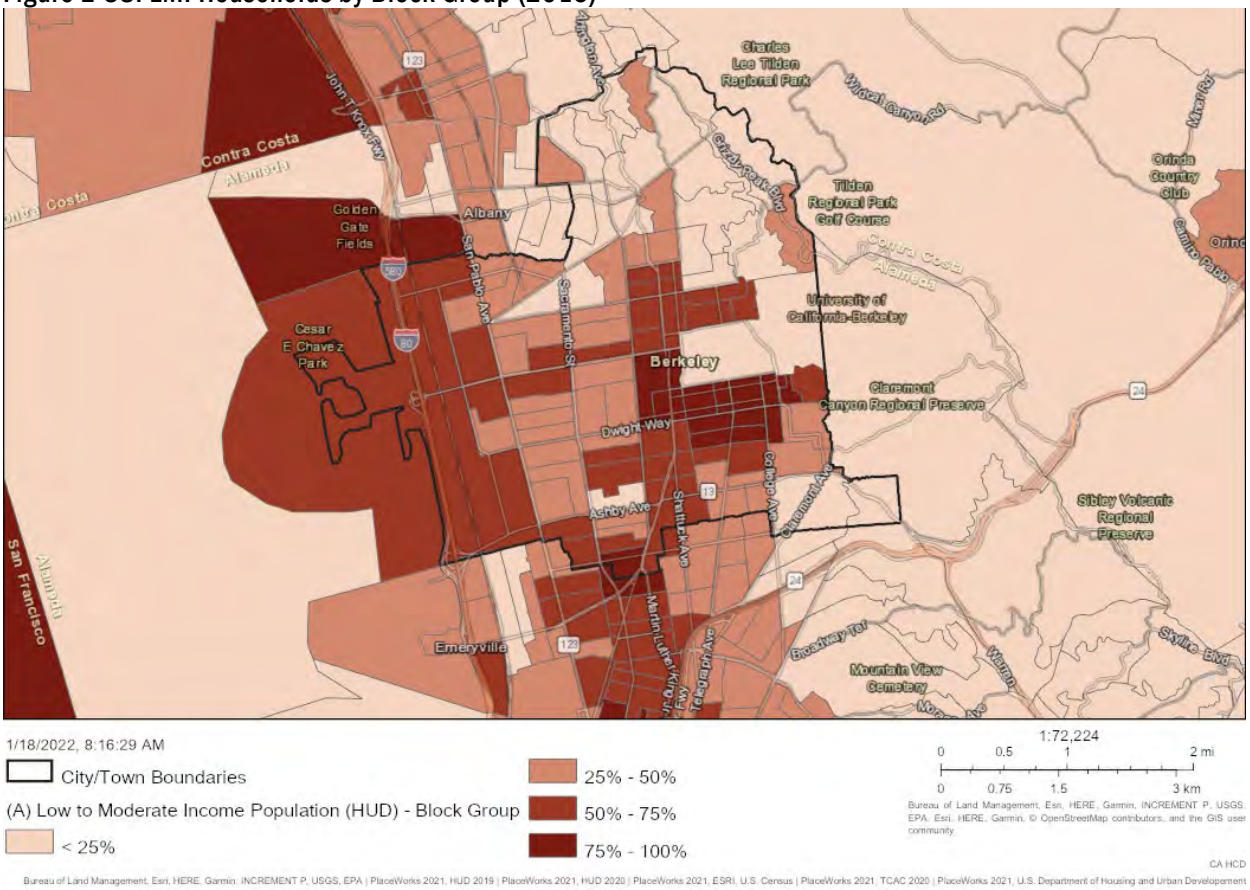
Table E-28: Income Segregation Indices (2010-2015)

	Berkeley		Bay Area
	2010	2015	2015
Isolation Index			
Very Low Income (<50% AMI)	0.475	0.484	0.269
Low Income (50%-80% AMI)	0.151	0.110	0.145
Moderate Income (80%-120% AMI)	0.180	0.149	0.183
Above Moderate Income (>120% AMI)	0.514	0.512	0.507
Dissimilarity Index			
Below 80% AMI vs. Above 80% AMI	0.361	0.334	0.198
Below 50% AMI vs. Above 120% AMI	0.464	0.406	0.253
Thiel's H	0.128	0.109	0.043

Source: ABAG AFFH Data Report (based on 2006-2010 and 2011-2015 ACS), 2022.

LMI areas where more than 51 percent of the household population is low or moderate income are shown geographically in Figure E-38. Block groups adjacent to the UC Berkeley campus in the Southside, Downtown Berkeley, and northern Elmwood District/Le Conte neighborhoods have the highest concentration of LMI households, where more than 75 percent are low or moderate income. These areas have large student populations that tend to be lower income. Student populations by tract are discussed in Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*. The South Berkeley, Lorin, Northside, and western neighborhoods also tend to have higher concentrations of LMI households. Most block groups in the Berkeley Hills, Thousand Oaks, Live Oak, Terrace View, and Claremont neighborhoods have LMI populations of 50 percent or lower. In general, LMI areas also have larger populations of people of color (see Figure E-21).

Figure E-38: LMI Households by Block Group (2015)

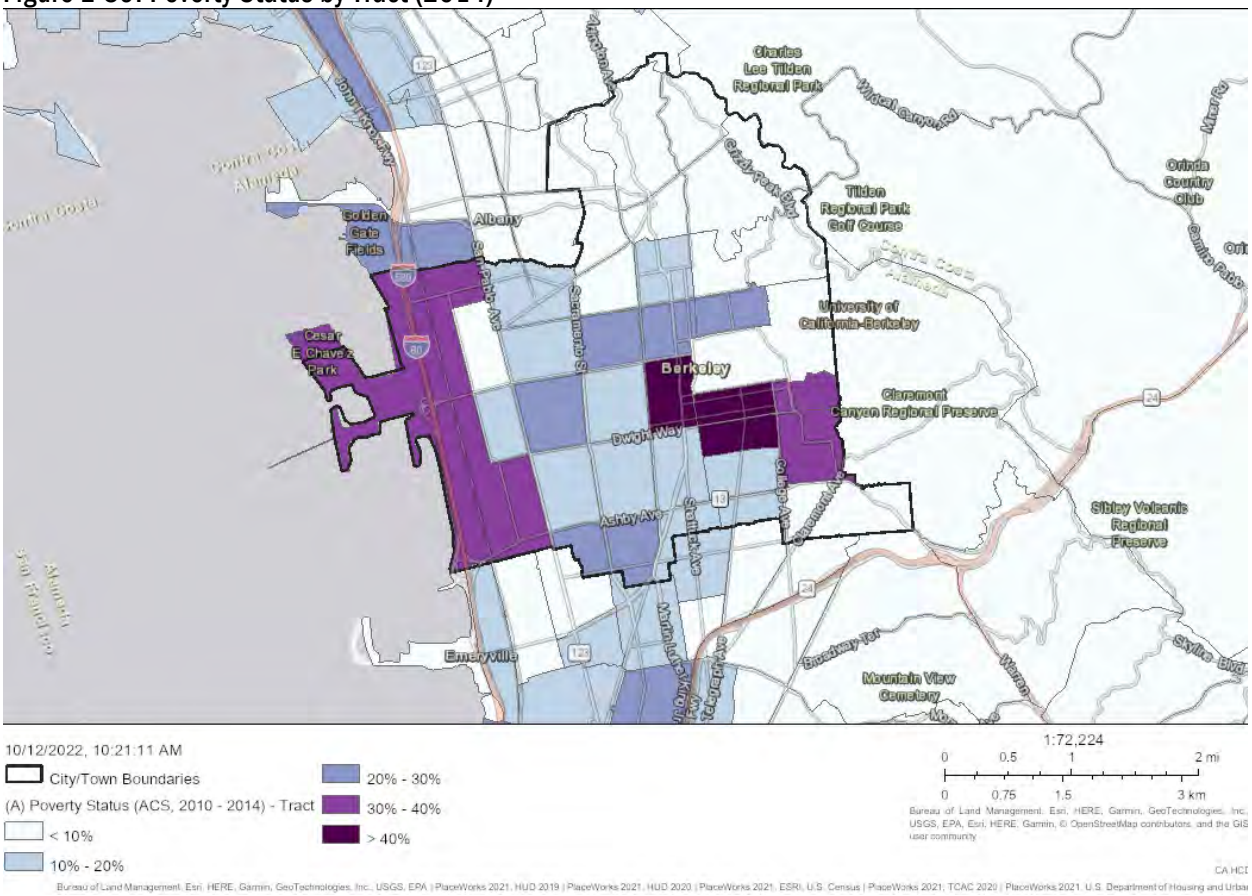


Source: HCD AFFH Data Viewer (HUD 2020, based on 2011-2015 ACS), 2022.

Poverty status by tract in Berkeley is included in Figure E-40. Since the 2010-2014 ACS (Figure E-39), the population of persons below the poverty level has decreased in several tracts, specifically in the Berkeley Marina, Gilman, Southwest Berkeley, Northside, and South, Central and North Berkeley neighborhoods. The population of persons below the poverty level has increased in some tracts surrounding the UC Berkeley campus. Consistent with the aggregation of LMI areas, tracts with large populations below the poverty level are located around the UC Berkeley campus. Tracts south of the campus in the Southside, Downtown Berkeley, Panoramic Hill, and northern Elmwood District/Le Conte neighborhoods have the highest poverty rate (>40 percent). Approximately 34 percent of the population in tract 4225 (Northside neighborhood) and 25 percent of the population in tract 4224 (North Berkeley neighborhood) is below the poverty level. This pattern reflects the large population of students with low or no income. As mentioned in Section 3.3.1 of the Housing Element, students tend to have very low incomes which would skew the City's median household income downward. However, students are generally not considered "lower income" for the purposes of public housing programs because they often rely on support from families or public loans.

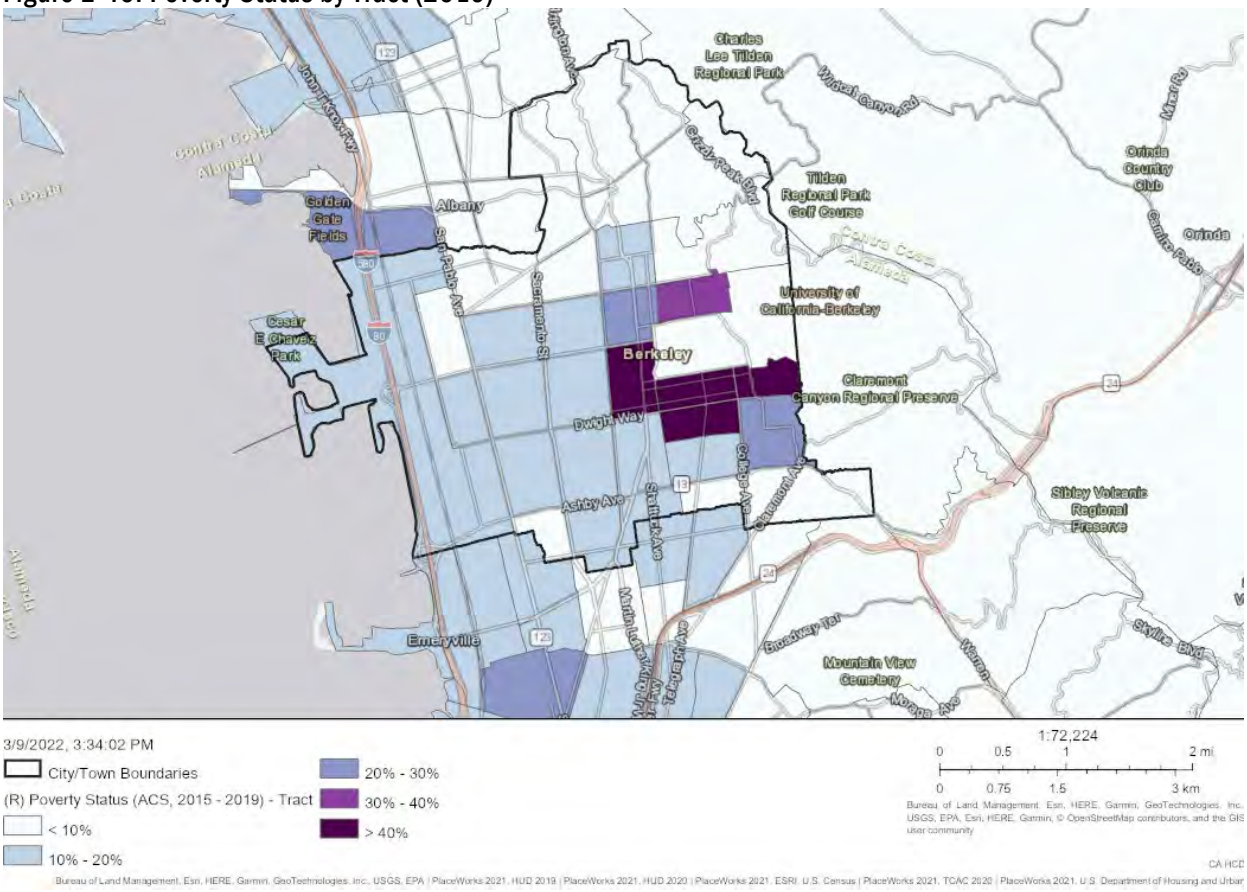
Between 10 and 20 percent of the population in most tracts are below the poverty level. Less than 10 percent is below the poverty level in most northeastern tracts (Berkeley Hills and Thousand Oaks neighborhood areas). The areas with the lowest poverty rates also have the smallest racial/ethnic minority populations and populations of children living in female-headed households (see Figure E-21 and Figure E-30).

Figure E-39: Poverty Status by Tract (2014)



Source: HCD AFFH Data Viewer (2010-2014 ACS), 2022.

Figure E-40: Poverty Status by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

E4.3 RACIALLY OR ETHNICALLY CONCENTRATED AREAS

Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)

In an effort to identify racially/ethnically-concentrated areas of poverty (R/ECAPs), HUD has identified census tracts with a majority non-White population (greater than 50 percent) and a poverty rate that exceeds 40 percent or is three times the average tract poverty rate for the metro/micro area, whichever threshold is lower. Areas of High Segregation and Poverty are also identified by HCD and the California Tax Credit Allocation Committee (TCAC), jointly known as the Fair Housing Task Force. Areas of High Segregation and Poverty are defined as tracts where at least 30 percent of the population is living below the poverty line and relies on the location quotient of residential segregation (LQ).[15]

Regional Trends. R/ECAPs and TCAC areas of high segregation and poverty are most concentrated on the eastern side of San Francisco and in coastal Alameda County cities from San Leandro to Berkeley (Figure E-42). There are very few of these tracts in Marin County or Contra Costa County. R/ECAPs and

[15] The LQ is a small-area measure of relative segregation calculated at the residential census tract level that represents how much more segregated an area (e.g., a census tract or block group) is relative to the larger area (in this case, the county). For the filter, tracts that have a LQ higher than 1.25 for Blacks, Hispanics, Asians, or all people of color are flagged as being racially segregated in comparison to the county.

TCAC areas of high segregation and poverty are consistent with racial/ethnic minority population and LMI household trends described above (see Figure E-16 and Figure E-35).

Poverty status by race and ethnicity for Alameda County is included in Table E-29. Since 2014, the population of persons below the poverty level has decreased, representing 12.9 percent of the population in 2014 compared to 9.9 percent in 2019. Non-Hispanic White populations have the lowest poverty rate of 6.7 percent. The poverty rate is highest amongst the Black/African American population (20 percent), followed by the American Indian and Alaska Native population (15 percent), and the population of a race not listed (14.4 percent). The Hispanic/Latino population also experiences poverty at a rate exceeding the Countywide average of 9.9 percent.

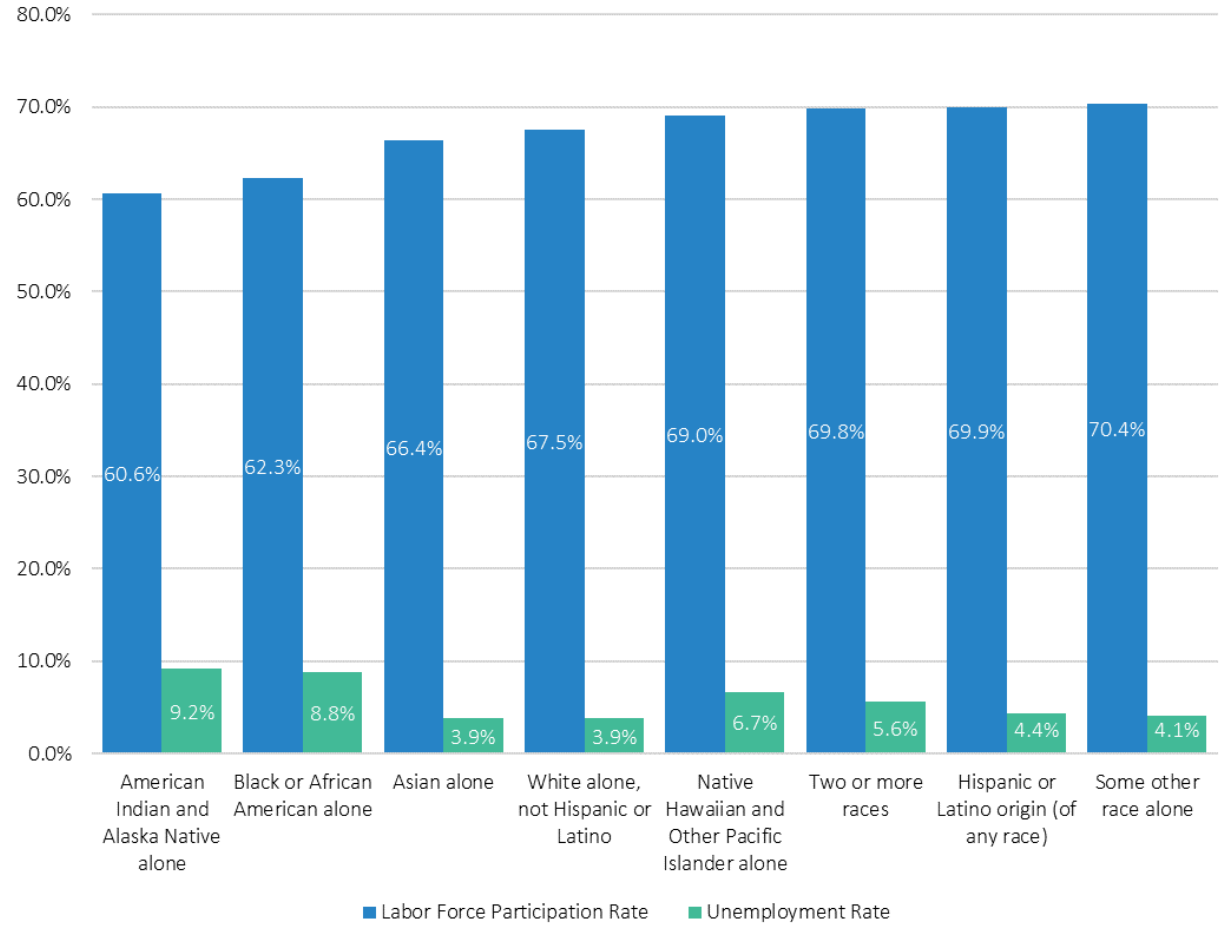
Table E-29: Poverty Status by Race/Ethnicity – Alameda County (2014 and 2019)

Race/Ethnicity	2014		2019	
	Total Population	Percent Below Poverty Level	Total Population	Percent Below Poverty Level
White alone	694,967	10.6%	658,902	7.7%
Black or African American alone	180,317	24.1%	172,438	20.0%
American Indian and Alaska Native alone	9,082	19.0%	10,905	15.0%
Asian alone	417,472	9.7%	492,498	7.9%
Native Hawaiian and Other Pacific Islander alone	12,761	11.9%	13,695	9.1%
Some other race alone	123,715	19.5%	176,536	14.4%
Two or more races	93,032	13.1%	105,317	8.9%
Hispanic or Latino origin (of any race)	346,045	17.9%	364,402	12.5%
White alone, not Hispanic or Latino	510,373	8.2%	512,146	6.7%
Population for whom poverty status is determined	1,531,346	12.9%	1,630,291	9.9%

Source: 2010-2014 and 2015-2019 ACS (5-Year Estimates).

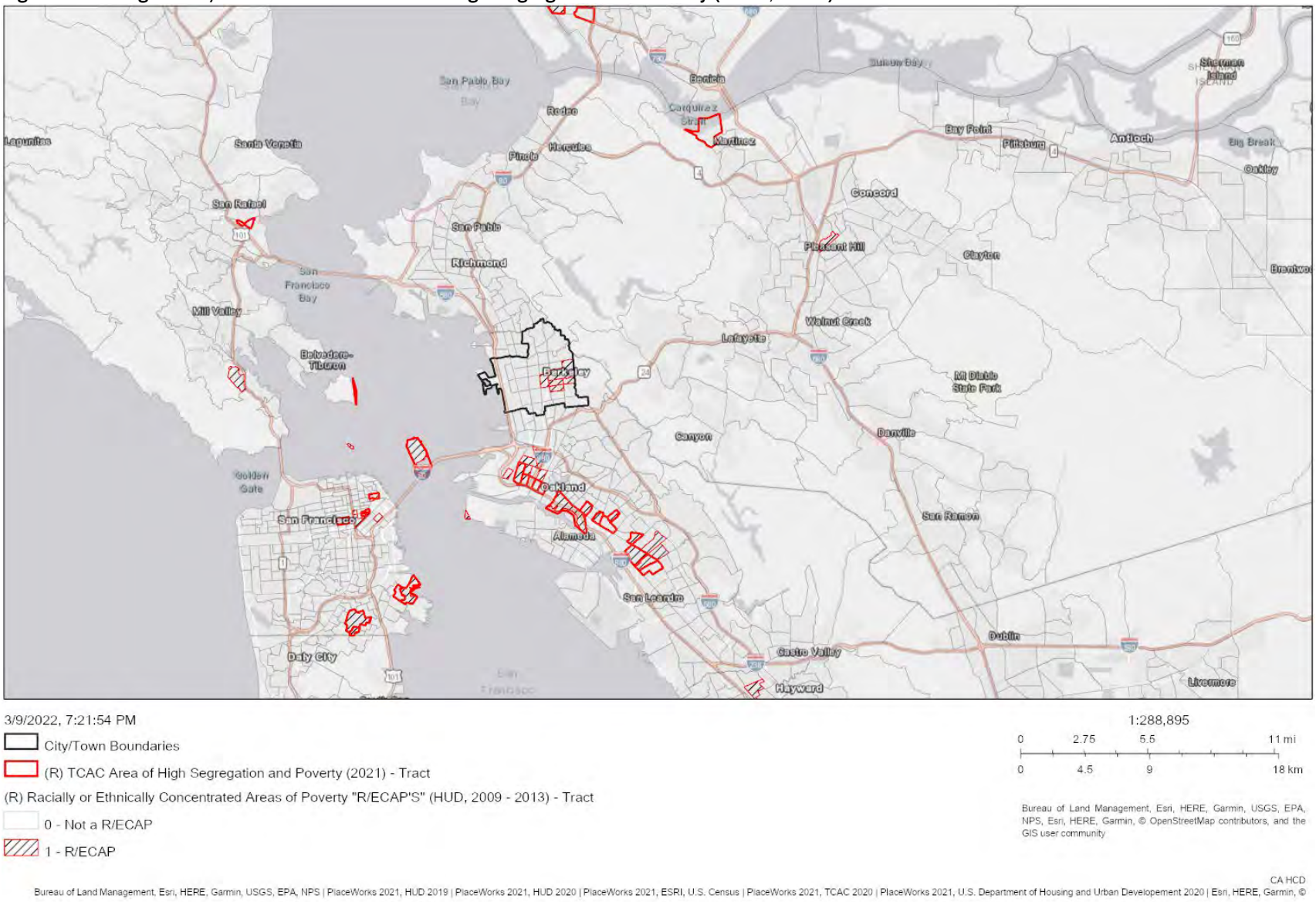
Employment status is often a variable that describes poverty status. As shown in Figure E-41, the American Indian and Alaska Native population in Alameda County has the lowest labor force participation and highest unemployment rate, followed by the Black/African American population. As discussed previously, the American Indian and Alaska Native and Black/African American populations also have the highest poverty rates in the County. Asian and White populations have the lowest unemployment rate of 3.9 percent with moderate labor force participation rates (66.4 percent and 67.5 percent, respectively). The White population has the lowest poverty rate countywide (6.7 percent), followed by the Asian population (7.9 percent).

Figure E-41: Employment Status by Race/Ethnicity – Alameda County (2019)



Source: 2015-2019 ACS (5-Year Estimates).

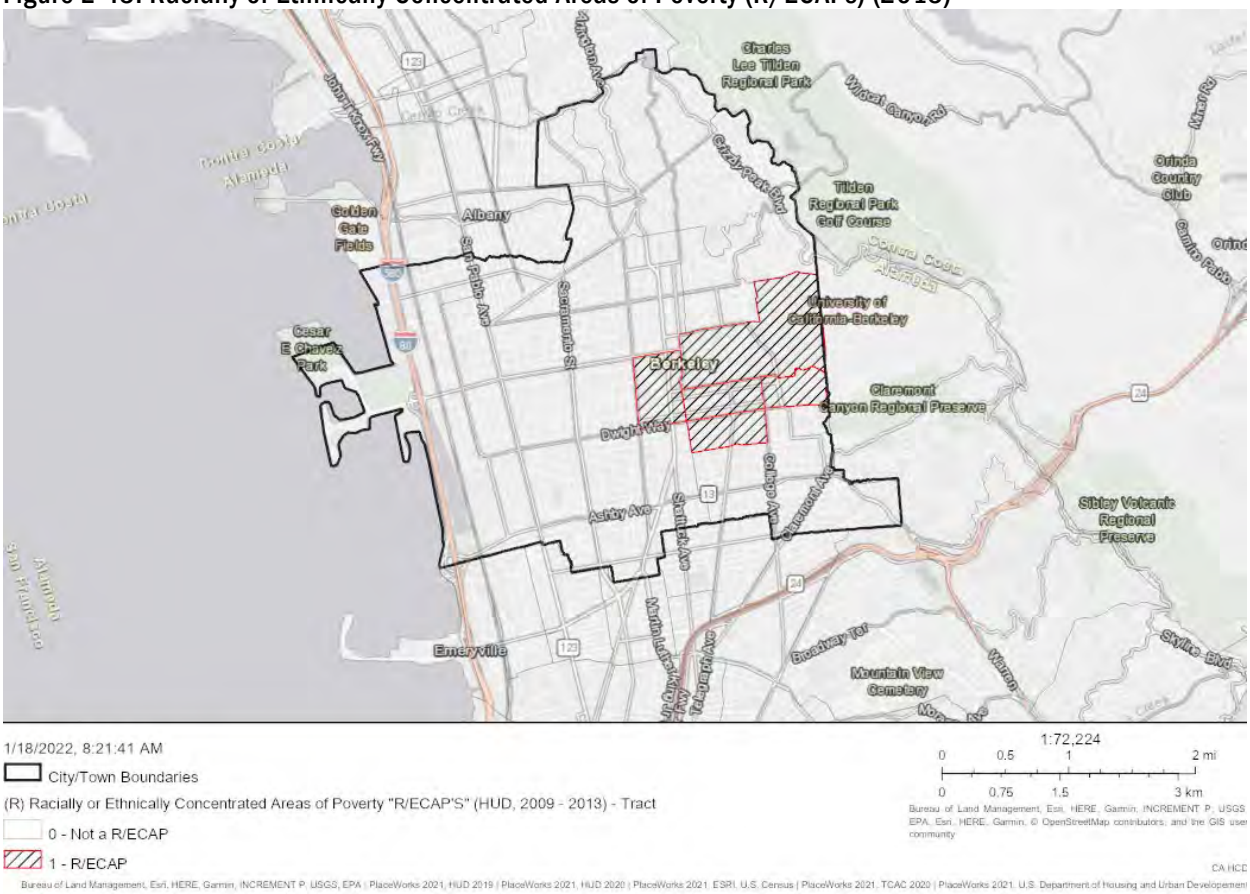
Figure E-42: Regional R/ECAPs and TCAC Areas of High Segregation and Poverty (2020, 2021)



Source: HCD AFFH Data Viewer (HUD, 2009-2013; 2021 TCAC), 2022.

Local Trends. There are no TCAC areas of high segregation and poverty that have been identified in the City of Berkeley. Figure E-43 shows there are five tracts that have been recognized by HUD as R/ECAPs. The following tracts are considered R/ECAPs: 4226, 4227, 4228, 4229, 4236.02. All five of these tracts are located on the eastern side of the City surrounding and including the UC Berkeley campus. As presented in Section E4.2 *Income Level*, this area has a high concentration of LMI households and persons below the poverty level (see Figure E-38 and Figure E-40). More than 80 percent of the population belongs to a racial/ethnic minority group in most block groups in this part of the City (see Figure E-21).

Figure E-43: Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs) (2013)



Source: HCD AFFH Data Viewer (HUD, 2009-2013), 2022

The presence of R/ECAPs in this area of the City correlates with the student populations in these tracts. In addition to UC Berkeley, the Berkeley City College is also located in this area in the Downtown Berkeley neighborhood. In Fall 2021, UC Berkeley had an enrollment of 45,057 students[16] and in 2017, Berkeley City College had an enrollment of approximately 7,000 students.[17] Students tend to have no income or if employed, only as part-time and generate limited incomes. Approximately 29 percent of the Berkeley population is enrolled in college or graduate school compared to 93 percent in tract 4226 (UC Berkeley campus), 83.1 percent in tract 4227 (south of UC Berkeley campus), 89.9 percent in tract 4228 (Southside neighborhood), 54.2 percent in tract 4229 (Downtown Berkeley neighborhood), and 64.5 percent in tract 4236.02 (northern Elmwood/South Berkeley neighborhood) (Table E-30). As mentioned in Section E4.2 *Income Level*, young adults aged 18 to 34, which includes college-aged persons, have significantly higher

[16] UC Berkeley Quick Facts, Fall 2021 Enrollment. https://opa.berkeley.edu/campus-data/uc-berkeley-quick-facts.
[17] Berkeley City College, About. https://www.berkeleycitycollege.edu/about-bcc/.

poverty rates compared to other age groups. However, poverty status of students and young adults alone, may not accurately represent the population living below the poverty level as many college students are dependents and may come from higher income families. Discussions on student poverty and income status are expanded upon in Section E4.6 *Student Poverty and Mobility*, of this Appendix.

Table E-30: Population Enrolled in College or Graduate School – R/ECAP Tracts (2019)

Tract/City	Population Enrolled in College or Graduate School	
	Persons	Percent
Census Tract 4226	970	93.0%
Census Tract 4227	4,374	83.1%
Census Tract 4228	8,152	89.9%
Census Tract 4229	3,125	54.2%
Census Tract 4236.02	4,209	64.5%
Berkeley	35,210	29.0%

Source: 2015-2019 ACS (5-Year Estimates).

Of the population aged 16 and older in the City, 38.2 percent are not in the labor force (Table E-31). Persons who are neither employed nor unemployed are not in the labor force, including retired persons, students, those taking care of children or other family members, and others who are neither working nor seeking work. Likely due to the high proportion of students, R/ECAP tracts have larger populations of persons not in the labor force. Most R/ECAP tracts, with the exception of tract 4228, have employment rates comparable or lower than the City average. The concentration of persons experiencing poverty in R/ECAPs can likely, in part, be explained by the low labor force participation rates in these tracts. Tract 4228 (Southside neighborhood) the largest population of persons not in the labor force and highest unemployment rate. Many of the UC Berkeley residence halls are located in the Southside neighborhood including Blackwell Hall, Cleary Hall, Channing-Bowditch Apartments, Martinez Commons, Unit 1 Residence Hall, Unit 2 Residence Hall, Unit 3 Residence Hall, and the Ida Louise Jackson Graduate Housing.

Table E-31: Labor Force Participation – R/ECAP Tracts (2019)

Tract/City	Population Aged 16+	In Labor Force		Not in Labor Force
		Employed	Unemployed	
Census Tract 4226	1,018	41.7%	1.8%	56.6%
Census Tract 4227	5,229	40.6%	3.8%	55.6%
Census Tract 4228	9,053	31.5%	5.1%	63.4%
Census Tract 4229	5,592	52.3%	2.3%	45.5%
Census Tract 4236.02	6,401	56.5%	3.1%	40.4%
Berkeley	108,360	58.4%	3.3%	38.2%

Source: 2015-2019 ACS (5-Year Estimates).

Poverty status by race and ethnicity is shown in Figure E-44. Unlike the County, the Asian/API population in Berkeley has the highest poverty rate of 36.9 percent, followed by the Black/African American population (25.4 percent), and the American Indian or Alaska Native population (24.5 percent). As discussed in Section E4.2 *Race/Ethnicity*, the Asian and API population make up the second largest population in the City. White non-Hispanic residents represent more than half of the population and have the lowest poverty rate of 12.1 percent.

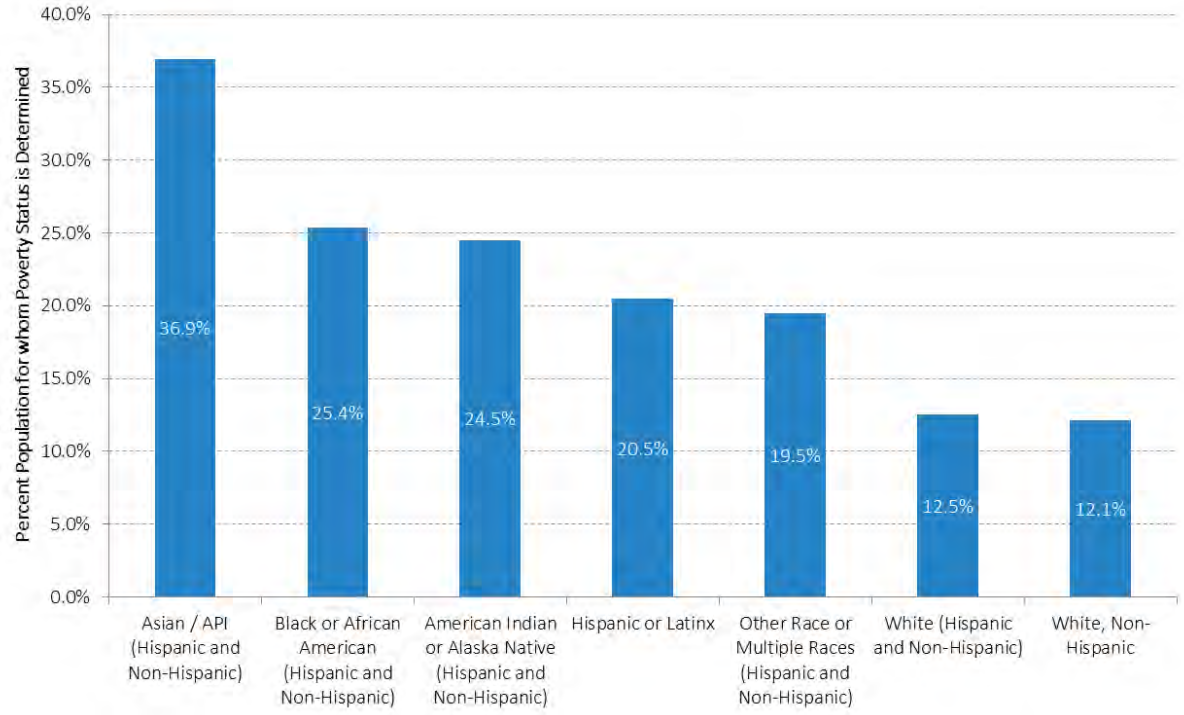
According to UC Berkeley Fall 2021 enrollment data, the Asian population represents the largest share of the UC Berkeley student body (33.8 percent), followed by the White population (23.6 percent), and Chicanx/Latinx population (16.2 percent).[18] Nearly a third of the Berkeley City College population is also

[18] UC Berkeley Quick Facts, Fall 2021 Enrollment. https://opa.berkeley.edu/campus-data/uc-berkeley-quick-facts.

Asian or API.[19] The large population of Asian/API students in the City likely contributes to the high poverty rate.

Black or African American students represent only 4.1 percent of the UC Berkeley student body but 15 percent of the Berkeley City College student body, while American Indian or Alaska Native students represent only 0.5 percent of the UC Berkeley student body and one percent of the Berkeley City College student body. Despite the smaller Black/African American and American Indian/Alaska Native student bodies, poverty rates amongst these groups citywide remain high. The high poverty rates amongst Black/African American and American Indian/Alaska Native populations cannot be attributed to student populations alone. Conversely, 23.6 percent of UC Berkeley students and 25 percent of Berkeley City College students are White, but only 12.1 percent are below the poverty level citywide. Based on student populations and poverty rates, Black or African American and American Indian or Alaska Native residents are most disproportionately affected by poverty in Berkeley.

Figure E-44: Poverty Status by Race/Ethnicity (2019)



Source: ABAG Housing Element Data Package (based on 2015-2019 ACS), 2021.

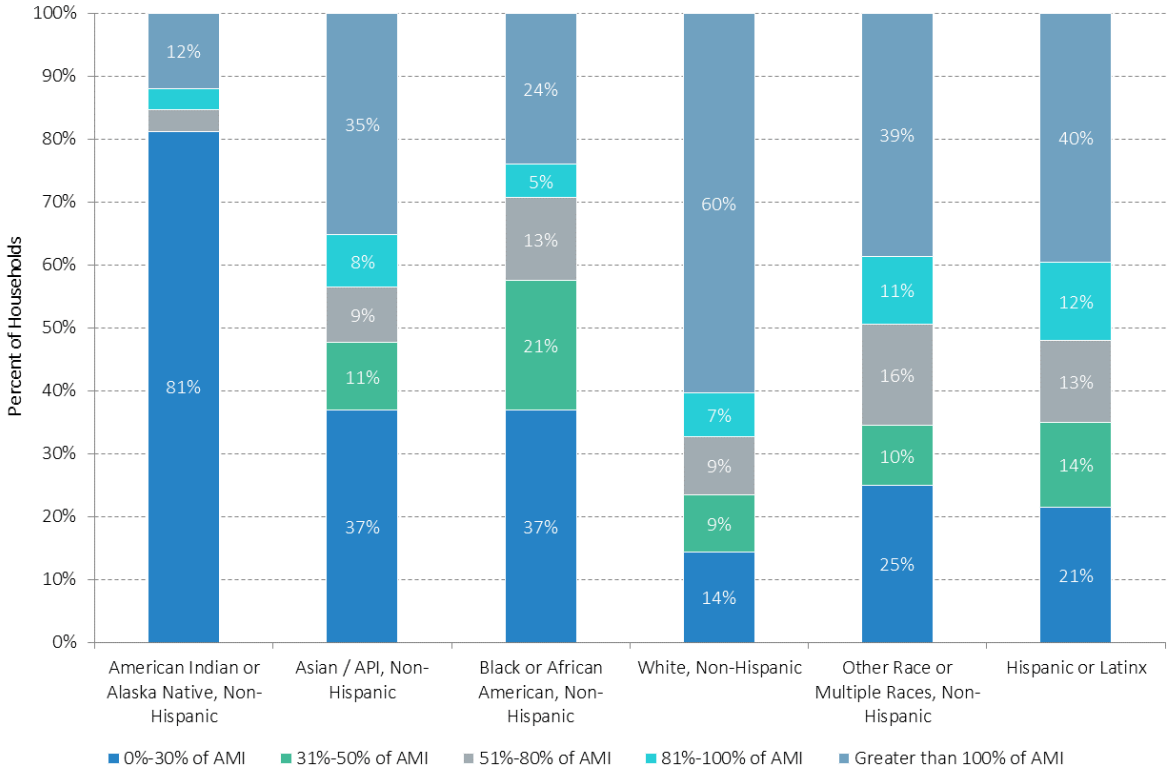
Income category distribution for various racial/ethnic groups in Berkeley is included in Figure E-45. Approximately 42 percent of Berkeley households are considered lower income, earning 80 percent of less than the AMI. Consistent with the poverty rates described above, the American Indian or Alaska Native and Black or African American household populations have the largest proportion of lower income households of 84.6 percent and 70.6 percent, respectively. Fewer Asian or API households (56.4 percent) are lower income, despite having the highest poverty rate (Figure E-44). This discrepancy is due to the

[19] Berkeley City College, About. https://www.berkeleycitycollege.edu/about-bcc/.

Census Bureau's definition for "household," which does not include people living in group quarters.[20] UC Berkeley has an undergraduate Asian/API population of 39.5 percent. According to the UC Berkeley Office of Undergraduate Admissions, approximately 7,000 undergraduate students, representing 27 percent of the student body, live in university housing. The non-Hispanic White household population is the only racial group with a proportion of lower income households (32.6 percent) below the citywide average.

It is relevant to note that nearly all lower income American Indian/Alaska Native households, 95 out of 117 total households, fall into the extremely low income category, earning less than 30 percent of the AMI. The proportion of extremely low income American Indian/Alaska Native households is substantially higher than all other racial/ethnic groups in the City.

Figure E-45: Household Income Distribution by Race/Ethnicity (2017)



Source: ABAG Housing Element Data Package (based on 2020 HUD CHAS Data (2013-2017 ACS)), 2021.

Racially or Ethnically Concentrated Areas of Affluence (RCAAs)

While racially concentrated areas of poverty and segregation (R/ECAPs) have long been the focus of fair housing policies, racially concentrated areas of affluence (RCAAs) must also be analyzed to ensure housing is integrated - a key to fair housing choice. Identifying RCAAs is also important for underserved populations to be able to participate in resources experienced by populations living in areas of influence. According to a policy paper published by HUD, RCAAs are defined as communities with a large proportion of affluent and non-Hispanic White residents. According to HUD's policy paper, non-Hispanic Whites are the most racially segregated group in the United States. In the same way neighborhood disadvantage is

[20] Group quarters are defined as places where people live or stay in a group living arrangement that is owned or managed by an organization providing housing and/or services for the residents, such as nursing homes, military barracks and college/university student housing.

associated with concentrated poverty and high concentrations of people of color, conversely, distinct advantages are associated with residence in affluent, White communities.

While HCD has created its own metric for RCAAs, as of February 2022, RCAA maps were not available on HCD's AFFH Data Viewer tool. Thus, this analysis relies on the definition curated by the scholars at the University of Minnesota Humphrey School of Public Affairs cited in HCD's memo: "*RCAAs are defined as census tracts where: 1) 80 percent or more of the population is white, and 2) the median household income is $125,000 or greater (slightly more than double the national median household income in 2016)*."

Regional Trends. The median income in Alameda County is $99,406 (Table E-32). The median income countywide has increase significantly since 2010. The median household income in 2010 was $69,384. The median household income for all racial/ethnic groups has increased during this period. Between 2010 and 2019, the median household income increased by 43.3 percent. The median income for households with a householder of two or more races and Asian householders increased at rates exceeding the countywide average, while the median incomes for all other racial/ethnic groups saw increases ranging from 28.8 percent (Black/African American householders) to 40.7 percent (Native Hawaiian and other Pacific Islander householders). Currently, Asian households have the highest median income of $124,079, followed by non-Hispanic White households ($114,0427). Asian and White households are the only racial or ethnic groups with median incomes exceeding the countywide median. The median income for Black/African American households of $51,049 is significantly lower than all other racial/ethnic groups in the County. Median income trends for racial groups in the County are consistent with poverty status trends presented in Table E-29.

Table E-32: Median Household Income by Race/Ethnicity – Alameda County (2010 and 2019)

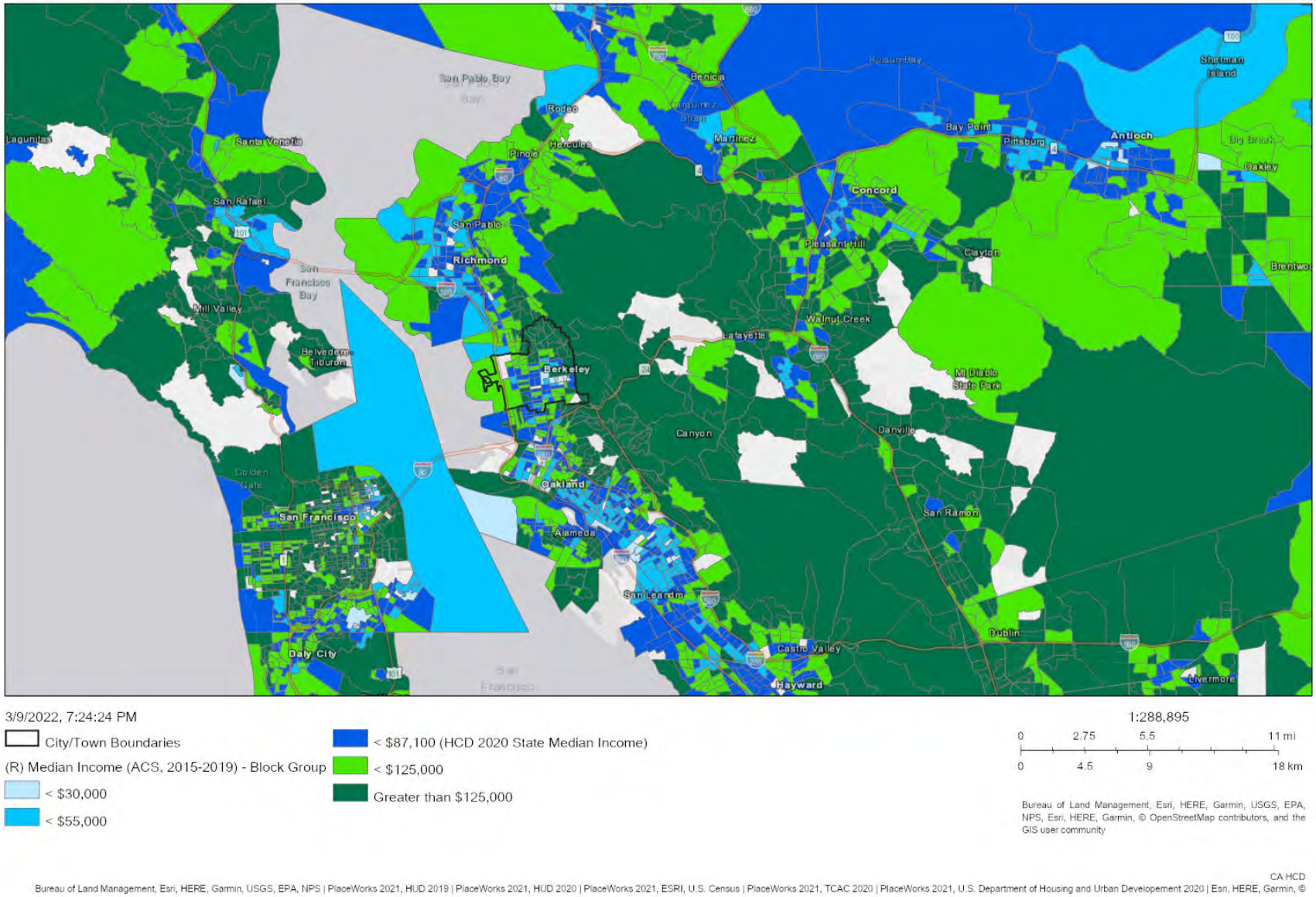
Race/Ethnicity of Householder	2010		2019	
	Percent of Population	Median Income	Percent of Population	Median Income
White	51.7%	$77,850	46.8%	$108,506
Black or African American	15.0%	$40,187	12.4%	$51,749
American Indian and Alaska Native	0.5%	$52,297	0.7%	$71,268
Asian	22.4%	$83,831	27.3%	$124,079
Native Hawaiian and Other Pacific Islander	0.6%	$62,120	0.7%	$87,408
Some Other Race	6.7%	$54,246	7.8%	$73,614
Two or More Races	3.0%	$63,305	4.3%	$95,736
Hispanic or Latino	15.5%	$55,613	16.4%	$77,990
White alone, non-Hispanic	43.9%	$82,617	39.6%	$114,427
All Households	100.0%	$69,384	100.0%	$99,406

Source: 2006-2010 and 2015-2019 ACS (5-Year Estimates).

Median incomes by block group for the region surrounding Berkeley are shown in Figure E-46. According to the 2015-2019 ACS, the median income in Alameda County is $99,406, higher than $85,530 in Berkeley. Berkeley has a lower median income compared to most adjacent cities including Alameda ($104,756), El Cerrito ($108,298), Emeryville ($102,725), Orinda ($223,217), and Piedmont ($224,659), but higher than Oakland ($73,692) and Richmond ($68,472). Block groups with median incomes exceeding $125,000 are most concentrated in central Contra Costa County, Marin County, and San Francisco, while median incomes below the HCD Statewide median of $87,100 tend to be located in coastal East Bay cities from San Leandro to Richmond. Smaller concentrations of block groups with low median incomes are also shown in northern Contra Costa County, southern and western San Francisco, and small sections of Marin County. Areas in the region with higher median incomes also tend to have smaller populations of people of color compared to areas with lower median incomes. However, most block groups in the region have non-White populations exceeding 20 percent (see Figure E-17). RCAA block groups with White

populations exceeding 80 percent and median incomes above $125,000 are most prevalent in Marin County and Contra Costa County.

Figure E-46: Regional Median Income by Block Group (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Local Trends. As mentioned previously, the median household income in Berkeley of $85,530 is lower than the median countywide. Since 2010, the median household income in Berkeley has increased at a slightly higher rate than the County (45.9 percent vs. 43.3 percent, respectively). The median incomes for different racial/ethnic groups have increased at rates ranging from 28.1 percent (Black/African American householders) to 89.5 percent (householder of two or more races). The American Indian/Alaska Native median household income decreased significantly during this period. The large student population in the City likely contributes to the low median income and high poverty rate of 19.2 percent. Non-Hispanic White households have a median income of $107,660, significantly higher than all other racial/ethnic groups in the City (Table E-33). Consistent with the poverty rates and household income distributions described in Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*, American Indian/Alaska Native and Black/African American households have the lowest median incomes of $27,232 and $39,441, respectively. Though the Asian population has the highest poverty rate in the City, the median income for Asian households remains moderate. It is important to note that this is likely affected by the large population of Asian/API students in the City. Students living in group quarters (residence halls, student housing) are not included in the ACS data for median household income.

Table E-33: Median Income by Race/Ethnicity (2019)

Race/Ethnicity	2010		2019		
	Percent Distribution	Median Income	Households	Percent Distribution	Median Income
White	65.6%	$75,151	29,606	65.3%	$107,050
Black or African American	10.8%	$30,794	3,820	8.4%	$39,441
American Indian and Alaska Native	0.2%	$76,042	298	0.7%	$27,232
Asian	17.6%	$38,225	7,929	17.5%	$58,253
Native Hawaiian and Other Pacific Islander	0.2%	$55,227	152	0.3%	-
Some Other Race	2.2%	$45,000	1,281	2.8%	$70,483
Two or More Races	3.3%	$43,608	2,266	5.0%	$82,647
Hispanic or Latino	7.6%	$44,273	3,585	7.9%	$71,051
White alone, non-Hispanic	60.8%	$77,273	27,955	61.6%	$107,660
All Households	100.0%	$58,617	45,352	100.0%	$85,530

Source: 2015-2019 ACS (5-Year Estimates).

Employment status for Berkeley, including labor force participation and unemployment rates, by race and ethnicity are presented in Table E-34. Since the 2006-2010 ACS, the unemployment rate has decreased from 6.7 percent to 5.3 percent. The unemployment rate has decreased for all racial/ethnic groups except the Asian population (remained constant), the population of some other race, and the population of two or more races. Citywide, the labor force participation rate is 61.8 percent, and the unemployment rate is 5.3 percent. Black/African American, American Indian/Alaska Native, Asian, and Native Hawaiian/Pacific Islander populations all have labor force participation rates falling short of the citywide average. Native Hawaiian/Pacific Islander and Black/African American populations also have the highest unemployment rates of 13 percent and 12.5 percent respectively. Conversely, the American Indian/Alaska Native population has the lowest unemployment rate of 1.4 percent. The low unemployment rate and low median income for American Indian/Alaska Native residents indicates persons in this group may have lower paying jobs.

Table E-34: Employment Status by Race/Ethnicity (2010 and 2019)

Race/Ethnicity	Total Population	Labor Force Participation Rate	Unemployment Rate	Unemployment Rate (2010)
Population 16 Years and Older	108,360	61.8%	5.3%	6.7%

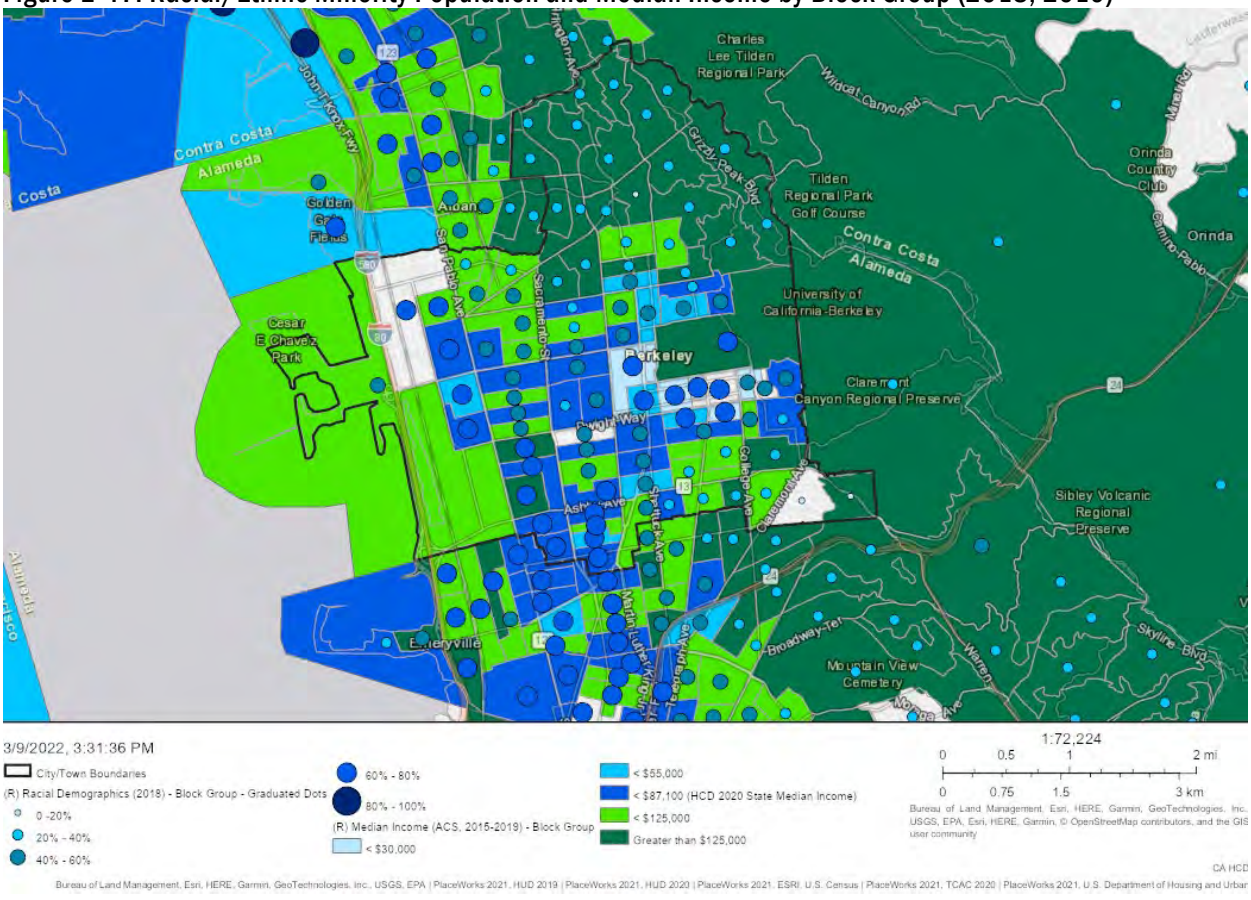
White	63,961	66.5%	4.3%	5.6%
Black or African American	8,264	52.9%	12.5%	17.7%
American Indian and Alaska Native	535	53.6%	1.4%	21.8%
Asian	24,619	51.4%	5.5%	5.5%
Native Hawaiian and Other Pacific Islander	570	58.1%	13.0%	25.1%
Some Other Race	4,133	65.6%	8.4%	6.8%
Two or More Races	6,278	65.0%	5.9%	2.9%
Hispanic or Latino	11,596	65.5%	7.6%	10.4%
White alone, non-Hispanic	58,213	66.6%	4.0%	5.0%

Source: 2006-2010 and 2015-2019 ACS (5-Year Estimates).

Median income and populations of persons of color by block group are shown geographically in Figure E-47. Block groups with median incomes exceeding $125,000 are most densely populated in the Berkeley Hills, Thousand Oaks, Terrace View, Live Oak, and Northbrae neighborhoods. Block groups in the Southside, Northside, Downtown Berkeley neighborhoods have the lowest median incomes. These neighborhoods have large student populations as described in Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*.

There are two block groups in the City with median incomes exceeding $125,000 and White populations exceeding 80 percent that can be categorized as RCAAs. One is in the Live Oak neighborhood on the southwest corner of Marin Avenue and Spruce Street, and the other is in the Claremont neighborhood in the southeast corner of the City intersected by California State Route 13 or Tunnel Road.

Figure E-47: Racial/Ethnic Minority Population and Median Income by Block Group (2018, 2019)



Source: HCD AFFH Data Viewer (ESRI 2018; 2015-2019 ACS), 2022.

E4.4 ACCESS TO OPPORTUNITIES

Significant disparities in access to opportunity are defined by the AFFH Final Rule as "substantial and measurable differences in access to educational, transportation, economic, and other opportunities in a community based on protected class related to housing."

While the Federal Affirmatively Furthering Fair Housing (AFFH) Rule has been repealed, the data and mapping developed by HUD for the purpose of preparing the Assessment of Fair Housing (AFH) can still be useful in informing communities about segregation in their jurisdiction and region, as well as disparities in access to opportunity. This section presents the HUD-developed index scores based on nationally available data sources to assess Alameda County residents' access to key opportunity assets by race/ethnicity and poverty level. Table E-36 provides index scores or values (the values range from 0 to 100) for the following opportunity indicator indices:

- **Low Poverty Index:** The low poverty Index captures the depth and intensity of poverty in a given neighborhood through poverty rate calculations and percentile rankings. The higher the score, the less exposure to poverty in a neighborhood.
- **School Proficiency Index:** The school proficiency index uses school-level data on the performance of 4th grade students on state exams to describe which neighborhoods have high-performing elementary schools nearby and which are near lower performing elementary schools. The higher the index value, the higher the school system quality is in a neighborhood.
- **Jobs Proximity Index:** The jobs proximity index quantifies the accessibility of a given residential neighborhood as a function of its distance to all job locations within a region/CBSA, with larger employment centers weighted more heavily. The higher the index value, the better the access to employment opportunities for residents in a neighborhood.
- **Labor Market Engagement Index:** The labor market engagement index provides a summary description of the relative intensity of labor market engagement and human capital in a neighborhood. This is based upon the level of employment, labor force participation, and educational attainment in a census tract. The higher the index value, the higher the labor force participation and human capital in a neighborhood.
- **Transit Trips Index:** This index is based on estimates of transit trips taken by a family that meets the following description: a 3-person single-parent family with income at 50 percent of the median income for renters for the region (i.e., the Core-Based Statistical Area (CBSA). The higher the transit trips index value, the more likely residents in that neighborhood utilize public transit.
- **Low Transportation Cost Index:** This index is based on estimates of transportation costs for a family that meets the following description: a 3-person single-parent family with income at 50 percent of the median income for renters for the region/CBSA. The higher the index value, the lower the cost of transportation in that neighborhood.
- **Environmental Health Index:** The environmental health index summarizes potential exposure to harmful toxins at a neighborhood level. The higher the index value, the less exposure to toxins harmful to human health. Therefore, the higher the index value, the better the environmental quality of a neighborhood, where a neighborhood is a census block-group.

The Department of Housing and Community Development (HCD) and California Tax Credit Allocation Committee (TCAC) convened the California Fair Housing Task force to "provide research, evidence-based policy recommendations, and other strategic recommendations to HCD and other related state agencies/ departments to further the fair housing goals (as defined by HCD)." The Task Force has created Opportunity Maps to identify resources levels across the state "to accompany new policies aimed at increasing access to high opportunity areas for families with children in housing financed with nine percent Low Income Housing Tax Credits (LIHTCs)". These opportunity maps are made from composite

scores of three different domains made up of a set of indicators. Table E-35 shows the full list of indicators. The opportunity maps include a measure or "filter" to identify areas with poverty and racial segregation. To identify these areas, census tracts were first filtered by poverty and then by a measure of racial segregation. The criteria for these filters are:

- **Poverty:** Tracts with at least 30 percent of population under federal poverty line;
- **Racial Segregation:** Tracts with location quotient higher than 1.25 for Blacks, Hispanics, Asians, or all people of color in comparison to the County.

Table E-35: Domains and List of Indicators for Opportunity Maps (2020)

Domain	Indicator
Economic	Poverty Adult education Employment Job proximity Median home value
Environmental	CalEnviroScreen 3.0 pollution indicators and values
Education	Math proficiency Reading proficiency High School graduation rates Student poverty rates

Source: California Fair Housing Task Force, Methodology for the 2021 TCAC/HCD Opportunity Maps, December 2020

TCAC/HCD assigns "scores" for each of the domains in Table E-35 by census tract and computes "composite" scores that are a combination of the three domains. Scores from each individual domain range from 0-1, where higher scores indicate higher "access" to the domain or higher "outcomes." Composite scores do not have a numerical value but rather rank census tracts by the level of resources (low, moderate, high, highest, and high poverty and segregation).

The TCAC/HCD Opportunity Maps offer a tool to visualize show areas of highest resource, high resource, moderate resource, moderate resource (rapidly changing), low resource, and high segregation and poverty and can help to identify areas within the community that provide good access to opportunity for residents or, conversely, provide low access to opportunity. They can also help to highlight areas where there are high levels of segregation and poverty.

The information from the opportunity mapping can help to highlight the need for housing element policies and programs that would help to remediate conditions in low resource areas and areas of high segregation and poverty and to encourage better access for low and moderate income and black, indigenous, and people of color (BIPOC) households to housing in high resource areas.

Regional Trends. HUD Opportunity indicators for Alameda County included in Table E-36 reveal that White residents are exposed to the least poverty and highest quality school systems. White County residents also have the highest access to employment opportunities, highest labor market participation, and highest human capital compared to other racial and ethnic groups. The Black population is most likely to utilize public transit and have the lowest transportation costs. The Asian/Pacific Islander population scored the highest for environmental health, indicating they tend to live in neighborhoods with better environmental conditions.

Populations below the federal poverty line, regardless of race, have lower low poverty index, school proficiency index, labor market index, and environmental health index scores compared to the total population. The Asian/Pacific Islander, Hispanic, and Black populations below the federal poverty line tend to have better access to employment opportunities than the respective total populations. All

populations below the federal poverty line, regardless of race, are more likely to use transit and have lower transportation costs.

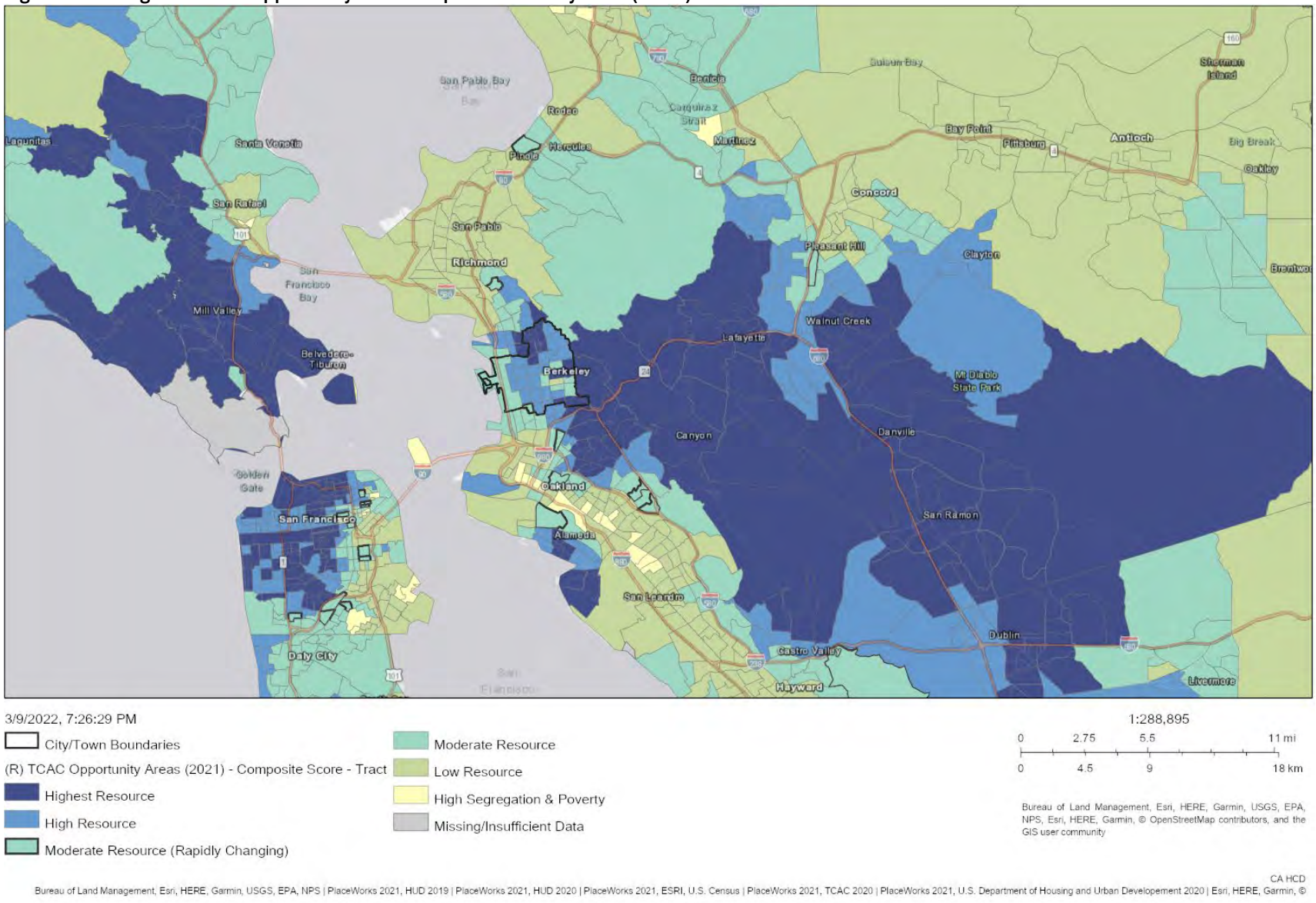
TCAC Opportunity Areas. Tract-level TCAC Opportunity score categories for the region are shown in Figure E-48 below. Highest and high resource tracts are most prevalent in southern and central Contra Costa County, from San Ramon to Walnut Creek, central and northwestern San Francisco, and southern Marin County. There are smaller pockets of highest and high resource areas in the City of Alameda and Berkeley. Most coastal East Bay tracts in and around the cities of San Leandro, Oakland, Richmond, Pittsburg, and Antioch are categorized as low resource. The eastern and southeastern side of San Francisco also has a concentration of low resource areas. Moderate resource tracts located sparsely throughout the East Bay but appear most frequently in Daly City, Marin County, and the northwestern corner of Contra Costa County. Areas of high segregation and poverty are most common in Oakland and San Francisco. High segregation and poverty tracts are described in detail in Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs).* In general, low resource tracts tend to have larger populations of persons of color, LMI households, and children living in single-parent female-headed households (see Figure E-16, Figure E-28, and Figure E-35).

Table E-36: HUD Opportunity Indicators by Race/Ethnicity and Poverty Status – Alameda County and Berkeley (2020)

	Low Poverty Index	School Proficiency Index	Jobs Proximity Index	Labor Market Index	Transit Trips Index	Low Transportation Cost index	Environmental Health Index
Alameda County							
Total Population							
White, Non-Hispanic	72.77	63.54	49.53	74.55	66.89	90.14	50.88
Black, Non-Hispanic	44.49	31.94	48.71	48.31	82.01	92.68	47.17
Hispanic	51.24	36.14	39.68	48.53	75.71	91.47	51.38
Asian or Pacific Islander, Non-Hispanic	67.49	59.00	43.20	66.53	75.47	90.32	53.28
Native American, Non-Hispanic	56.63	45.28	45.70	56.25	73.86	91.57	51.02
Population below federal poverty line							
White, Non-Hispanic	62.73	55.76	48.95	66.69	77.09	91.96	46.91
Black, Non-Hispanic	34.26	24.75	50.48	39.82	84.51	93.47	46.13
Hispanic	38.27	25.08	40.01	40.17	80.37	92.68	50.21
Asian or Pacific Islander, Non-Hispanic	52.06	47.56	52.88	57.37	84.51	93.46	46.16
Native American, Non-Hispanic	40.35	28.16	39.56	41.16	82.37	92.68	50.47
Berkeley							
Total Population							
White, Non-Hispanic	69.83	78.20	67.22	83.31	88.76	94.05	29.09
Black, Non-Hispanic	51.29	80.36	76.74	74.74	90.47	95.16	27.98
Hispanic	60.16	79.94	73.32	74.20	90.10	94.94	29.02
Asian or Pacific Islander, Non-Hispanic	66.12	77.23	69.26	68.33	90.47	95.17	30.10
Native American, Non-Hispanic	60.56	78.29	72.48	73.05	90.29	95.07	28.69
Population below federal poverty line							
White, Non-Hispanic	64.02	77.44	69.81	78.40	90.79	95.27	29.62
Black, Non-Hispanic	50.86	79.80	75.75	75.70	90.76	95.52	28.68
Hispanic	60.52	80.24	72.64	75.07	91.32	95.64	28.65
Asian or Pacific Islander, Non-Hispanic	66.16	76.43	69.03	70.54	92.40	95.86	29.97
Native American, Non-Hispanic	78.58	76.03	64.53	77.31	85.35	92.05	34.61

Source: HUD AFFH-T Data, 2020.

Figure E-48: Regional TCAC Opportunity Area Composite Score by Tract (2021)



Source: HCD AFFH Data Viewer (HCD and California Tax Credit Allocation Committee (TCAC), 2021), 2022.

Local Trends. HUD Opportunity Indicators for the City of Berkeley are included in Table E-36 above. Compared to the County, Berkeley populations, regardless of race or ethnicity, have higher school proficiency, jobs proximity, labor market, transit trips, and low transportation cost index scores. However, environmental conditions for all groups are worse in Berkeley than in the County. White and Asian/Pacific Islander populations in the City are also exposed to poverty at a higher rate than the County as a whole.

Like the County, White residents in the City have the lowest exposure to poverty and highest labor market participation compared to other racial/ethnic groups; however, they also have the lowest access to employment opportunities. White populations are also least likely to use public transit and have the highest transportation costs. The Black population tends to live near the highest quality school systems in the City and have the best access to employment opportunities. Black and Asian/Pacific Islander residents are equally and most likely to utilize public transportation. The Asian/Pacific Islander population also has the lowest transportation costs and highest exposure to better environmental quality.

In Berkeley, poverty status appears to have less of an effect on Opportunity Indicator scores compared to Alameda County. Hispanic, Asian/Pacific Islander, and Native American populations below the federal poverty line are less exposed to poverty and have higher labor force participation/human capital than the respective total populations. Environmental quality is also better for White, Black, and Native American populations below the federal poverty line.

TCAC Opportunity Areas. TCAC Opportunity Area scores for Berkeley have been compiled by tract (Table E-37) and are presented geographically in Figure E-49. Over half of the tracts in the City are high resource tracts (18 tracts), followed by highest resource tracts (seven tracts, 21.2 percent), and moderate resource tracts (six tracts, 18.2 percent). There is one low resource tract and one tract categorized as moderate resource (rapidly changing). Moderate resource (rapidly changing) tracts are designed to identify areas that may become high resource.

There are five highest resource tracts: in the Berkeley Hills, Thousand Oaks, Live Oak, and Northbrae neighborhoods, two in the southeast corner of the City in the Claremont and Elmwood District neighborhoods, and one encompassing the UC Berkeley campus. Most tracts in the Berkeley Hills, Westbrae, North Berkeley, Central Berkeley, and South Berkeley neighborhoods are high resource. Moderate resource areas are identified surrounding the UC Berkeley campus in the Downtown Berkeley, Northside, Panoramic Hill, and northern Elmwood District/Le Conte neighborhoods, as well as the eastern side of the City (Gilman, Northwest Berkeley, 4th Street, Southwest Berkeley, and Berkeley Marina neighborhoods). The moderate resource (rapidly changing) area is in southwestern corner of the South Berkeley neighborhood. The Southside neighborhood is considered a low resource area.

Highest resource areas tend to have smaller populations of people of color while block groups in and around moderate and low resource tracts tend to have larger populations of people of color (see Figure E-21). The low and moderate resource areas adjacent to UC Berkeley also have a higher percentage of LMI households (see Figure E-38). Several of these tracts have also been identified by HUD as R/ECAPs (see Figure E-43). There does not appear to be any correlation between populations of persons with disabilities or children in single-parent female-headed households and TCAC opportunity score (see Figure E-26 and Figure E-35).

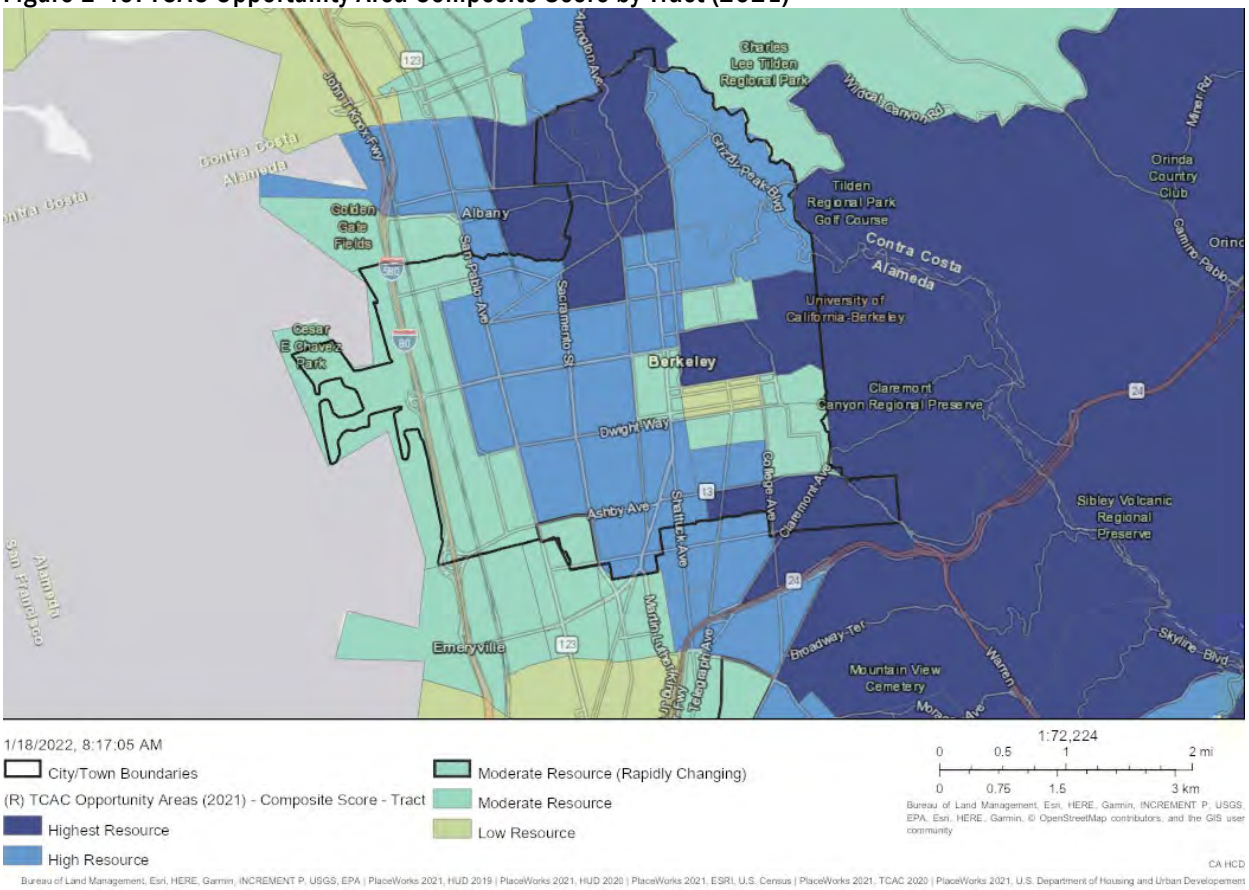
Tract 4228, the Southside neighborhood and low resource area, has a student population of approximately 90 percent. This tract has the highest unemployment rate and lowest labor force participation rate compared to other R/ECAPs in the City surrounding UC Berkeley. Tract 4228 is further characterized in Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*. However, as discussed before, the Census Bureau's reporting of student households as low incomes or even at poverty levels may not accurately reflect the actual financial status of the students.

Table E-37: TCAC Opportunity Area Scores by Tract (2021)

Census Tract	Economic Score	Environmental Score	Education Score	Composite Score	Final Category
6001421100	0.785	0.98	0.565	0.435	High Resource
6001421200	0.873	0.971	0.565	0.5	Highest Resource
6001421300	0.915	0.794	0.701	0.591	Highest Resource
6001421400	0.877	0.974	0.565	0.51	Highest Resource
6001421500	0.814	0.967	0.565	0.446	High Resource
6001421600	0.782	0.799	0.685	0.462	High Resource
6001421700	0.544	0.957	0.759	0.438	High Resource
6001421800	0.803	0.936	0.759	0.59	Highest Resource
6001421900	0.673	0.599	0.799	0.436	High Resource
6001422000	0.552	0.017	0.765	-0.031	Moderate Resource
6001422100	0.546	0.346	0.743	0.257	High Resource
6001422200	0.676	0.613	0.749	0.407	High Resource
6001422300	0.51	0.922	0.746	0.39	High Resource
6001422400	0.464	0.924	0.724	0.349	High Resource
6001422500	0.249	0.666	0.724	0.108	Moderate Resource
6001422600	0.985	0.641	0.624	0.635	Highest Resource
6001422700	0.076	0.63	0.616	-0.18	Moderate Resource
6001422800	0.001	0.708	0.638	-0.453	Low Resource
6001422900	0.111	0.853	0.676	-0.021	Moderate Resource
6001423000	0.689	0.668	0.757	0.437	High Resource
6001423100	0.622	0.596	0.765	0.378	High Resource
6001423200	0.362	0.469	0.765	0.176	High Resource
6001423300	0.435	0.466	0.756	0.234	High Resource
6001423400	0.678	0.649	0.612	0.297	High Resource
6001423500	0.538	0.832	0.634	0.274	High Resource
6001423601	0.692	0.863	0.69	0.429	High Resource
6001423602	0.119	0.819	0.638	-0.058	Moderate Resource
6001423700	0.338	0.809	0.616	0.115	Moderate Resource
6001423800	0.845	0.883	0.793	0.619	Highest Resource
6001423901	0.758	0.855	0.515	0.311	High Resource
6001423902	0.849	0.85	0.69	0.532	Highest Resource
6001424001	0.576	0.676	0.653	0.285	High Resource
6001424002	0.487	0.52	0.558	0.104	Moderate Resource (Rapidly Changing)

Source: UC Berkeley – TCAC Opportunity Area Scores by Tract. 2021.

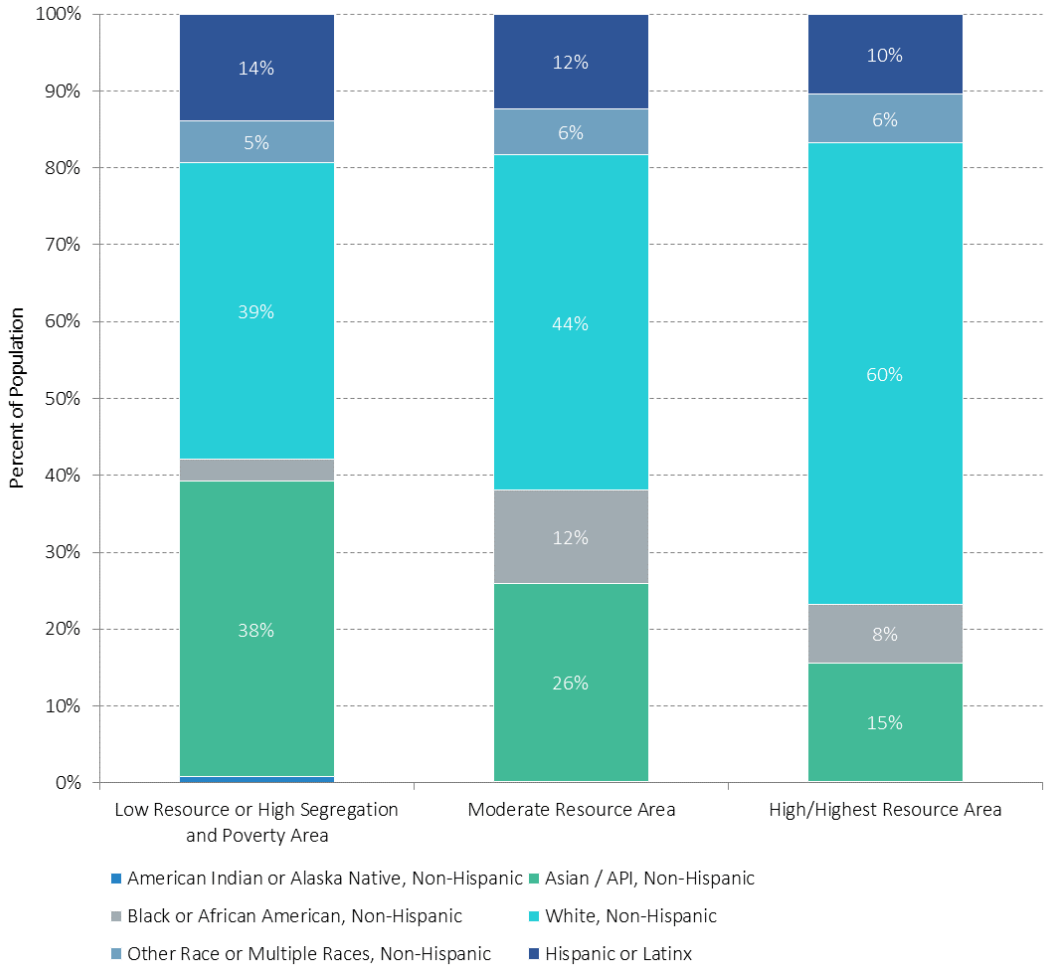
Figure E-49: TCAC Opportunity Area Composite Score by Tract (2021)



Source: HCD AFFH Data Viewer (HCD and California Tax Credit Allocation Committee (TCAC), 2021), 2022.

As outlined in Section E4.2 *Race/Ethnicity*, 53.3 percent of the Berkeley population is White. A disproportionate share of residents in high or highest resource areas, 60 percent, are White (Figure E-50). Only 44 percent of the population in moderate resource areas and 39 percent of the population in low resource areas are White. Of the population in the low resource area, 38 percent is Asian, and 14 percent is Hispanic or Latino. It is relevant to note that nearly 90 percent of the population in the low resource tract is enrolled in college or graduate school. Therefore, the racial/ethnic distribution in the low resource area is mostly a reflection of the UC Berkeley, and to a less extent Berkeley Community College, student body.

Figure E-50: Population Living in High Resource Areas by Race



Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates) and TCAC/HCD Opportunity Maps, 2020), 2021.

Education

Regional Trends. There are 18 school districts in Alameda County, including 11 adult schools and three community colleges. The Berkeley Unified School District (BUSD) consists of 11 elementary schools, three middle schools, two high schools, and one independent high school program. Graduation rates by race and ethnicity for Alameda County are presented in Table E-38. Alameda County had higher graduation rates than the State of California for both the 2010-11 and 2020-21 classes. In both 2011 and 2021, the Asian population had the highest graduation rate, increasing from 90 percent in 2011 to 95.4 percent in 2021. African American students (79.8 percent), Hispanic/Latino students (79.3 percent), and students that did not report their race (76.9 percent) had the lowest graduation rates in 2021. Since 2011, graduation rates amongst students without race reported, African American students, and American Indian/Alaska Native students saw the largest increase in graduation rates. There are no racial or ethnic groups in the County that saw a reduction in graduation rates during the same period.

Table E-38: High School Graduation Rates by Race/Ethnicity – Alameda County (2011-2021)

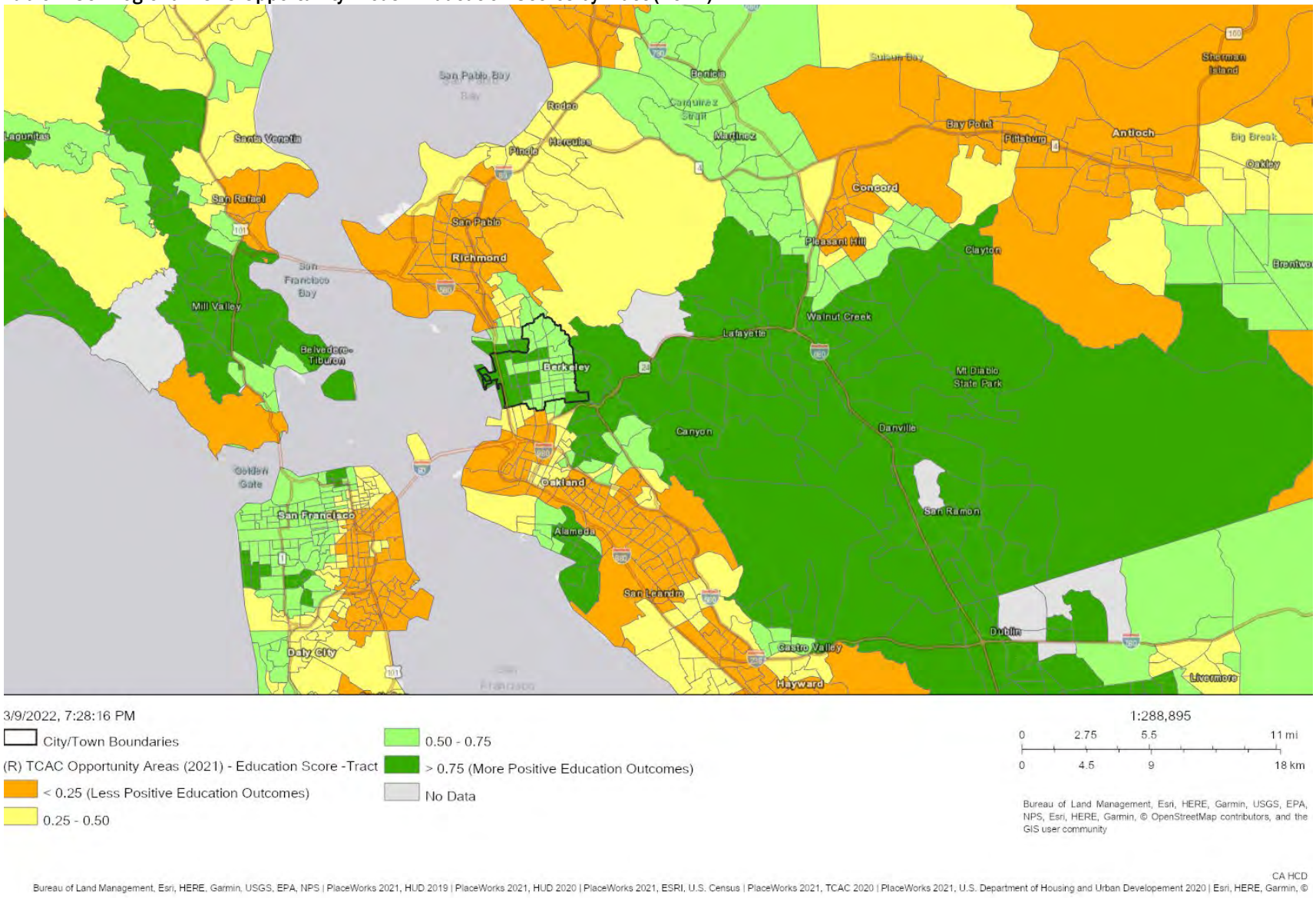
	2010-2011		2020-2021	
	Students	Graduation Rate	Students	Graduation Rate
African American	2,892	60.8%	1,706	79.8%
American Indian or Alaska Native	90	61.1%	47	80.9%
Asian	3,474	90.0%	4,439	95.4%
Filipino	894	87.7%	972	92.0%
Hispanic or Latino	4,663	68.9%	6,304	79.3%
Pacific Islander	276	74.6%	168	85.1%
White	4,246	89.0%	3,252	91.8%
Two or More Races	306	83.0%	837	89.7%
Not Reported	150	53.3%	121	76.9%
Alameda County	16,991	78.0%	17,846	86.9%
California	503,273	77.1%	500,179	83.6%

Source: California Department of Education, Data Reporting Office. Cohort Outcome Data for the Class of 2010-11 and 2020-21.

HUD's school proximity indices for Alameda County, shown previously in Table E-36, indicate White and Asian populations tend to live in neighborhoods with higher quality school systems compared to Native American, Hispanic, and Black populations. All populations below the federal poverty line, regardless of race, have lower quality school systems compared to the total population.

TCAC education scores are determined using the following variables: math proficiency, reading proficiency, high school graduation rates, and student poverty rates. A complete list of TCAC Opportunity Map domains and indicators are included in Table E-35. Coastal East Bay areas such as Antioch, Concord, Richmond, Oakland, and San Leandro have the highest concentration of tracts scoring in the lowest quartile for education. A high concentration of tracts in eastern San Francisco also scored in the lowest quartile. High scoring tracts, with education scores of 0.50 and above, are most prevalent in central and southern Contra Costa County, Berkeley, western San Francisco, and part of Marin County. Lower scoring tracts in the East Bay and San Francisco tend to have larger racial/ethnic minority populations and LMI households (see Figure E-16 and Figure E-35).

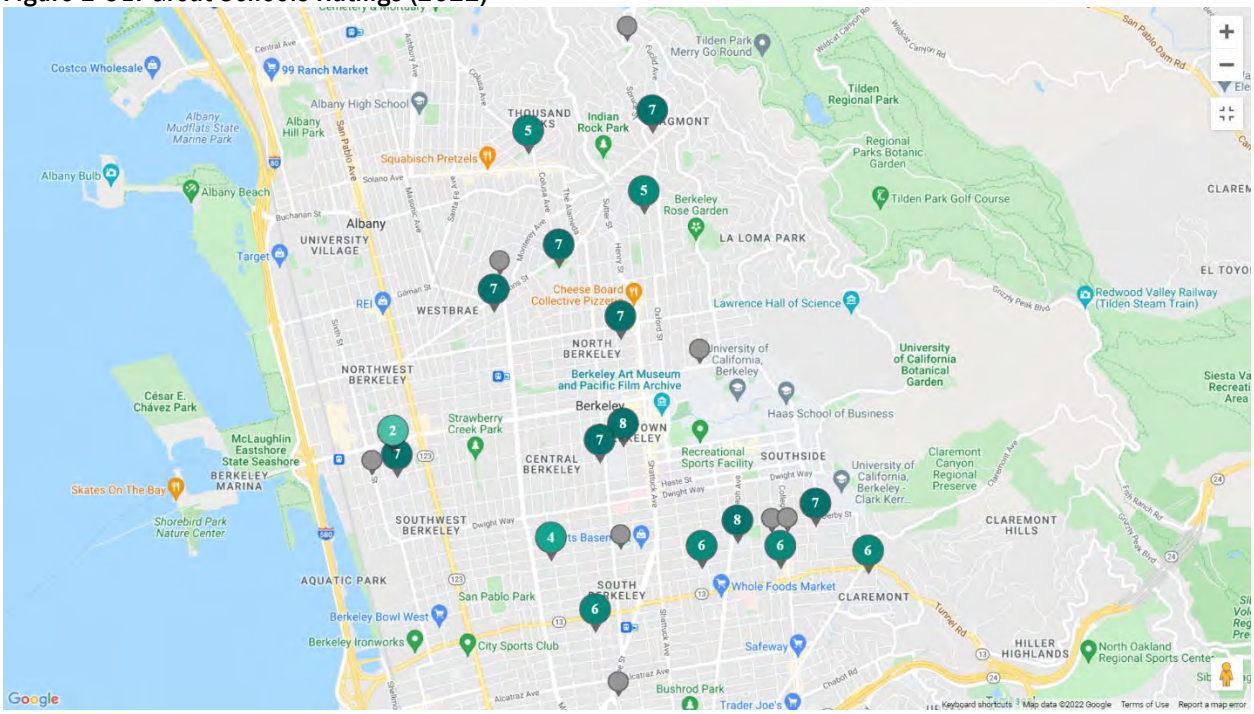
Table E-39: Regional TCAC Opportunity Areas – Education Scores by Tract (2021)



Source: HCD AFFH Data Viewer (HCD and TCAC, 2021), 2022.

Local Trends. Greatschools.org is a non-profit organization that rates schools across the States. The Great Schools Summary Rating calculation is based on four ratings: the Student Progress Rating or Academic Progress Rating, College Readiness Rating, Equity Rating, and Test Score Rating. Ratings at the lower end of the scale (1-4) signal that the school is "below average," 5-6 "average." and 7-10 "above average." Figure E-51 shows that most Berkeley schools are considered average or above average. There is one school, Longfellow Middle School in the South Berkeley neighborhood, which currently scores below average. Longfellow Middle School is in a block group where approximately 60 percent of the population belongs to a racial or ethnic minority group and where 51 percent of households are LMI (see Figure E-21 and Figure E-38). REALM Charter, Berkeley's only charter school which was in the Southwest Berkeley neighborhood, closed in 2019.

Figure E-51: Great Schools Ratings (2022)



Note: Private schools are shown in gray.
Source: GreatSchools.org, GreatSchools Rating – Berkeley, CA, 2022.

Of the 17 schools in the BUSD, including 11 elementary schools, three middle schools, and three high schools, there are 11 Title 1 schools. Title 1, Part A of the Elementary and Secondary Education Act, as amended by the Every Student Succeeds Act (ESEA):

> *"…provides financial assistance to local educational agencies (LEAs) and schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging state academic standards. Federal funds are currently allocated through four statutory formulas that are based primarily on census poverty estimates and the cost of education in each state."*

Title 1 schools in Berkeley are listed below. These schools are not generally concentrated in one area of the City.

- Berkeley Arts Magnet at Whittier
- Berkeley Technology Academy

- Cragmont Elementary
- Emerson Elementary
- John Muir Elementary
- Longfellow Arts and Technology Middle
- Malcolm X Elementary
- Oxford Elementary at West Campus
- Sylvia Mendez Elementary
- Thousand Oaks Elementary
- Willard Middle

Cragmont Elementary and Thousand Oaks Elementary are in the northeastern corner of the City (Berkeley Hills/Cragmont and Thousand Oaks neighborhoods), Berkeley Arts Magnet at Whittier and Oxford Elementary at West Campus are in central Berkeley (North and Central Berkeley neighborhoods), Berkeley Technology Academy, Longfellow Arts and Technology Middle, Malcom X Elementary, and Sylvia Mendez Elementary are in southern Berkeley (South Berkeley and Le Conte neighborhoods), and Emerson Elementary, John Muir Elementary, and Willard Middle are in the southeast corner of the City (Elmwood District and Claremont neighborhoods).

Graduation rates for BUSD students for the 2016-2017 and 2020-2021 classes are shown in Table E-40. Berkeley has higher graduation rates than both the County and State. The Asian student population has the highest graduation rate in the City compared to other racial and ethnic student groups. The graduation rate for Asian students during the 2020-2021 school year was 94.2 percent, followed by the Hispanic/Latino population (89.5 percent), and White population (89.1 percent). The African American and two or more races student populations had slightly lower graduation rates of 87.3 percent and 87.7 percent, respectively. Like the County and State, graduation rates in BUSD have increased since the 2016-2017 school year, from 86.6 percent to 89.4 percent in 2020-2021. The graduation rates for African American and Hispanic/Latino students in Berkeley is higher than the County, but lower for Asian students, White students, and students of two or more races. In addition to higher graduation rates, between the 2014-2015 and 2017-2018 school years, Berkeley had higher rates of students entering college (72.4 percent) compared to the County (70 percent) and State (64.9 percent).

Table E-40: High School Graduation Rates by Race/Ethnicity – BUSD (2017-2021)

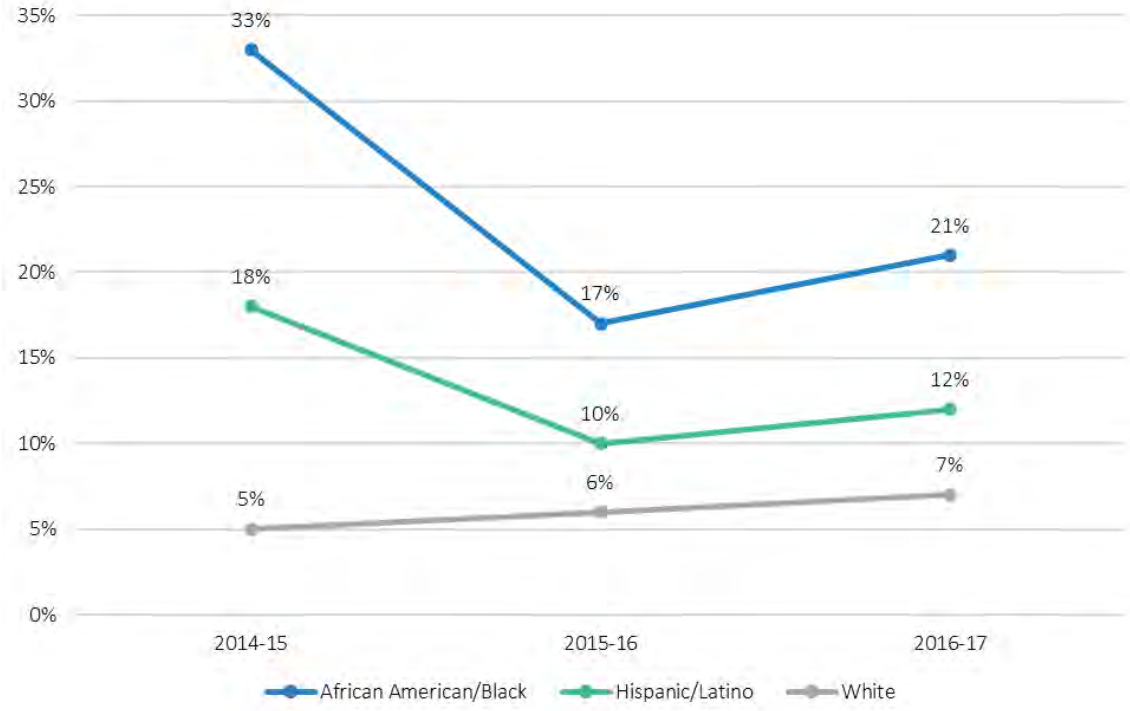
	2016-2017		2020-2021	
	Students	Graduation Rate	Students	Graduation Rate
African American	181	83.4%	110	87.3%
Asian	84	84.5%	86	94.2%
Filipino	11	100.0%	--	--
Hispanic or Latino	174	84.5%	219	89.5%
White	333	88.0%	368	89.1%
Two or More Races	87	93.1%	106	87.7%
BUSD	873	86.6%	905	89.4%
Alameda County	15,225	85.4%	15,933	86.6%
California	428,998	86.7%	425,585	87.7%

Source: California Department of Education, Data Reporting Office. Cohort Outcome Data for the Class of 2016-17 and 2020-21.

Black/African American and Hispanic/Latino students in BUSD are more prone to chronic absence and lower college readiness rates (Figure E-52, Figure E-53). The rate of Black/African American and Hispanic Latino students who are chronically absent has decreased since the 2014-2015 school year but remains significantly higher than White students. Approximately 21 percent of Black/African American students

and 12 percent of Hispanic/Latino students were chronically absent during the 2016-2017 school year compared to only seven percent of White students. During this period, African American and Hispanic/Latino students also had lower graduation rates than White students.

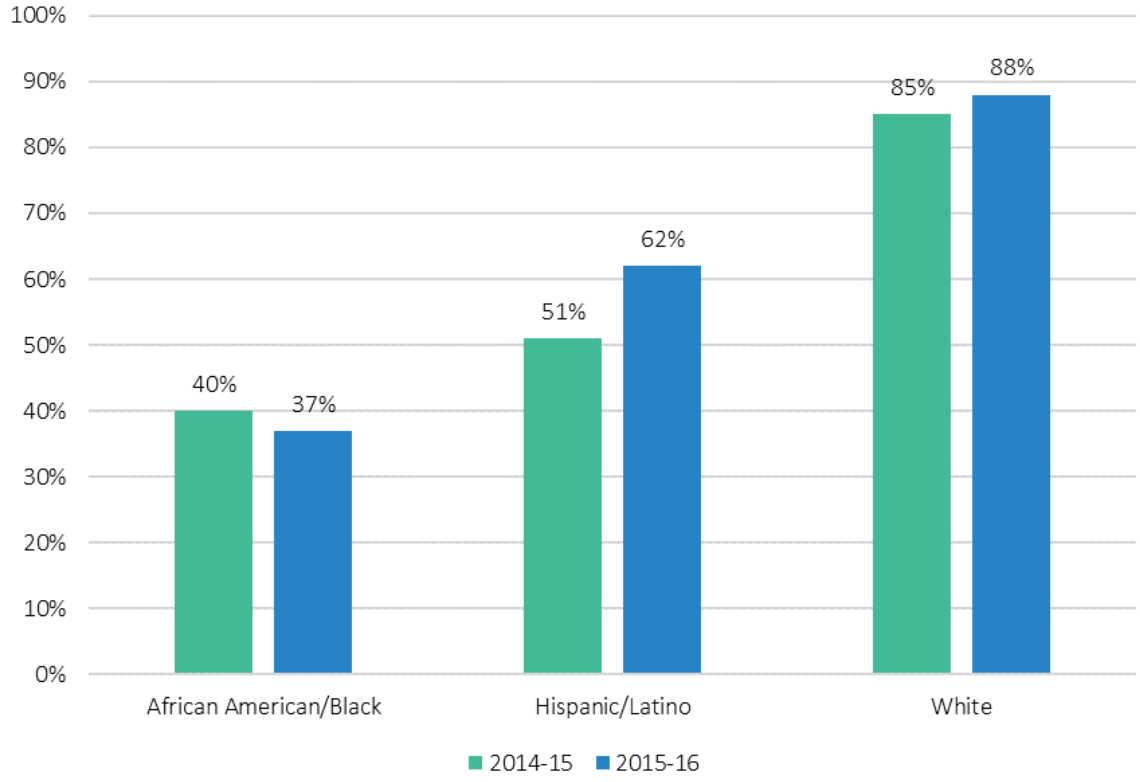
Figure E-52: School Attendance – BUSD (2014-2017)



% of students who are "chronically absent" (missed more than 10% of school days in the year)
Source: Berkeley's 2020 Vision: Equity in Education, Update to the Berkeley City Council, September 2018.

Black/African American and Hispanic/Latino students at Berkeley high school are also less likely to complete courses required for University of California (UC) and California State University (CSU) schools. During the 2015-2016 school year, 88 percent of White students complete UC/CSU required courses with a C or better compared to only 62 percent of Hispanic/Latino students and 37 percent of Black/African American students. Between 2014-2015 and 2015-2016, the proportion of Black/African American student with completed UC/CSU courses decreased.

Figure E-53: College and Career Readiness – Berkeley High School (2014-2016)



% of Berkeley High School graduates who completed courses required for UC/CSU entry with "C" or better
Source: Berkeley's 2020 Vision: Equity in Education, Update to the Berkeley City Council, September 2018.

HUD's school proximity indices for Berkeley, shown previously in Table E-36, indicate Black and Hispanic populations tend to live in neighborhoods with higher quality school systems compared to White, Asian, and Native American populations. School proficiency scores for the City ranged from 77.2 for the Asian population to 80.4 for the Black population. All populations below the federal poverty line, other than the Hispanic population, have less access to high quality school systems compared to the total population.

BUSD has a higher rate of English only (EO) students (78.5 percent), compared to the County (53.8 percent) and the State (59 percent) (Table E-41). Only 6.7 percent of BUSD students are considered English learners (EL). Conversely, 18.5 percent of Alameda County students and 17.7 percent of California students are EL. Due to the low rate of English learners in BUSD, the district also has a lower rate of reclassified fluent English proficient (RFEP) students. During the 2020-2021 school year, of English language-learners, 55 percent were Spanish-speakers, 9.9 percent were Arabic-speakers, 3.5 percent were Pashto-speakers, 3.3 percent were Urdu-speakers, 1.9 percent were Tigrinya-speakers, 1.6 percent were Thai-, Vietnamese-, Russian-, French-, and Japanese-speakers, 1.4 percent were Punjabi-speakers, and 1.1 percent were Amharic-speakers. Less than 2 percent of English-language learners spoke any other language.

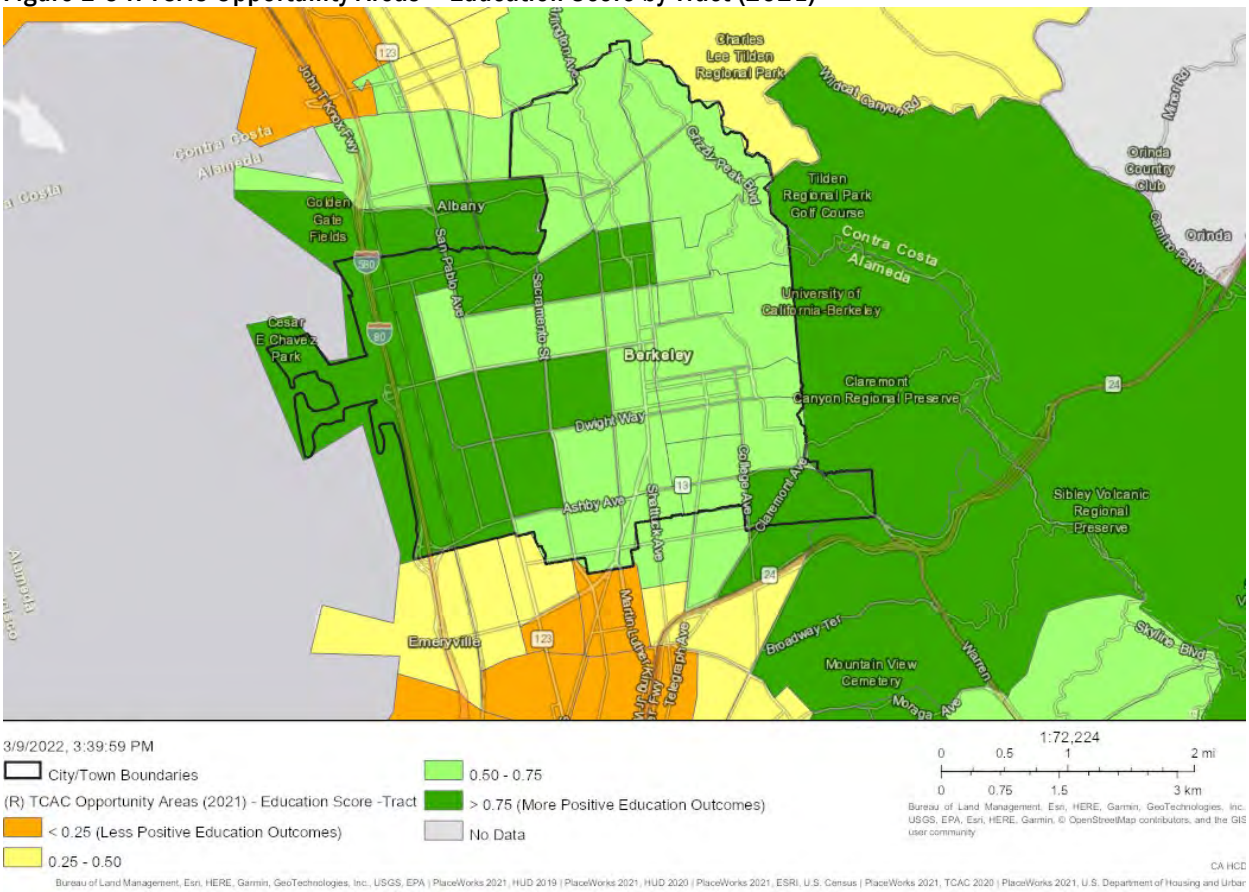
Table E-41: English Language Learners – BUSD, Alameda County, California (2020-21)

	Elementary	Middle	High	BUSD	Alameda County	California
English Only (EO)	81.1%	79.0%	75.2%	78.5%	53.8%	59.0%
Initial Fluent English Proficient (IFEP)	5.8%	6.2%	8.1%	6.7%	7.3%	4.3%
English Learner (EL)	7.8%	7.4%	5.1%	6.7%	18.5%	17.7%
Reclassified Fluent English Proficient (RFEP)	2.9%	7.3%	11.5%	7.0%	18.3%	17.6%
To Be Determined (TBD)	2.3%	0.1%	0.1%	1.0%	2.1%	1.4%
Total	4,005	2,077	3,327	9,409	222,573	6,002,523

Source: California Department of Education, Data Reporting Office. Cohort Outcome Data for the Class of 2020-21.

TCAC Opportunity Area education scores for Berkeley tracts are shown in Figure E-54. All tracts have higher scores exceeding 0.50. In general, the eastern side of the City has slightly lower scores, between 0.50 and 0.75, while the western side has scores in the highest quartile. TCAC education scores for Berkeley tracts range from 0.52 to .080, indicating there are adequate educational opportunities Citywide. Higher education scores do not directly correlate with larger populations of persons of color. Tracts with higher education scores generally have larger populations of persons with disabilities and children in female-headed households, indicating that these protected groups are not exposed to lower education scores at a higher rate (see Figure E-21, Figure E-26, and Figure E-35).

Figure E-54: TCAC Opportunity Areas – Education Score by Tract (2021)

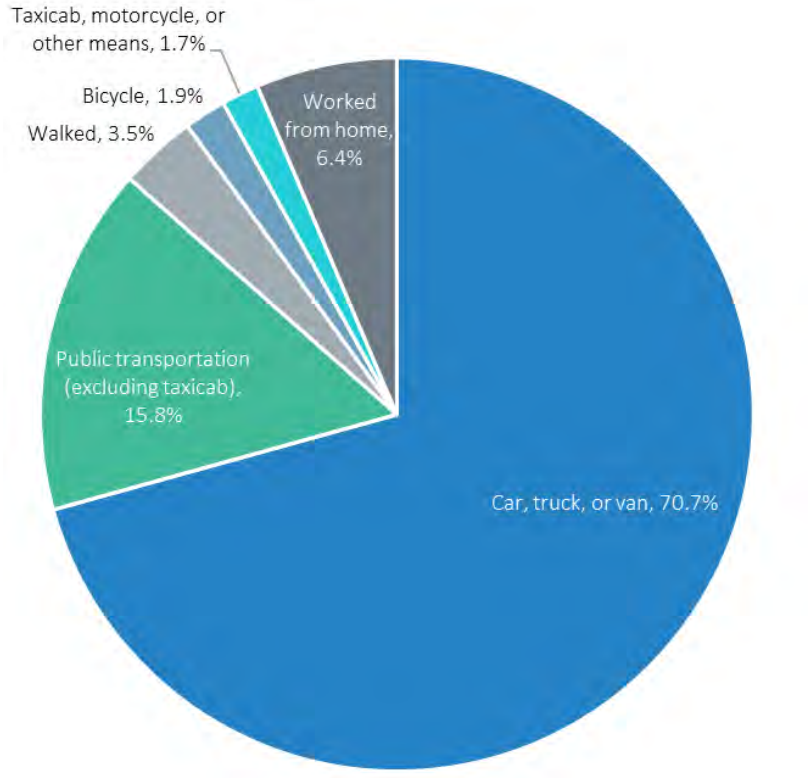


Source: HCD AFFH Data Viewer (HCD and TCAC, 2021), 2022.

Transportation

Regional Trends. In the County, most workers (70.7 percent) drive to work (Figure E-55). Nearly 61 percent of workers drive alone and 9.8 percent carpool. Public transit is the second most common mode of transportation in the County, followed by walking, and bicycling. Since the 2006-2010 ACS, the proportion of workers who worked from home increased from 5.1 percent to 6.4 percent. One-year, 2019 ACS estimates show that 6.6 percent of workers worked from home. Between the 2006-2010 and 2015-2019 ACS, the rate of workers using public transportation also increased (from 11.3 percent to 15.8 percent).

Figure E-55: Means of Transportation for Work – Alameda County (2019)



Source: 2015-2019 ACS (5-Year Estimates).

There are seven transit agencies that operate in Alameda County.[21] Services include heavy rail, commuter rail, bus, ferry, and automated guideway services. Transit agencies serving Alameda County are as follows:

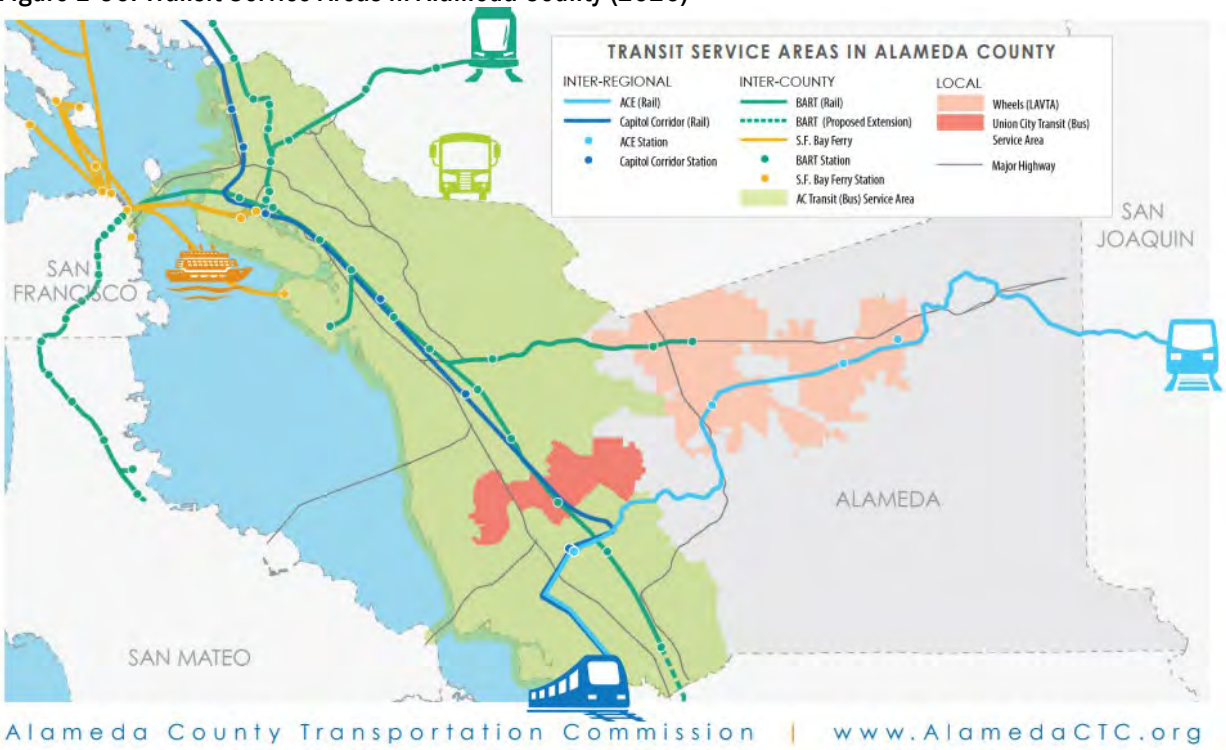
- Bay Area Rapid Transit (BART)
- Alameda-Contra Costa Transit District (AC Transit)
- Capital Corridor
- Altamont Corridor Express (ACE)
- San Francisco (SF) Bay Ferry
- Union City Transit

[21] Alameda County Transportation Commission, Alameda County Transit System Fact Sheet, January 2020. https://www.alamedactc.org/wp-content/uploads/2020/01/Transit_System_FS_Jan2020.pdf.

- Wheels – Livermore Amador Valley Transit Authority (LAVTA)

Transit routes and services areas for these agencies in the Alameda County region are shown in Figure E-56. Most of these agencies serve cities throughout northeastern Alameda County. The eastern County is served only by BART, Wheels (LAVTA), and ACE.

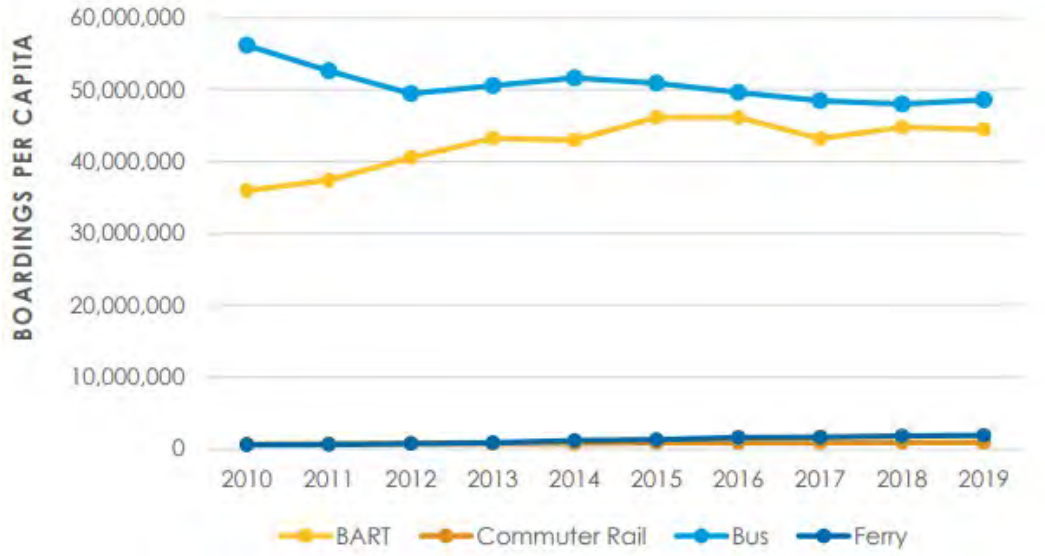
Figure E-56: Transit Service Areas in Alameda County (2020)



Source: Alameda County Transportation Commission – Alameda County Transit System Fact Sheet, January 2020.

According to the Alameda County Transportation Commission, Alameda County has the second highest share of transit commuters after San Francisco. A majority of transit trips in the County are on BART or bus. Boardings per capita for all services, BART, Commuter Rail, Bus, and Ferry, has increased since 2010 (Figure E-57). Operator expenses for BART and AC transit have increased over the last decade. The County Transportation Commission attributes this increase to congestion on arterials for buses, strongly-peaked demand, and rising maintenance and labor costs. The County Transportation Commission also noted that the cost per trip for operators has increased as AC transit and BART have expanded services but seen a dip in ridership over the past four years.

Figure E-57: Boardings per Capita – Alameda County (2010-2019)



Source: Alameda County Transportation Commission – Alameda County Transit System Fact Sheet, January 2020.

HUD's opportunity indicators can provide a picture of transit use and access in Alameda County through the transit index[22] and low transportation cost index.[23] Index values can range from zero to 100 and are reported by race so that differences in access to transportation can be evaluated based on racial or ethnic background. Indices scores for the County were shown previously in Table E-36. In the County, transit index values range from 67 to 82, with White residents scoring the lowest and Black residents scoring highest. Given that the higher the transit trips index, the more likely residents utilize public transit, Black residents are more likely to use public transit. Hispanic and Asian/API residents were about equally likely to use public transit (transit trip index scores of 75.7 and 75.5, respectively). For residents living below the poverty line, the index values have a smaller range from 77 for White residents to 84.5 for Black and Hispanic residents. Regardless of income, White residents have lower index values- and thus a lower likelihood of using transit. For all racial/ethnic groups, the lower income population is more likely to use public transit.

Low transportation cost index values have a smaller range than transit index values of 90.1 for the White population to 92.7 for the Black population. Low transportation cost indices across all races and were similar for residents living below the poverty line. White residents have the lowest low transportation cost index scores, regardless of poverty status, While Black residents have the highest.

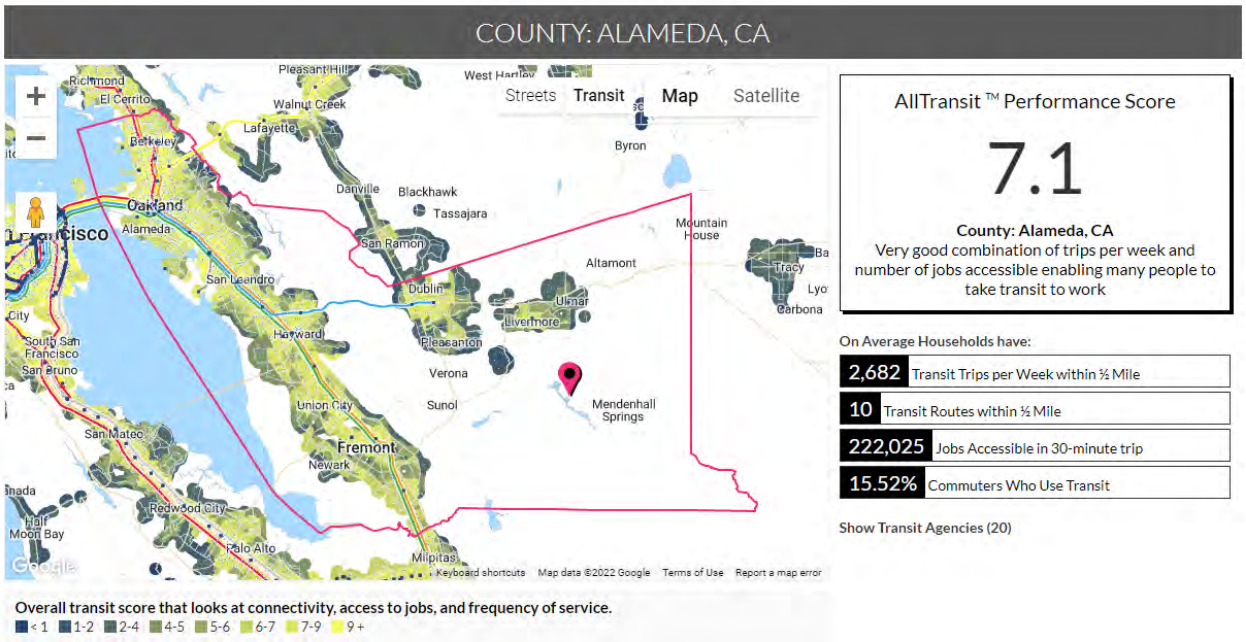
All Transit explores metrics that reveal the social and economic impact of transit, specifically looking at connectivity, access to jobs, and frequency of service. According to the most recent data posted (2019), Alameda County has an AllTransit Performance Score of 7.1 (out of 10). The map in Figure E-58 shows

[22] Transit Trips Index: This index is based on estimates of transit trips taken by a family that meets the following description: a 3-person single-parent family with income at 50 percent of the median income for renters for the region (i.e., the Core-Based Statistical Area (CBSA). The higher the transit trips index, the more likely residents in that neighborhood utilize public transit.

[23] Low Transportation Cost Index: This index is based on estimates of transportation costs for a family that meets the following description: a 3-person single-parent family with income at 50 percent of the median income for renters for the region/CBSA. The higher the index, the lower the cost of transportation in that neighborhood.

that the coastal areas of the County, from Fremont to Berkeley, have the highest scores compared to inland Alameda County areas. According to AllTransit, in the County, 85.7 percent of jobs are located within ½ mile of transit and 92.8 percent workers live within ½ mile of transit. Further, 93.3 percent of households are within a ½ mile of transit including 100 percent of Low Income Housing Tax Credit (LIHTC) buildings totaling 14,317 units.

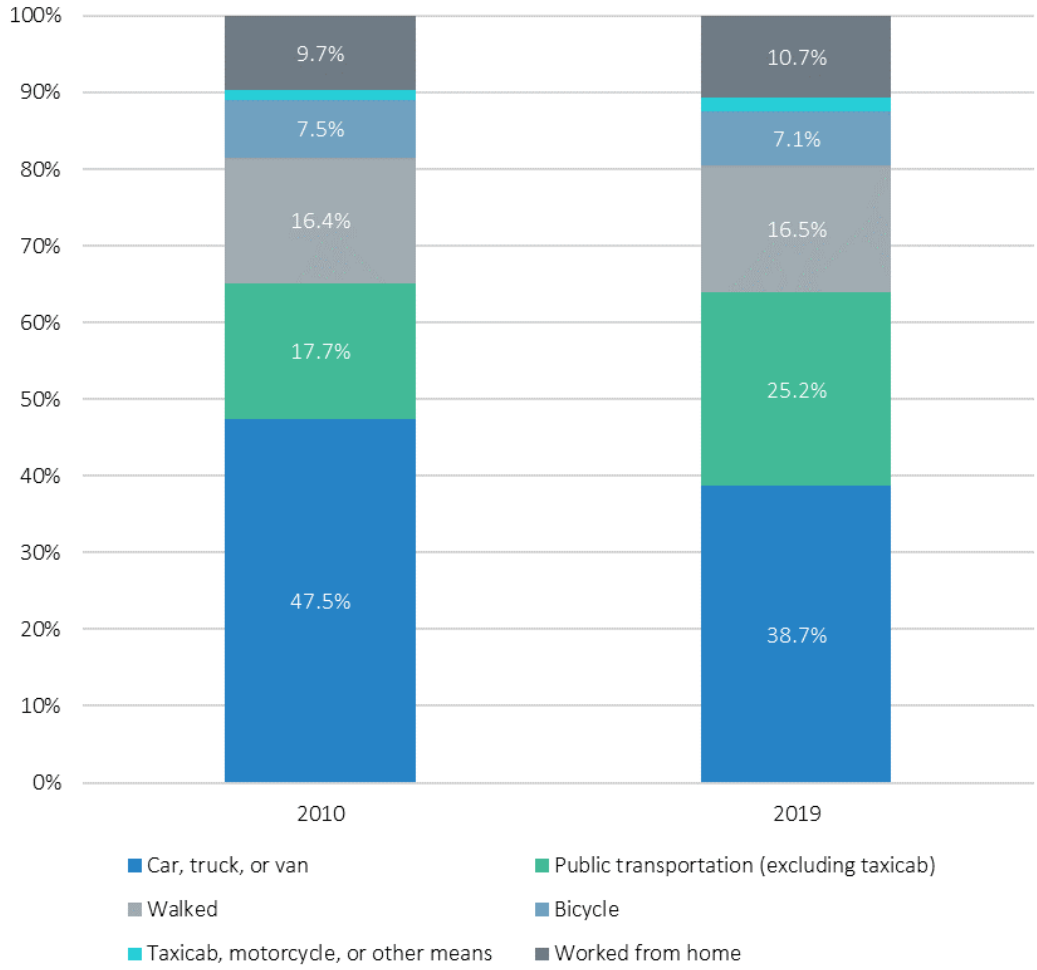
Figure E-58: Alameda County All Transit Performance Score and Map (2019)



Source: AllTransit Performance Score – Berkeley, CA 2019, 2022.

Local Trends. Compared to the County, Berkeley has a significantly lower proportion of workers who drive to work. Only 38.7 percent of Berkeley workers get to work by car, truck, or van, including 33 percent who drive alone and 5.7 percent who carpool (Figure E-59). Over a quarter of workers in the City use public transit. Since the 2006-2010 ACS, the proportion of workers who drive to work has decreased significantly, while the proportion of workers using public transit has increased. The proportion of persons working from home also increased by one percent during the same period. In general, the City is characterized by a high level of public transit users and pedestrians compared to the County.

Figure E-59: Means of Transportation for Work – Berkeley (2010-2019)



Source: 2006-2010 and 2015-2019 ACS (5-Year Estimates).

HUD Opportunity Indicator scores for the City were shown previously in Table E-36. In Berkeley, transit index values range from 88.8 to 90.5, with White residents scoring the lowest and Black and Asian residents scoring highest. Given that the higher the transit trips index, the more likely residents utilize public transit, Black and Asian residents are more likely to use public transit. Hispanic and Native American residents were almost as likely to use public transit as Black and Asian residents (index scores of 90.1 and 90.3, respectively). For residents living below the poverty line, the index values have a larger range from 85.4 for Native American residents to 92.4 for Asian residents. All groups below the poverty level, except Native American populations, were more likely to use public transit compared to the population as a whole. All Berkeley residents, regardless of race or income, were more likely to use public transit compared to the County population.

Low transportation cost index values have a smaller range than transit index values of 94.1 for the White population to 95.2 for the Asian population. Low transportation cost indices across all races and were similar for residents living below the poverty line. White residents have the lowest low transportation cost index scores for the total population, while Native American residents have the lowest low transportation cost index scores for populations below the federal poverty level. All racial/ethnic groups

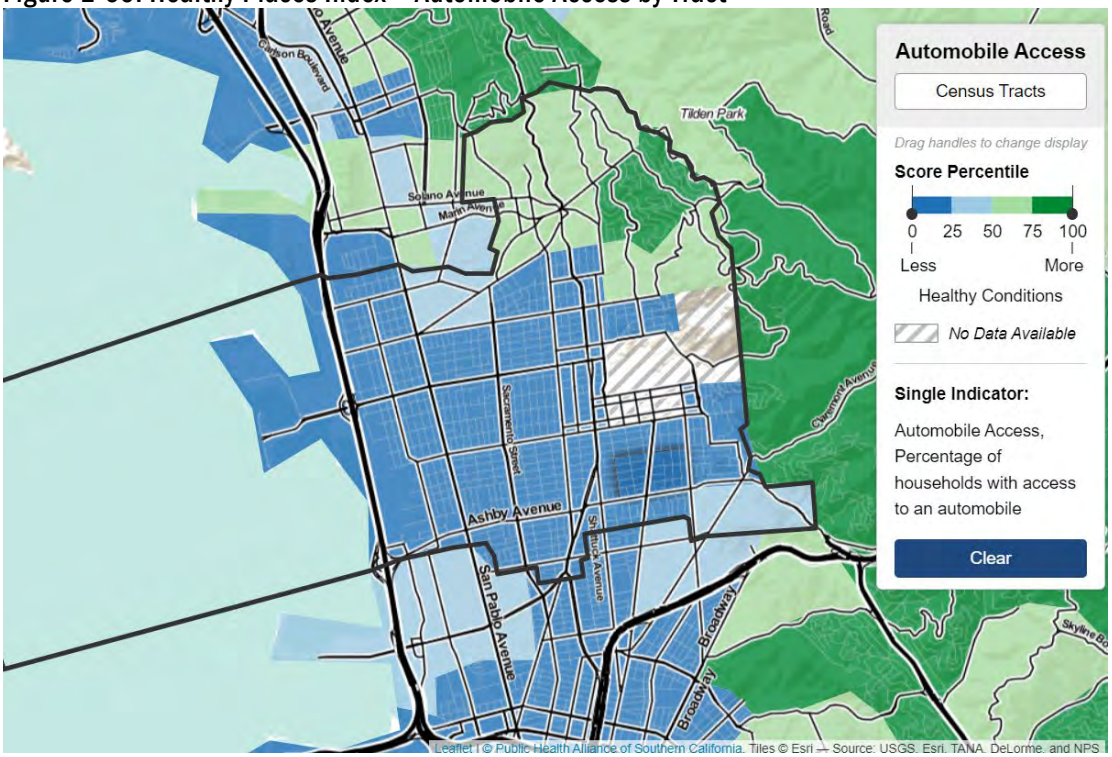
in the City, except for Native Americans below the poverty level, have lower transportation costs compared to the County.

Transit agencies serving the City of Berkeley include:

- AC Transit
- Amtrak
- Bay Area Rapid Transit (BART)
- Bear Transit – UC Berkeley Shuttle
- Capital Corridor Joint Powers Authority
- Emery Go-Round
- Tideline Water Taxi
- Berkeley Lab – Employee shuttle
- CALTRANS Commuter Bike Shuttle – Van service takes bikes from MacArthur BART to San Francisco Transbay Terminal during commute hours

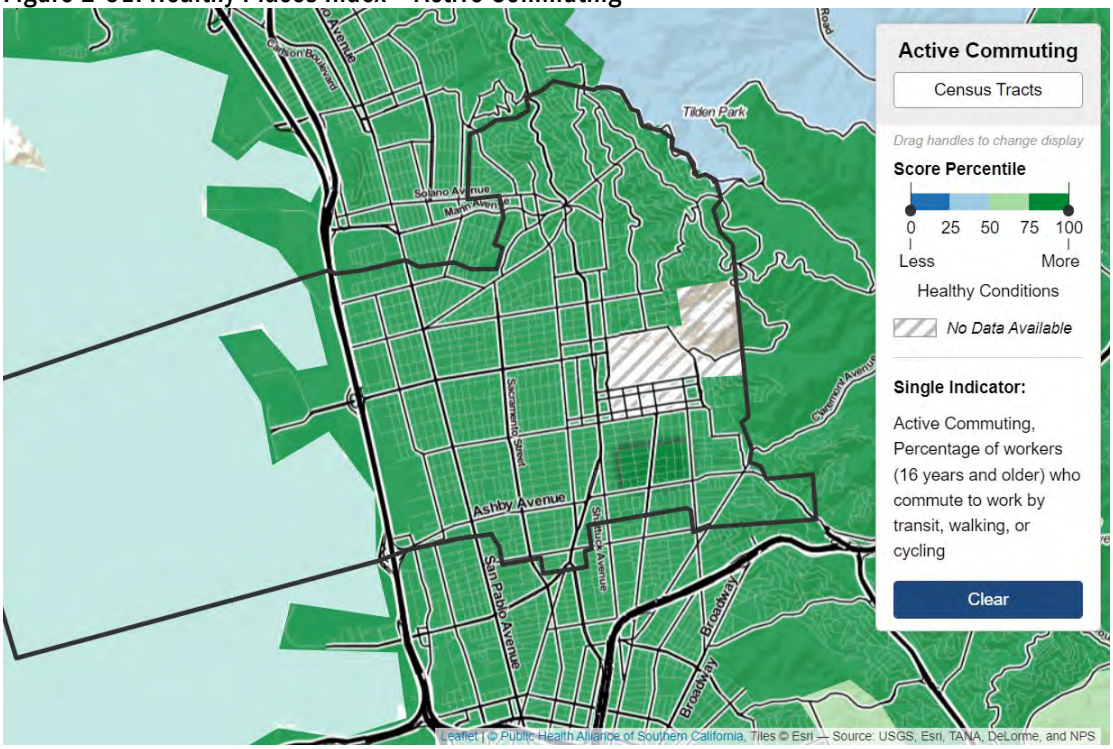
The California Healthy Places Index (HPI) analyzes community conditions and variables related to economic, education, transportation, social, neighborhood, housing, clean environment, and healthcare access to estimate healthy community conditions. Figure E-60 shows that most tracts in Berkeley scored in the lowest quartile for automobile access. This is consistent with the low rate of workers who commute by car, truck, or van. Tracts in the northeastern corner of the City, in the Berkeley Hills, Thousand Oaks, Live Oak, and Terrace View neighborhoods, have larger populations with access to automobiles. Though automobile access is limited throughout the City, all tracts scored in the highest quartile for active commuting (Figure E-61). Active commuting includes persons who commute to work by transit, walking, or cycling.

Figure E-60: Healthy Places Index – Automobile Access by Tract



Source: California Healthy Places Index (HPI), accessed March 2022.

Figure E-61: Healthy Places Index – Active Commuting



Source: California Healthy Places Index (HPI), accessed March 2022.

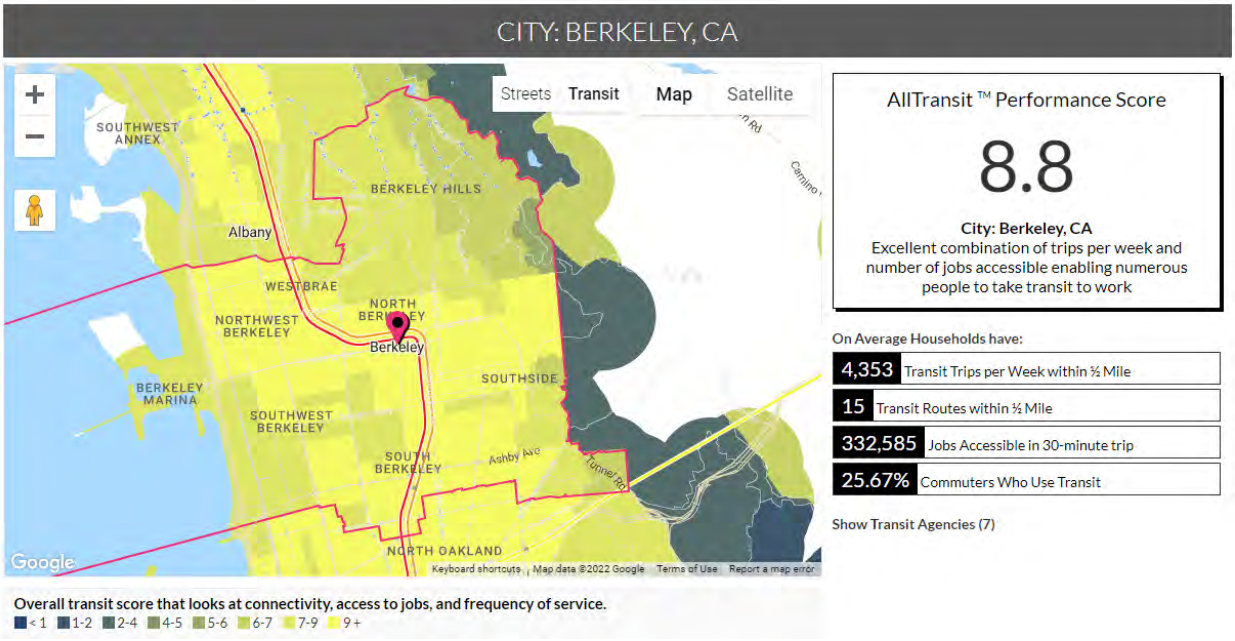
There are three major transit centers located in Berkeley. Transit centers are considered "major transit connection hubs, where multiple transit modes and agencies converge."[24] Berkeley transit centers include:

- Ashby BART Station (BART, AC Transit, West Berkeley Shuttle)
- Downtown Berkeley BART Station (BART, AC Transit, Bear Transit (Shuttle))
- North Berkeley BART Station (BART, AC Transit)

Berkeley received an All Transit performance score of 8.8, higher than the County score of 7.1. According to All Transit, 98.8 percent of jobs are located within ½ mile of transit and 99.9 percent of workers live within ½ mile of transit, higher than the rates Countywide. Nearly all households (99.9 percent) are also within ½ mile of transit, including 100 percent of LIHTC buildings totaling 781 units. As presented in both Figure E-62 and Figure E-63, most of Berkeley has high access to transit and jobs. Transit opportunities are generally less accessible to areas along the City boundaries, especially the Berkeley Hills neighborhood in the northeastern corner of the City. This part of Berkeley has a higher concentration of elderly adults, White residents, and has median incomes exceeding $125,000 (see Figure E-27 and Figure E-47).

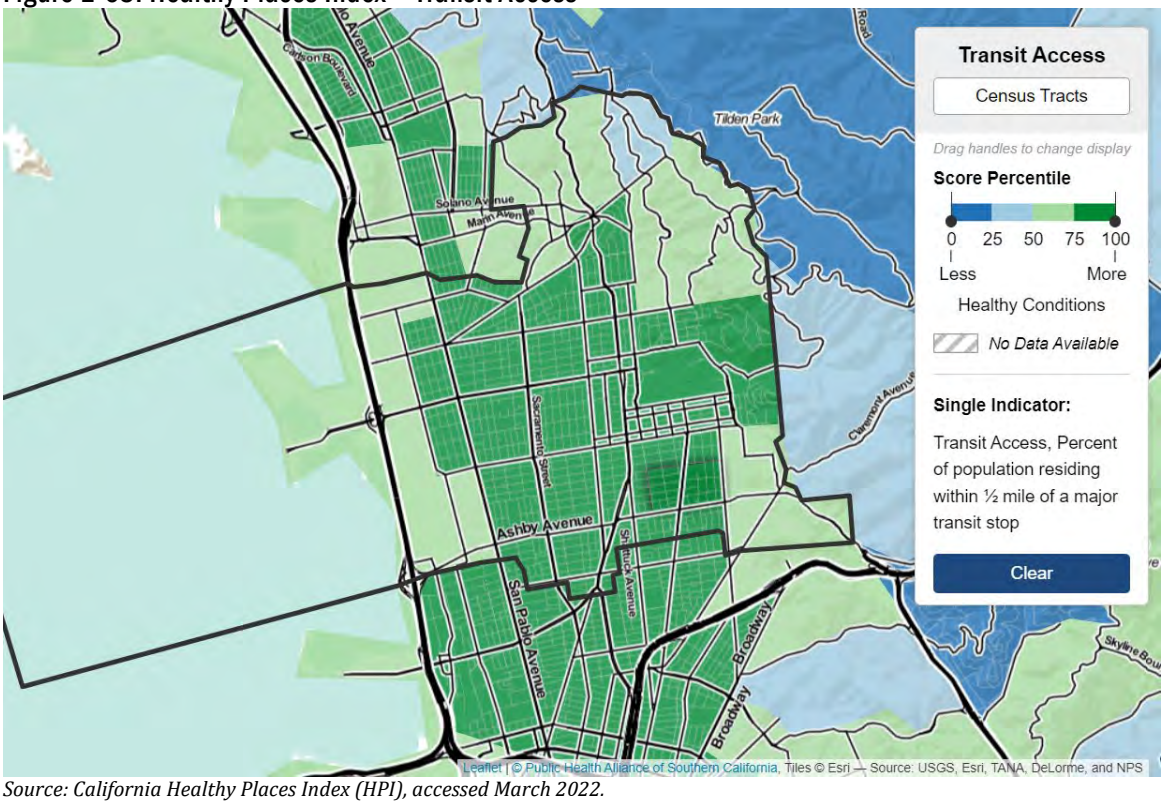
[24] Metropolitan Transportation Commission, 511 SF Bay – Transit Centers, accessed March 2022. https://511.org/transit/centers.

Figure E-62: Berkeley All Transit Performance Score and Map (2019)



Source: AllTransit Performance Score – Berkeley, CA 2019, 2022.

Figure E-63: Healthy Places Index – Transit Access



Source: California Healthy Places Index (HPI), accessed March 2022.

Economic

Regional Trends. The Bay Area economy has grown to be the fourth largest metropolitan region in the United States today, with over 7.7 million people residing in the nine-county, 7,000 square-mile area. In

recent years, the Bay Area economy has experienced record employment levels during a tech expansion surpassing the "dot-com" era of the late 1990s. The latest boom has extended not only to the South Bay and Peninsula — the traditional hubs of Silicon Valley — but also to neighborhoods in San Francisco and cities in the East Bay, most notably Oakland. The rapidly growing and changing economy has also created significant housing and transportation challenges due to job-housing imbalances.

HUD provide values for labor market index[25] and jobs proximity index[26] that can be used to measure for economic development in Alameda County. Like other HUD opportunity indicators, scores range from 0 to 100 and are published by race and poverty level to identify differences in the relevant "opportunity" (in this case economic opportunity). The labor market index value is based on the level of employment, labor force participation, and educational attainment in a census tract- a higher score means higher labor force participation and human capital in a neighborhood. Alameda County's labor market index values have a significant range from 48.3 to 74.6, with Black residents scoring lowest and White residents scoring highest. White residents have significantly higher labor market participation than all other racial/ethnic groups according to labor market index scores. Scores for Marin County residents living below the poverty line drop notably for residents of all races.

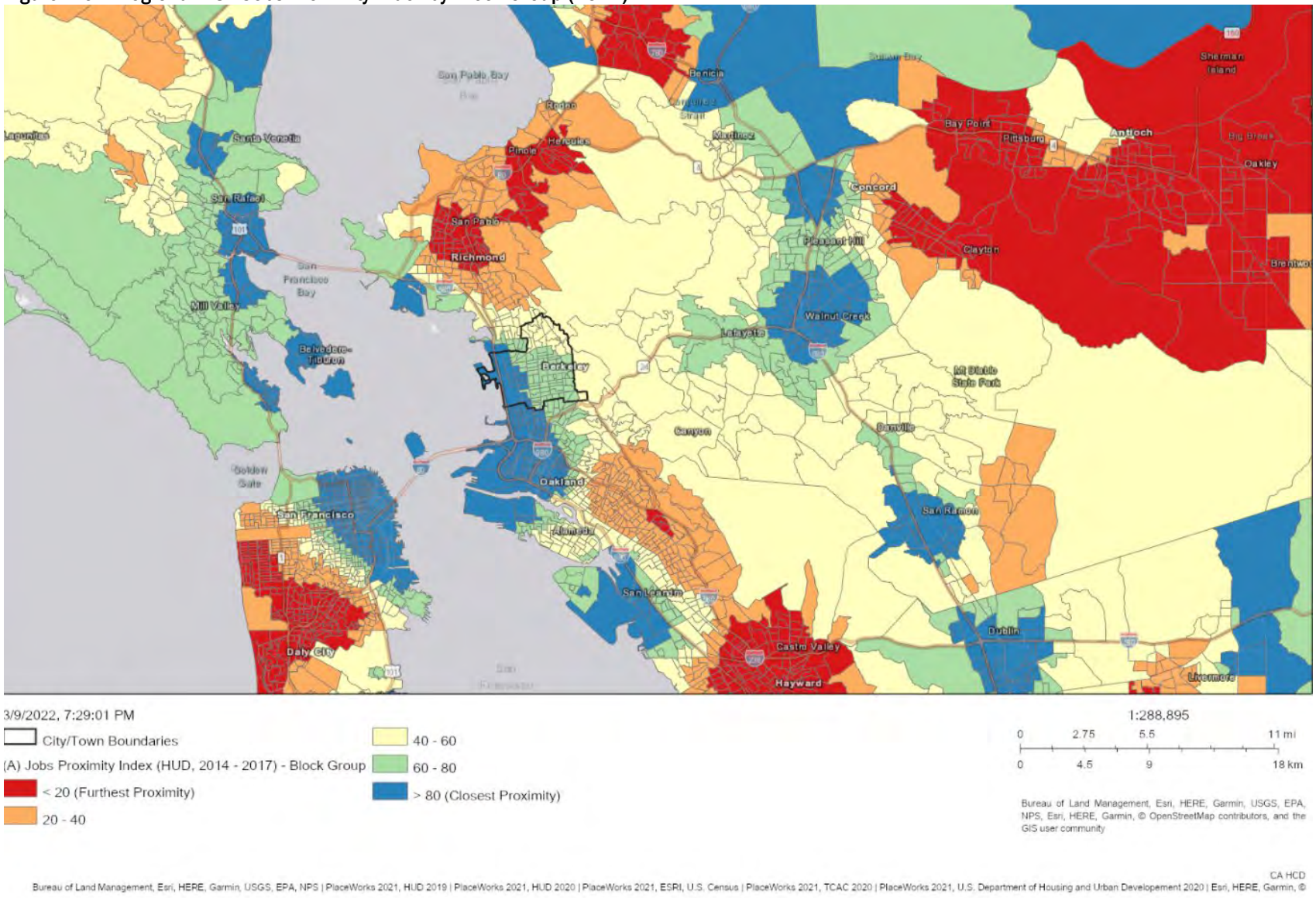
HUD's jobs proximity index quantifies the accessibility of a neighborhood to jobs in the region. Index values can range from 0 to 100 and a higher index value indicate better the access to employment opportunities for residents in a neighborhood. County jobs proximity index values range from 39.7 to 49.5 and are highest for White and Black residents. The jobs proximity value map in Figure E-64 shows the distribution of scores in the region. Regionally, tracts along the northern San Pablo Bay shore and northern San Francisco Bay shore (Oakland and San Francisco) have the highest job proximity scores Block groups in northern Contra Costa County, surrounding Richmond, Clayton, and Antioch, and block groups in southwestern San Francisco, Daly City, and around Hayward have significantly lower jobs proximity scores.

TCAC economic scores are determined using the following variables: poverty, adult education, employment, job proximity, and median home value. A complete list of TCAC Opportunity Map domains and indicators are included in Table E-35. TCAC economic scores by tract are presented in Figure E-67. Tracts with TCAC education scores in the highest quartile are concentrated in San Francisco, Berkeley, northern Oakland, and southern Marin County. Most of Contra Costa County as well as the area spanning southern Oakland to San Leandro have lower TCAC economic scores.

[25] Labor Market Engagement Index: The labor market engagement index provides a summary description of the relative intensity of labor market engagement and human capital in a neighborhood. This is based upon the level of employment, labor force participation, and educational attainment in a census tract. The higher the score, the higher the labor force participation and human capital in a neighborhood.

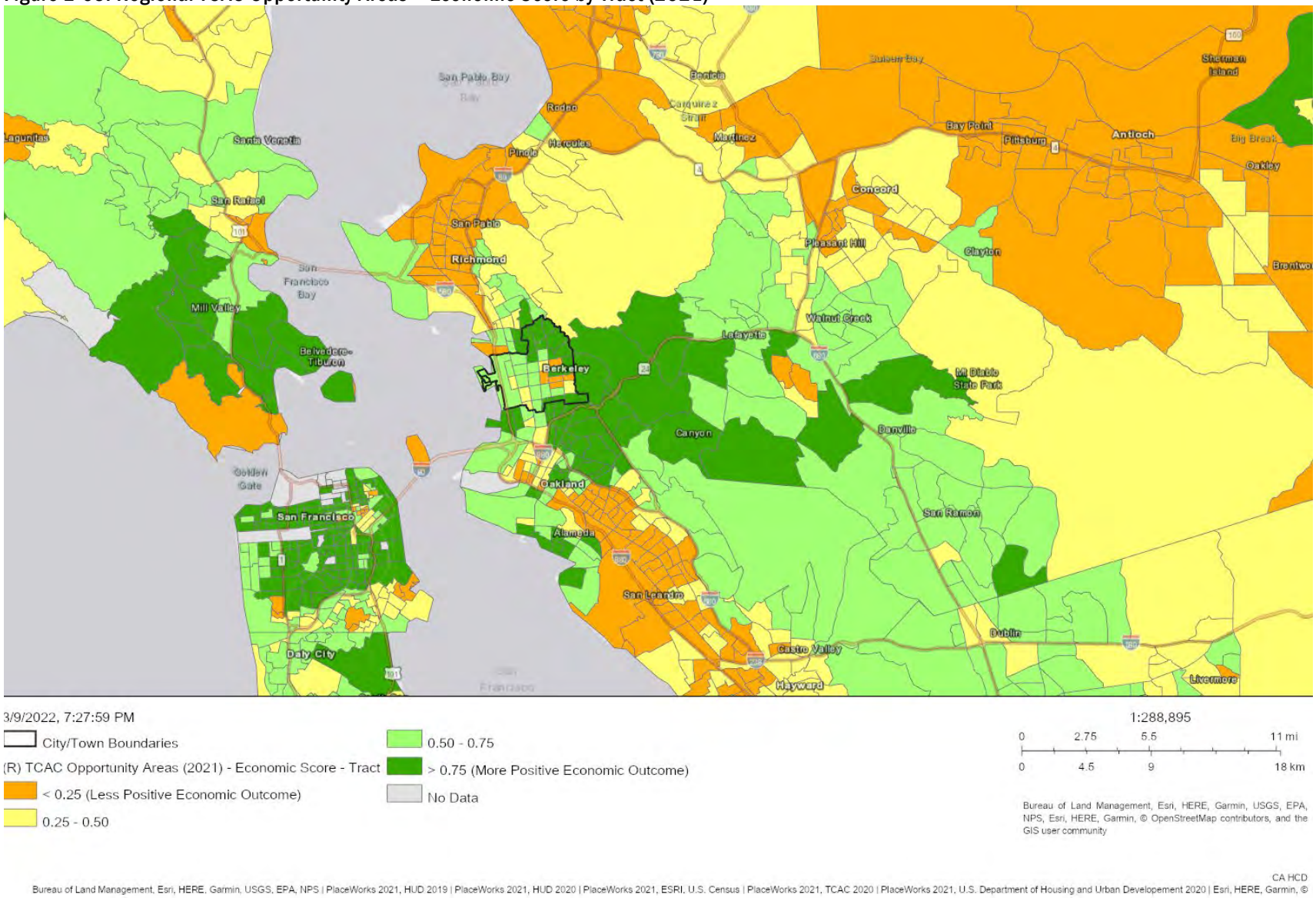
[26] Jobs Proximity Index: The jobs proximity index quantifies the accessibility of a given residential neighborhood as a function of its distance to all job locations within a region/CBSA, with larger employment centers weighted more heavily. The higher the index value, the better the access to employment opportunities for residents in a neighborhood.

Figure E-64: Regional HUD Jobs Proximity Index by Block Group (2017)



Source: HCD AFFH Data Viewer (HUD 2020, based on 2014-2017 Longitudinal Employer-Household Dynamics (LEHD) data), 2022.

Figure E-65: Regional TCAC Opportunity Areas – Economic Score by Tract (2021)



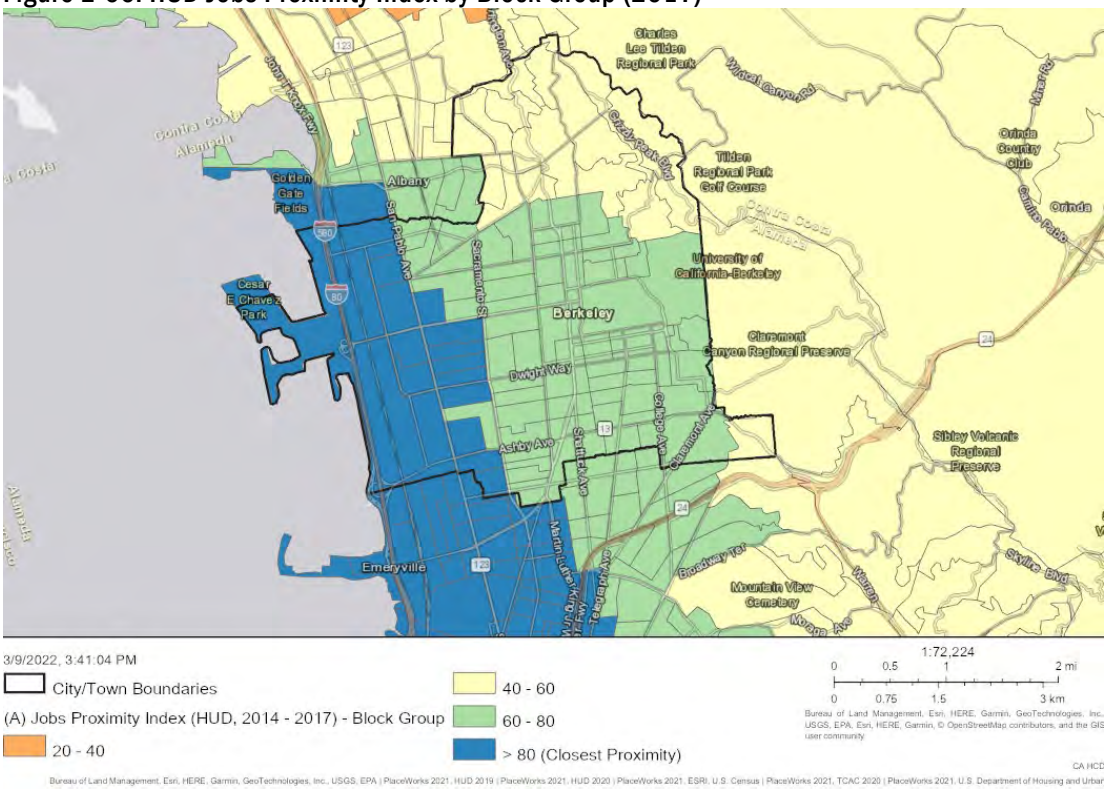
Source: HCD AFFH Data Viewer (HCD and TCAC, 2021), 2022.

Local Trends. HUD Opportunity indicators for labor market indices and jobs proximity indices for the City of Berkeley are included in Table E-36. As discussed previously, the labor market index is based on employment levels, labor force participation, and human capital in a neighborhood. Labor market index values for the City range from 68.3 to 83.3 for the total City population, higher than the range Countywide. The White population has the highest labor market index values, followed by the Black population, Hispanic population, Native American population, and Asian population (lowest values). The low labor market index value for Asian communities is likely in part due to the large population of Asian students residing in the City. As discussed previously, students tend to have lower labor force participation rates and employment levels. Labor market index values are higher for the populations below the poverty level for all racial/ethnic groups other than the White population.

Jobs proximity index values reflect the level of employment accessibility for certain racial groups. The Black population in the City has the highest jobs proximity index value of 76.7, followed by the Hispanic population (73.3), Native American population (72.5), Asian population (69.3), and White population (67.2). Jobs proximity index values are higher for all racial/ethnic groups in the City compared to Alameda County as a whole. Index values are lower for all racial/ethnic groups below the federal poverty level except for the White population. Jobs proximity index values by block group are shown in Figure E-66. There are no block groups in the City with jobs proximity index scores below 40. The northeastern corner of the City, in the Berkeley Hills, Cragmont, Terrace View, Thousand Oaks, Live Oak and Northbrae neighborhoods, have the lowest jobs proximity index scores between 40 and 60. The Claremont neighborhood in the southeast corner of the City also has scores in the same range. Most block groups in the City scored between 60 and 80 for jobs proximity. The western section of the City, Gilman, Northwest Berkeley, 4th Street, Southwest Berkeley, and Berkeley Marina neighborhoods, have the highest jobs proximity index values exceeding 80. Lower index scores correlate with larger White populations, smaller populations of children in female-headed households, and smaller populations of persons below the poverty line (see Figure E-21, Figure E-35, and Figure E-40). Lower access to employment opportunities does not disproportionately affect any of the special needs groups or populations described previously in this Appendix.

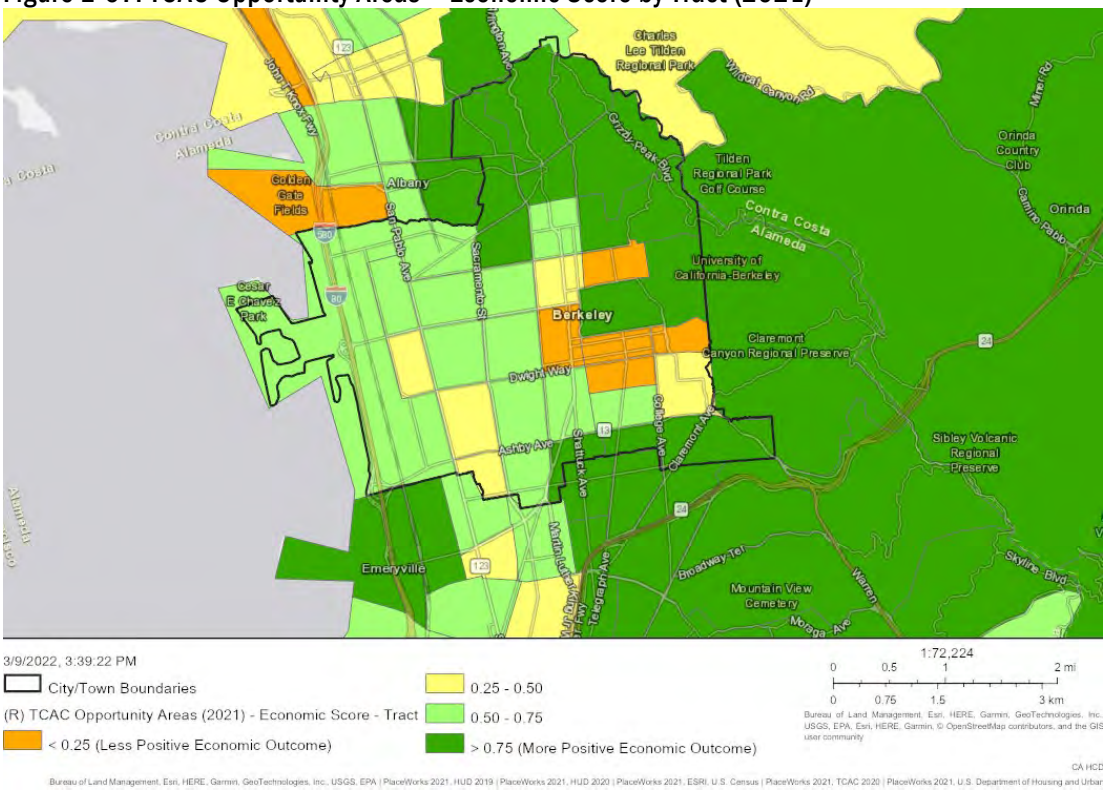
TCAC economic scores for the City by tract are presented in Figure E-67. The areas of the City with lower jobs proximity index scores have higher TCAC economic scores. As discussed above, TCAC economic scores are based on the following variables: poverty, adult education, employment, job proximity, and median home value. The northeastern and southeastern corners of the City, where TCAC economic scores are the highest, have the lowest poverty rates and highest median incomes compared to other tracts in Berkeley (see Figure E-40 and Figure E-47). The Northside, Southside, Downtown Berkeley, and northern Panoramic Hill, Le Conte, and Elmwood District neighborhoods all have TCAC economic scores in the lowest quartile. These tracts surround the UC Berkeley campus and are considered R/ECAPs (see Figure E-43). They also have large student populations and low labor force participation (see Table E-30 and Table E-31).

Figure E-66: HUD Jobs Proximity Index by Block Group (2017)



Source: HCD AFFH Data Viewer (HUD 2020, based on 2014-2017 Longitudinal Employer-Household Dynamics (LEHD) data), 2022.

Figure E-67: TCAC Opportunity Areas – Economic Score by Tract (2021)



Source: HCD AFFH Data Viewer (HCD and TCAC, 2021), 2022.

Environmental

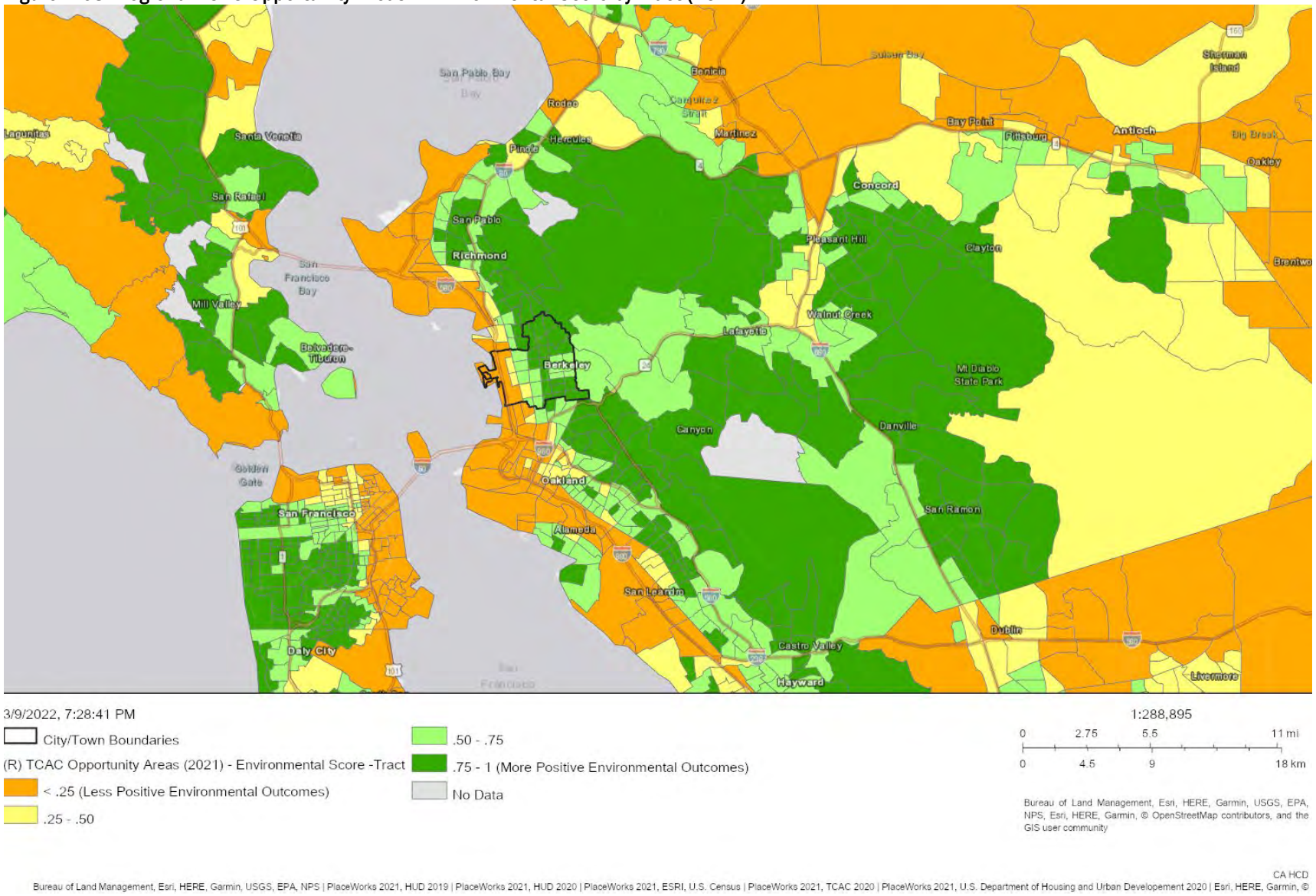
Regional Trends. Environmental conditions residents live in can be affected by past and current land uses like landfills or proximity to freeways The TCAC Environmental Score shown in Figure E-68 is based on CalEnviroscreen 3.0 pollution indicators and values. A complete list of TCAC Opportunity Map domains and indicators are included in Table E-35. The California Office of Environmental Health Hazard Assessment (OEHHA) compiles these scores to help identify California communities disproportionately burdened by multiple sources of pollution. In addition to environmental factors (pollutant exposure, groundwater threats, toxic sites, and hazardous materials exposure) and sensitive receptors (seniors, children, persons with asthma, and low birth weight infants), CalEnviroScreen also takes into consideration socioeconomic factors. These factors include educational attainment, linguistic isolation, poverty, and unemployment. TCAC Environmental Scores range from 0 to 1, where higher scores indicate a more positive environmental outcome (better environmental quality)

Regionally, TCAC environmental scores are lowest in the tracts in coastal East Bay cities from San Leandro to Richmond, northern Contra Costa County, eastern San Francisco and Daly City, and in some Marin County tracts (Figure E-68). Tracts with environmental scores in the highest quartile are located in inland Contra Costa County, eastern San Francisco/Daly City, and western Marin County. The eastern side of Berkeley has significantly higher TCAC environmental scores compared to the western side. This trend is consistent with nearby jurisdictions to the north and south of the City.

Figure E-68 shows the TCAC Environmental Score based on CalEnviroscreen 3.0. However, the Office of Environmental Health Hazard Assessment has released updated scored in February 2020 (CalEnviroscreen 4.0). The CalEnviroscreen 4.0 scores in Figure E-69 are based on percentiles and show trends similar to the TCAC environmental score map. Western portions of San Leandro, Oakland, Richmond, and southeastern San Francisco have the highest (worst) CalEnviroScreen 4.0 percentile scores. Most of Contra Costa County, Marin County, and San Francisco have lower (better) CalEnviroScreen 4.0 percentile scores. Like the TCAC environmental scores, eastern Berkeley has better CalEnviroScreen 4.0 scores compared to the western side of the City. In general, CalEnviroScreen 4.0 scores in Berkeley are lower (better) than jurisdictions to the north and south of the City.

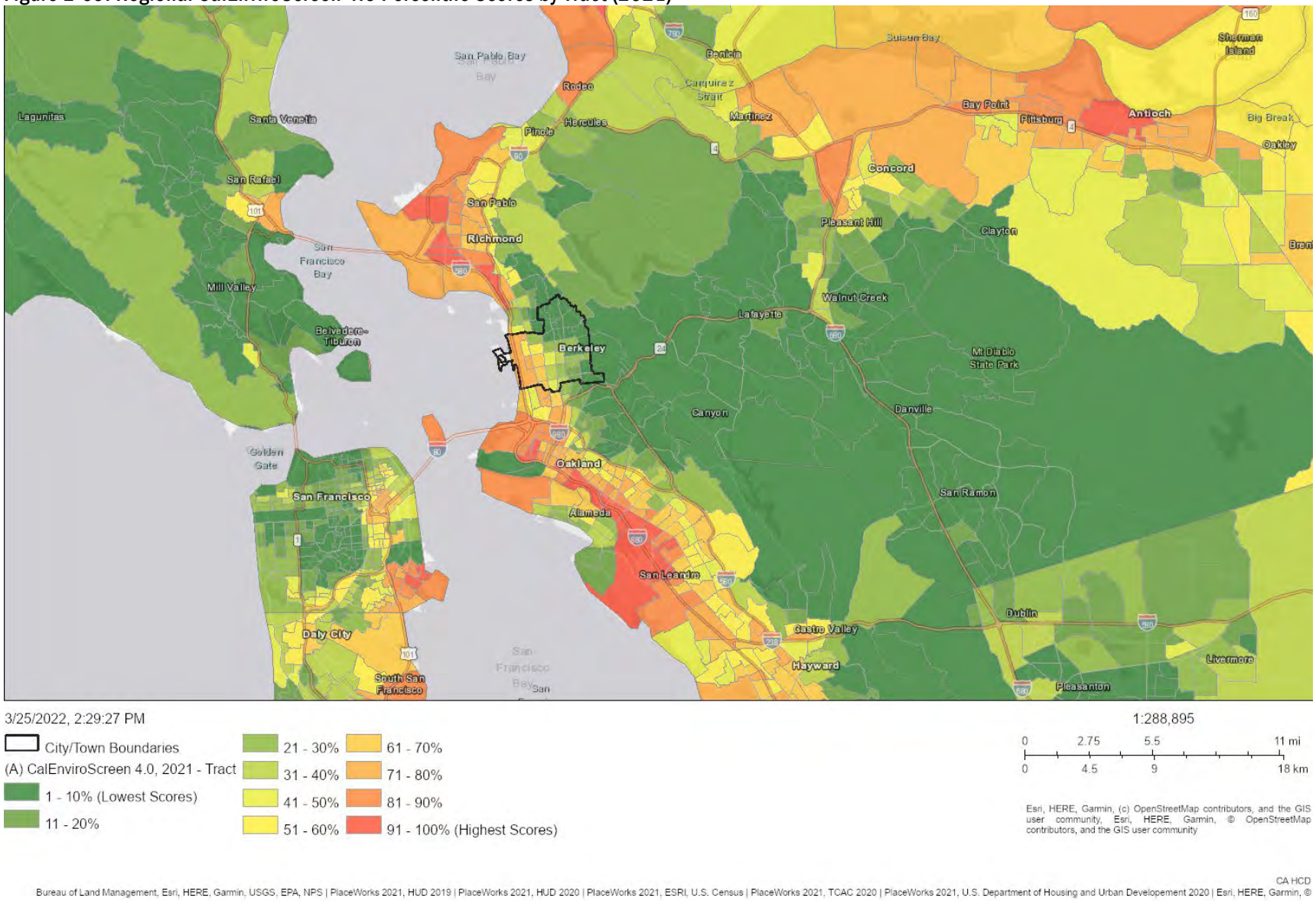
HUD's opportunity index for "environmental health" summarizes potential exposure to harmful toxins at a neighborhood level. Index values range from 0 to 100 and the higher the index value, the less exposure to toxins harmful to human health. Therefore, the higher the value, the better the environmental quality of a neighborhood, where a neighborhood is a census block-group. In Alameda County, environmental health index values range from 47.4 for the Black population to 53.3 for the Asian/Pacific Islander population (Table E-36). The range is similar for the population living below the federal poverty line, with Black residents living in poverty still scoring lowest (46.1) but Native American residents living in poverty scoring highest among all races (50.5). Environmental scores for all populations below the poverty line are lower compared to the respective racial/ethnic populations as a whole.

Figure E-68: Regional TCAC Opportunity Areas – Environmental Score by Tract (2021)



Source: HCD AFFH Data Viewer (HCD and TCAC, 2021), 2022.

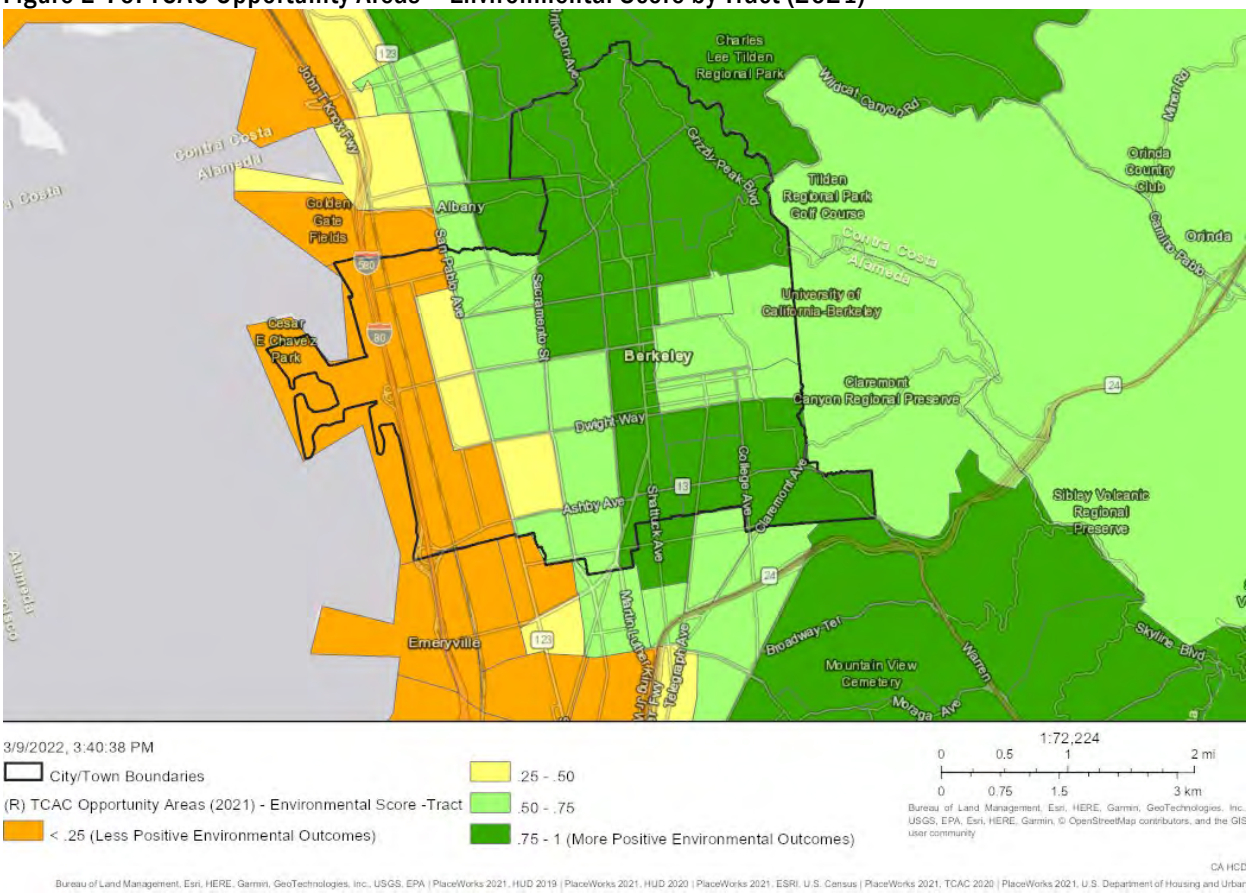
Figure E-69: Regional CalEnviroScreen 4.0 Percentile Scores by Tract (2021)



Source: HCD AFFH Data Viewer (OEHHA, 2021), 2022.

Local Trends. As discussed previously, TCAC environmental scores in Berkeley are higher on the eastern side compared to the western side. All tracts on the eastern side of the City have environmental scores of 0.50 or above. Western Berkeley neighborhoods, including Berkeley Marina, Gilman, Northwest Berkeley, 4th Street, Southwest Berkeley, and part of South Berkeley, have the lowest TCAC environmental scores below 0.50. This area of the City has populations of people of color exceeding 40 percent, persons with disabilities exceeding 10 percent, and children in female-headed households exceeding 20 percent (see Figure E-21, Figure E-26, and Figure E-35). Some block groups in this section of the City are also considered LMI areas with populations of low to moderate income household exceeding 50 percent (see Figure E-38). Tracts with lower environmental scores are categorized as high resource and moderate resource areas (see Figure E-49).

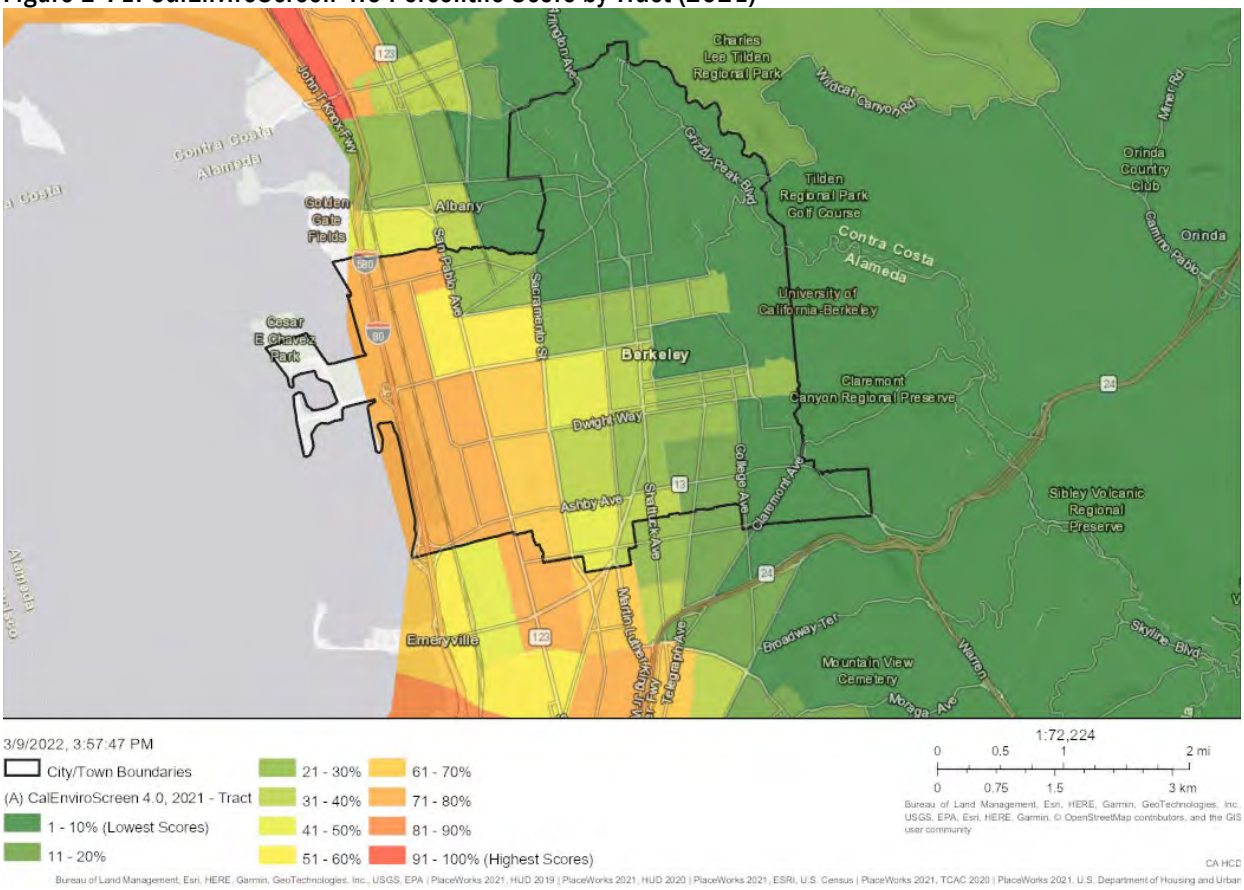
Figure E-70: TCAC Opportunity Areas – Environmental Score by Tract (2021)



Source: HCD AFFH Data Viewer (HCD and TCAC, 2021), 2022.

CalEnviroScreen 4.0 percentile scores follow trends similar to TCAC environmental scores (Figure E-71). The eastern side of the City, especially the northeastern neighborhoods of Berkeley Hills, Cragmont, Terrace View, Thousand Oaks, Live Oak, upper North Berkeley, and Northbrae, have the lowest (best) CalEnviroScreen 4.0 percentile scores in the City. CalEnviroScreen 4.0 percentile scores get progressively worse towards the western side of the City. There are no tracts in the City scoring in the 90th percentile or above (worst scores).

Figure E-71: CalEnviroScreen 4.0 Percentile Score by Tract (2021)



Source: HCD AFFH Data Viewer (CalEnviroScreen 4.0, 2021), 2022.

HUD Opportunity indicator scores for the City of Berkeley are included in Table E-36. Environmental health scores for all racial/ethnic groups in the City are lower than the Countywide scores. Environmental health scores range from 28 for the Black population to 30.1 for the Asian/Pacific Islander population, and 28.7 for the Hispanic population below the federal poverty level and 34.6 for the Native American population below the federal poverty level. Unlike the County, the White, Black, and Native American populations below the federal poverty level are higher compared to the respective total populations. Environmental health index scores for the Native American population below the poverty level is significantly higher than the index score for the total Native American population.

E4.5 DISPROPORTIONATE HOUSING NEEDS

The AFFH Rule Guidebook defines disproportionate housing needs as a condition in which there are significant disparities in the proportion of members of a protected class experiencing a category of housing needs when compared to the proportion of a member of any other relevant groups or the total population experiencing the category of housing need in the applicable geographic area (24 C.F.R. § 5.152). The analysis is completed by assessing cost burden, overcrowding, and substandard housing.

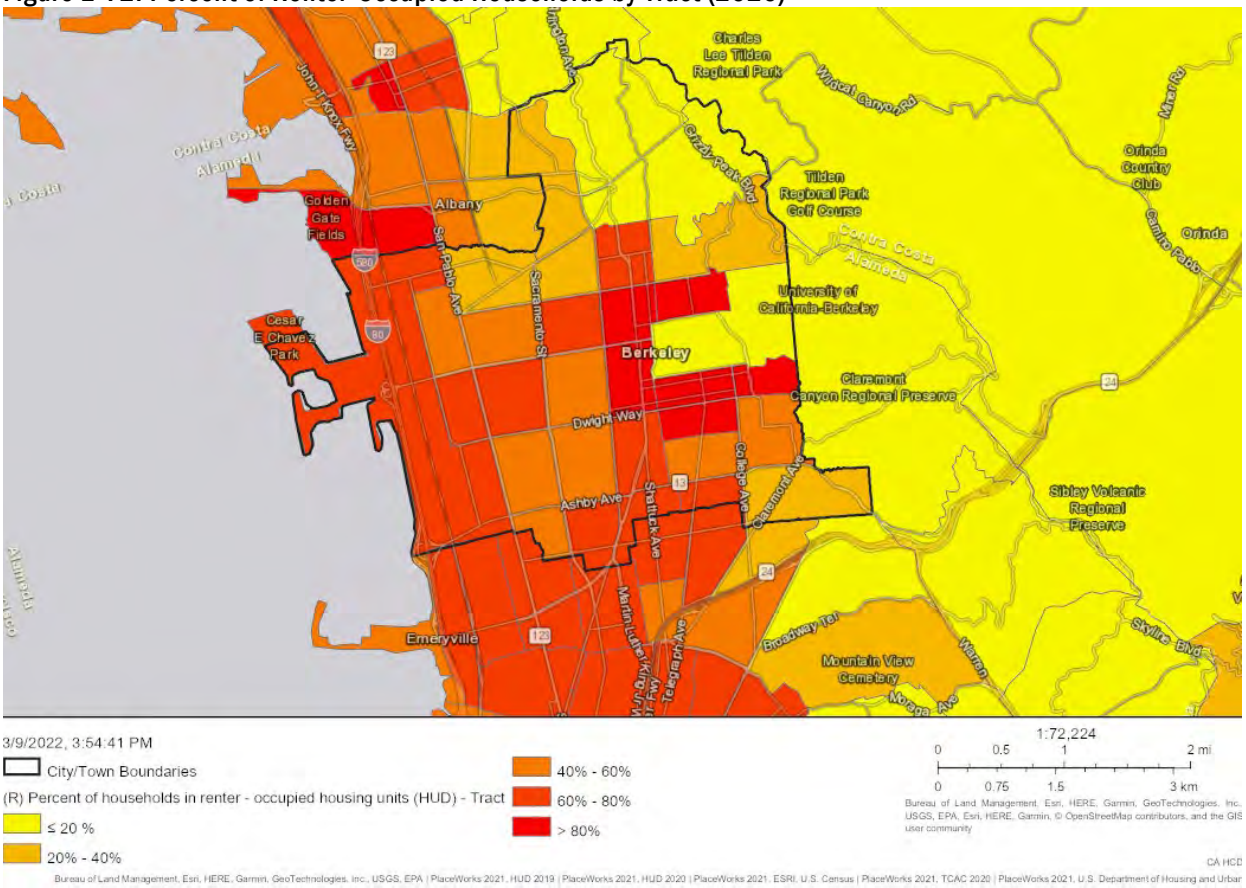
The Comprehensive Housing Affordability Strategy (CHAS) developed by the Census for HUD provides detailed information on housing needs by income level for different types of households in Marin County. Housing problems considered by CHAS include:

- Housing cost burden, including utilities, exceeding 30 percent of gross income;

- Severe housing cost burden, including utilities, exceeding 50 percent of gross income;
- Overcrowded conditions (housing units with more than one person per room); and
- Units with physical defects (lacking complete kitchen or bathroom)

According to CHAS data based on the 2014-2018 ACS, approximately 41 percent of Alameda County households experience housing problems, compared to 43 percent of households in Berkeley. In both the County and City, renters are more likely to be affected by housing problems than owners. It is important to note that Berkeley has a large population of renters, likely in part due to the large student population in the City. Renter populations by tract are shown in Figure E-72. More than 80 percent of households in tracts surrounding the UC Berkeley campus are renter-occupied. As mentioned above, 29 percent of the Berkeley population is enrolled in college or graduate school compared to only 8.5 in the County. The northeastern corner of the City is comprised of mostly owner-occupied households. 2014-2018 HUD CHAS data shows than 57.1 percent of households in the City are renters compared to only 46.7 Countywide.

Figure E-72: Percent of Renter-Occupied Households by Tract (2020)



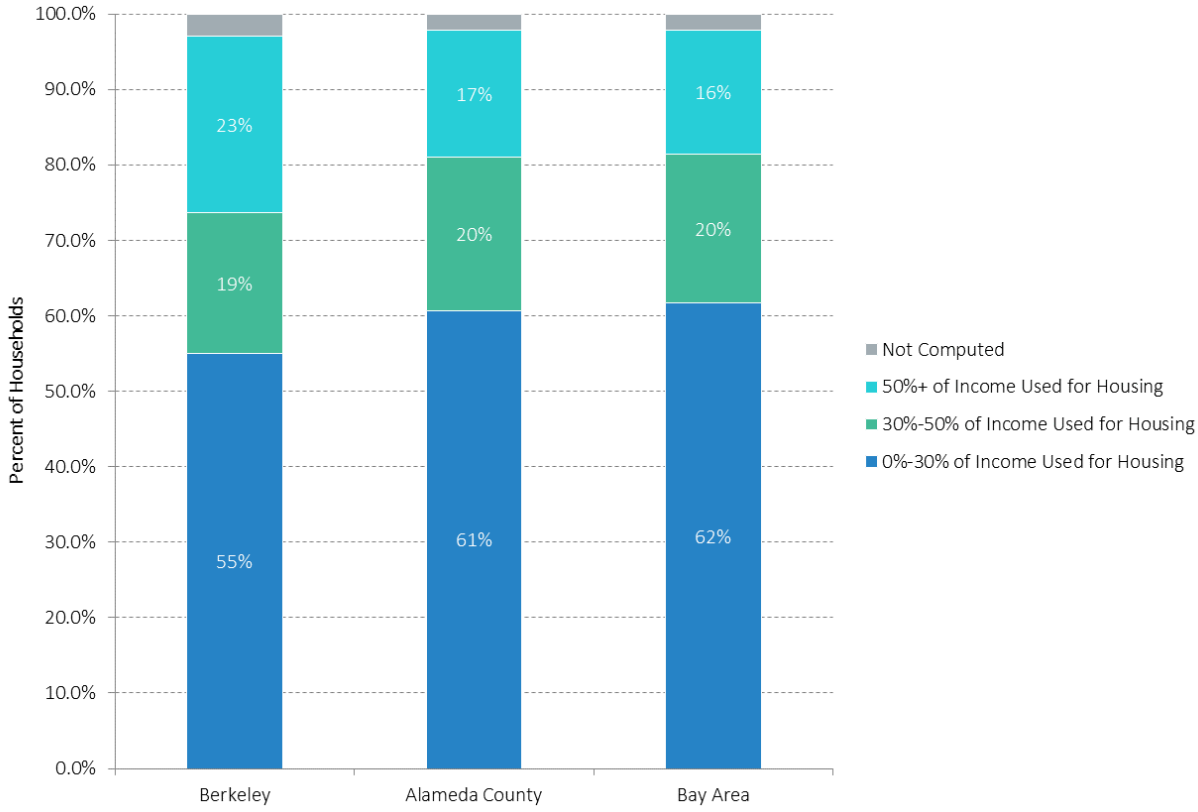
Source: HCD AFFH Data Viewer (HUD 2020 based on 2012-2016 ACS), 2022.

Cost Burden

Regional Trends. Households paying 30 percent or more of their income in housing costs are considered cost burdened and households paying 50 percent or more on their income are considered severely cost burdened. As discussed previously, 40.7 percent of households in Alameda County experience one or more housing problem, including 35.7 percent that are cost burdened. According to more recent 2015-2019 ACS data included in the ABAG Housing Element Data Package, 37 percent of Alameda County

households are cost burdened including 17 percent severely cost burdened households (Figure E-73). Cost burden is only slightly more prevalent in the County compared to the Bay Area. Only 36 percent of households in the Bay Area are cost burdened including 16 percent severely cost burdened. There are significantly more severely cost burdened households (23 percent) in the City compared to both the County and Bay Area.

Figure E-73: Cost Burden Severity (2019)



Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

Housing problems and cost burden by race and ethnicity for Alameda County is shown in Table E-42. Estimates may differ slightly from Figure E-73 as this dataset utilizes the 2021 HUD CHAS data based on the 2014-2018 ACS. This table also includes rates of housing problems, including cost burden, for Alameda County households using the 2006-2010 ACS. The proportion of owners experiencing a housing problem has decreased significantly during this period while the proportion of renters experiencing a housing problem has increased slightly. Overall, there is currently a smaller share of cost burdened households, owners and renters, compared to in 2010. As mentioned above, renter-occupied households are more likely to experience housing problems and cost burden. Over half of renter-occupied households in the City experience a housing problem compared to only 29.5 percent of owner-occupied households.

In the County, Black renters followed by American Indian renters are most likely to be cost burdened (56.9 percent and 50.6 percent cost burdened, respectively). Hispanic renter-occupied households also experience cost burden exceeding the Countywide average of 45.9 percent. Black and Hispanic owner-occupied households are also most likely to experience cost burdened compared to owners of a difference race or ethnicity. The Hispanic population represents 22.4 percent of the population in Alameda County, the third largest racial or ethnic group Countywide, followed by the Black/African American population (10.3 percent) (see Table E-17). As discussed in Section E4.3 *Racially or Ethnically Concentrated Areas of*

Poverty (R/ECAPs), the Black/African American (20 percent), American Indian/Alaska Native (15 percent), and Hispanic/Latino (12.5 percent) populations also experience poverty at rates exceeding the Countywide average of 9.9 percent.

Table E-42: Housing Problems and Cost Burden by Race/Ethnicity – Alameda County (2018)

	White	Black	Asian	American Indian	Pacific Islander	Hispanic	All	All (2010)
With Housing Problem								
Owner-Occupied	24.2%	40.7%	30.5%	29.6%	32.2%	40.1%	29.5%	42.6%
Renter-Occupied	44.6%	60.6%	50.6%	54.5%	59.9%	63.2%	53.4%	52.1%
All Households	32.0%	54.4%	38.2%	43.9%	48.4%	54.2%	40.7%	46.8%
With Cost Burden								
Owner-Occupied	23.4%	38.8%	26.4%	26.5%	28.5%	32.5%	26.7%	40.9%
Renter-Occupied	41.6%	56.9%	38.5%	50.6%	45.7%	49.8%	45.9%	47.5%
All Households	30.3%	51.3%	31.1%	40.3%	38.5%	43.1%	35.7%	43.9%

Source: HUD CHAS Data (based on 2006-2010 and 2014-2018 ACS), 2021.

Housing problems and cost burden often affect special needs populations, such as elderly households and large households, disproportionately.[27] Only 26.7 percent of owner-occupied households in the County are cost burdened, compared to 31.8 percent of owner-occupied elderly households. Fewer owner-occupied large households are cost burdened compared to the County average, however significantly more experience one or more housing problem. The high proportion of large owner-occupied households experiencing a housing problem is likely due to overcrowding. Similarly, only 45.9 percent of all renters in the City are cost burdened while 66 percent of elderly renters and 46.7 percent of large renter households are cost burdened. Both elderly and large renter-occupied households experience housing problems at a high rate. As discussed above, housing problems other than cost burden include lack of complete facilities (kitchen or bathroom) and overcrowding.

Table E-43: Housing Problems Elderly and Large Households – Alameda County (2018)

	With Any Housing Problem	Cost Burden >30%
Owner-Occupied		
Elderly Households	32.1%	31.8%
Large Households	42.8%	23.4%
All Owner-Occupied	29.5%	26.7%
Renter-Occupied		
Elderly Households	69.8%	66.0%
Large Households	78.7%	46.7%
All Renter-Occupied	53.4%	45.9%
All Households	40.7%	35.7%

Source: HUD CHAS Data (based on 2014-2018 ACS), 2021.

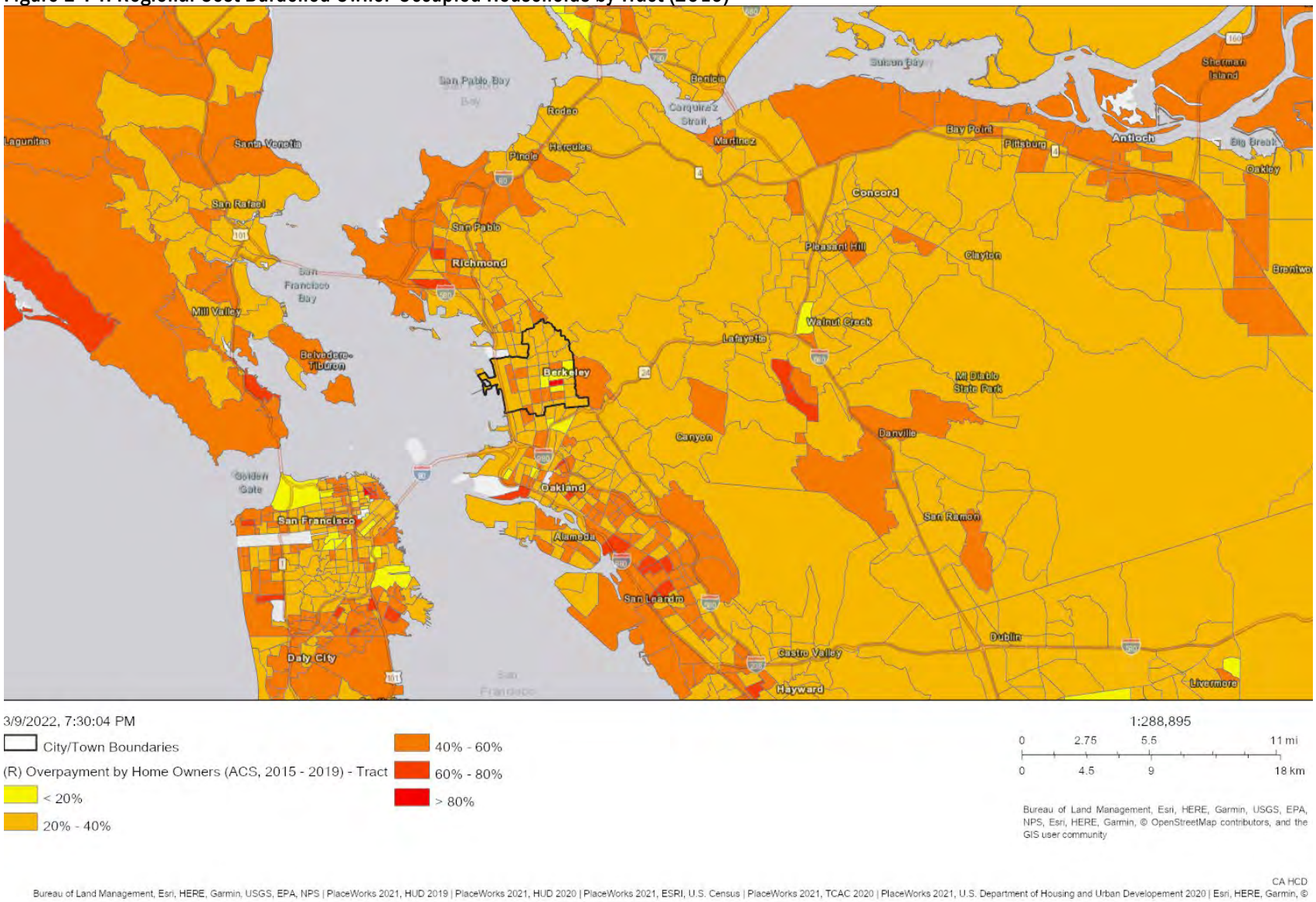
Figure E-74 and Figure E-75 shows cost burden by tenure geographically for the region. While there are some tracts throughout the Bay Area where fewer than 20 percent of the renter population is cost burdened, there are generally more cost burden amongst renter-occupied households compared to owner-occupied households. Tracts where more than 40 percent of owners are cost burden are most concentrated in areas surrounding Richmond, San Leandro, southern San Francisco and Daly City, Marin County, and northern Contra Costa County. Less than 40 percent of owner are cost burdened in most

[27] Elderly households include elderly families, two persons with either or both age 62 or older, and elderly non-families (i.e., single-person elderly households). Large households are considered households with five or more related persons.

Berkeley tracts. The composition of cost burdened owner tracts in the City is generally comparable to the nearby jurisdictions of El Cerrito, Albany, Emeryville, and Oakland.

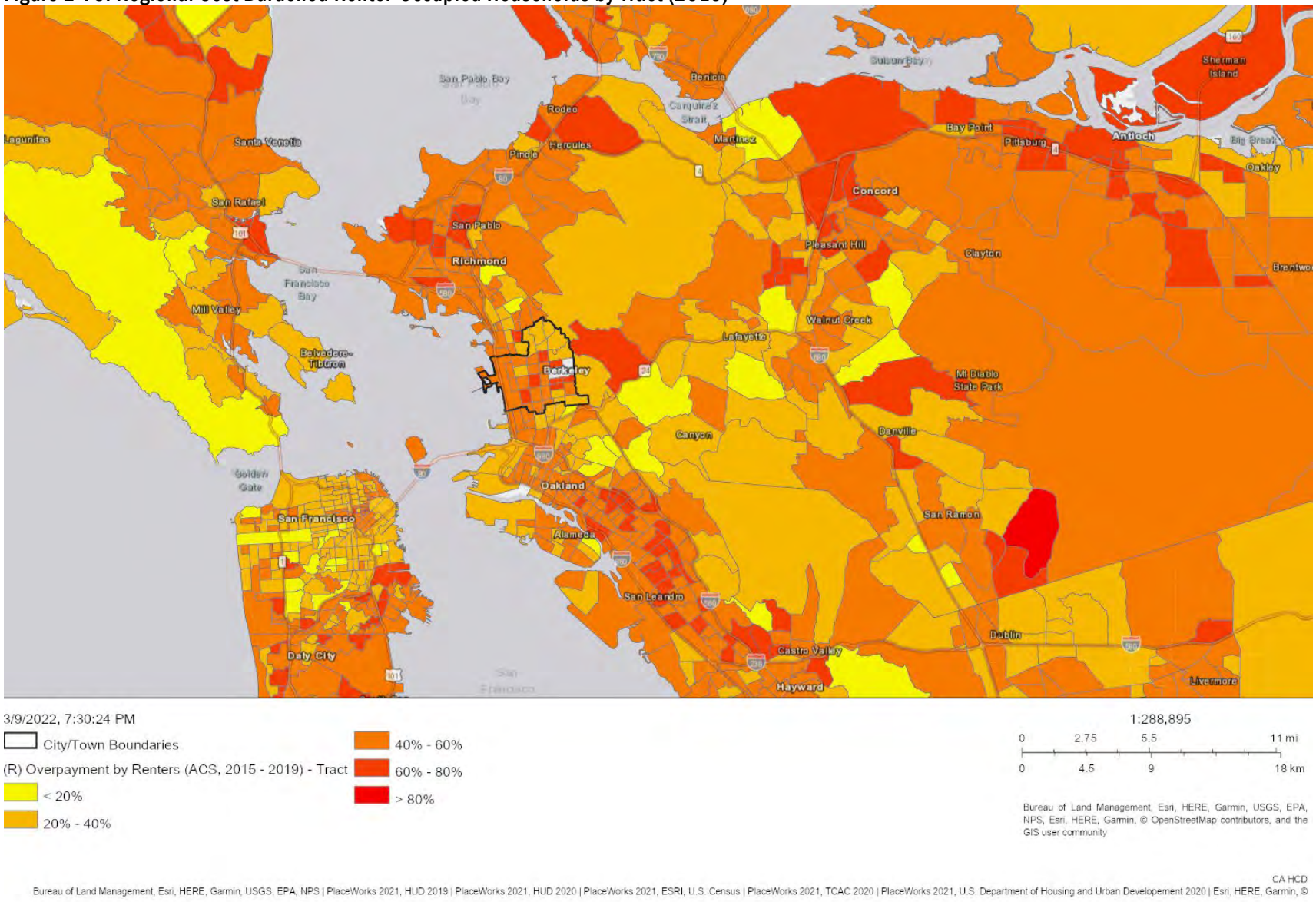
Cost burdened renter-occupied households are prevalent throughout the region, specifically in coastal Alameda County, northern Contra Costa County and central Contra Costa County along Interstate 680, southern San Francisco/Daly City, and eastern Marin County. More than 40 percent of renters are cost burdened in most Berkeley tracts. The City has a slightly higher concentration of tracts where more than 60 percent of renters are cost burdened compared to tracts directly north and south of Berkeley. In general, areas where cost burden is more prevalent are more highly populated and have larger proportions of people of color (see Figure E-16). Children living in single-parent female-headed households, LMI households, and low resource tracts are also more concentrated in these areas (see Figure E-30, Figure E-37, and Figure E-48).

Figure E-74: Regional Cost Burdened Owner-Occupied Households by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Figure E-75: Regional Cost Burdened Renter-Occupied Households by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Local Trends. A slightly smaller proportion of owners in the City are cost burdened compared to the County (25.1 percent vs. 26.7 percent, respectively) (Table E-44). Conversely, 52.1 percent of renters in the City are cost burdened compared to only 45.9 percent Countywide. Due to the high concentration of renters in the City and the prevalence of cost burden amongst renters, over 40 percent of all households are cost burdened in Berkeley, while only 35.7 are cost burdened in the County. All racial/ethnic groups except the White population are cost burdened at a rate exceeding the average in the City. Pacific Islander owners (66.7 percent), followed by Pacific Islander renters (65.2 percent), American Indian renters (63.3 percent), and Black renters (60.3 percent) are cost burdened at the highest rate. As shown in Figure E-44, these groups also experience poverty at the highest rates in the City. Nearly 37 percent of the Asian/API population, 24.5 percent of the American Indian/Alaska Native population, and 24.5 percent of the Black/African American population in the City is below the ACS-designated poverty line. However, as discussed before, the large presence of student households in the City is likely a reason for the high rate of cost burden, which may not reflect the actual financial status of these households.

Table E-44 also includes housing problem and cost burden rates using the 2006-2010 ACS, Like the County, the proportion of owners experiencing a housing problem has decreased significantly. However, in Berkeley, the proportion of renters experiencing a housing problem has also decreased. In 2010, 47.7 percent of households experienced a housing problem and 46 percent were cost burdened.

Table E-44: Housing Problems and Cost Burden by Race/Ethnicity – Berkeley (2018)

	White	Black	Asian	American Indian	Pacific Islander	Hispanic	All	All (2010)
With Housing Problem								
Owner-Occupied	23.7%	40.4%	31.4%	40.0%	66.7%	42.0%	26.5%	34.8%
Renter-Occupied	50.7%	61.0%	60.0%	78.7%	68.7%	56.8%	54.8%	57.5%
All Households	36.7%	54.7%	51.8%	76.3%	68.5%	52.9%	42.7%	47.7%
With Cost Burden								
Owner-Occupied	23.0%	37.9%	28.4%	40.0%	66.7%	35.0%	25.1%	34.3%
Renter-Occupied	48.6%	60.3%	55.7%	63.3%	65.2%	53.1%	52.1%	55.0%
All Households	35.3%	53.4%	48.0%	61.9%	65.4%	48.4%	40.5%	46.0%

Source: HUD CHAS Data (based on 2014-2018 ACS), 2021.

According to 2014-2018 HUD CHAS data, the City of Berkeley has a larger proportion of elderly households compared to the County (26.4 percent vs. 22.2 percent), but a smaller proportion of related large households (2.3 percent vs. 9.4 percent). As presented in Table E-45, owner-occupied elderly households have housing problems and cost burden at a rate exceeding the citywide average. Cost burden is less prevalent amongst owner-occupied large households, but housing problems are more prevalent, likely due to overcrowding. Similarly, renter-occupied elderly and large households experience housing problems at a rate exceeding the City average.

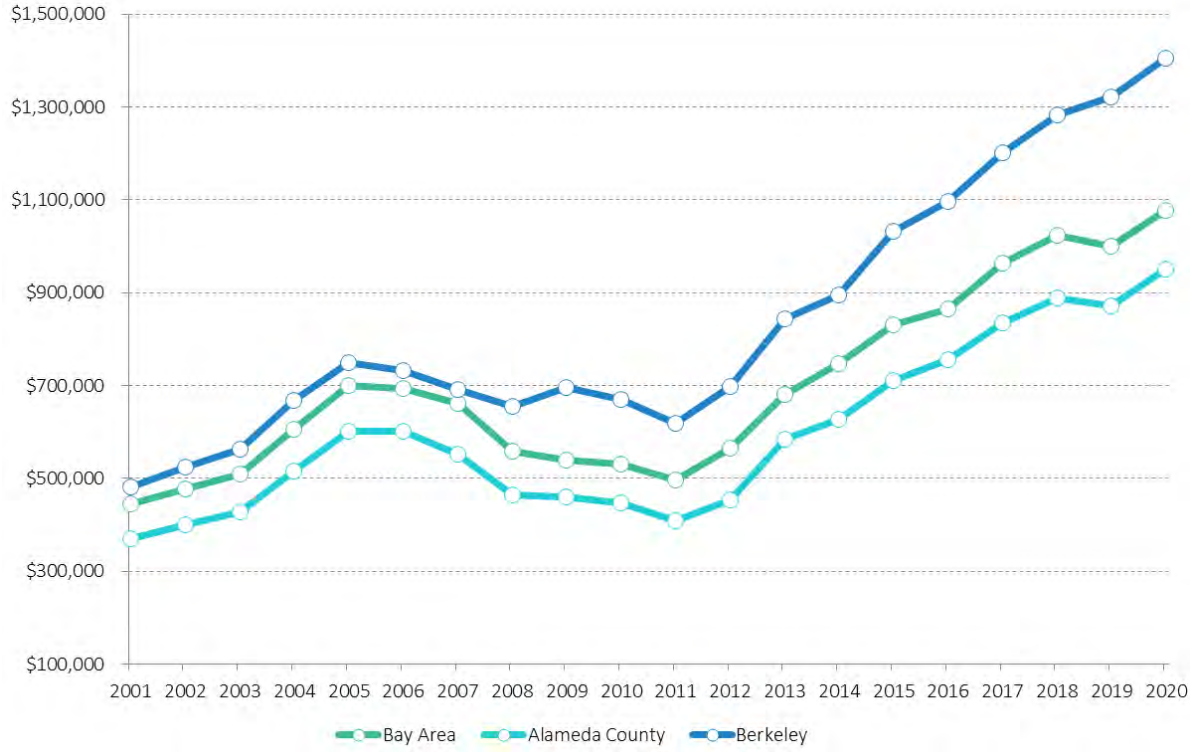
Table E-45: Housing Problems Elderly and Large Households – Berkeley (2018)

	With Any Housing Problem	Cost Burden >30%
Owner-Occupied		
Elderly Households	28.4%	27.6%
Large Households	30.5%	16.1%
All Owner-Occupied	26.5%	25.1%
Renter-Occupied		
Elderly Households	64.7%	63.1%
Large Households	62.3%	47.8%
All Renter-Occupied	54.8%	52.1%
All Households	42.7%	40.5%

Source: HUD CHAS Data (based on 2014-2018 ACS), 2021.

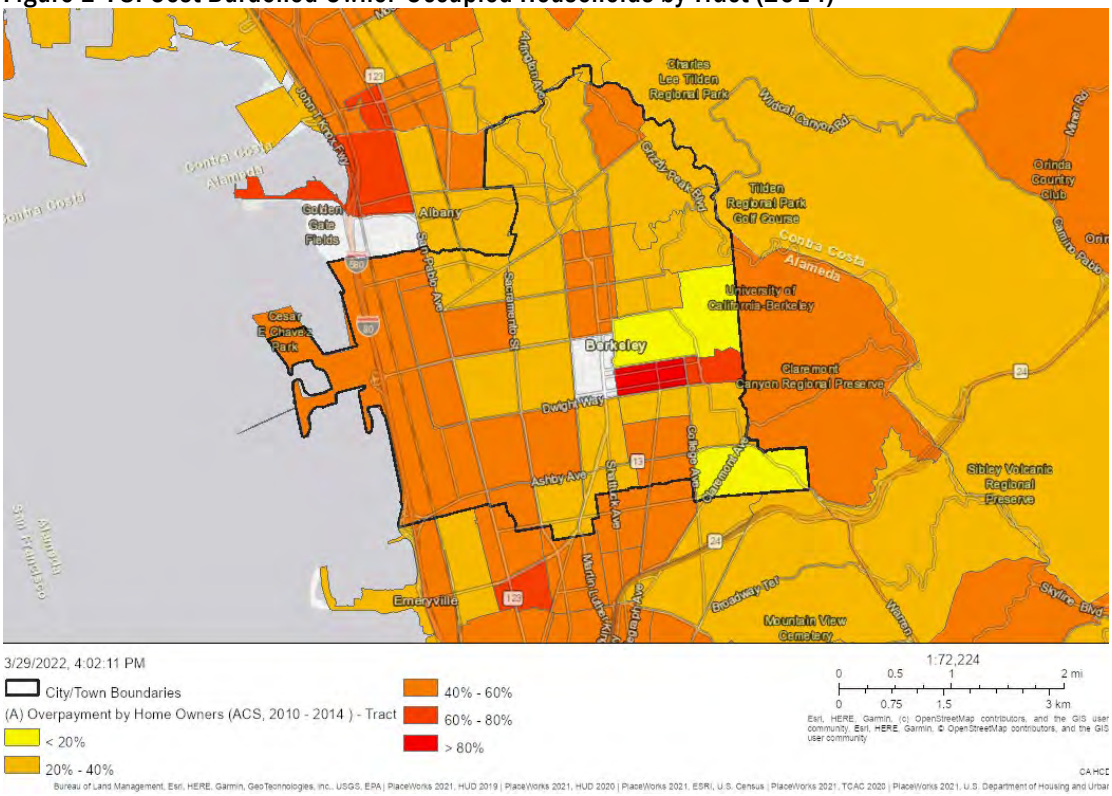
Figure E-76 and Figure E-79 compare percentage of cost burdened owners by tract using the 2010-2014 and 2015-2019 ACS. Cost burden amongst homeowners in most tracts has generally decreased during this period, specifically in tracts surrounding the UC Berkeley campus and on the western side of the City. As shown in Figure E-77, home values for owner-occupied units in Berkeley have followed trends in the County and Bay Area. Home values remain higher in Berkeley compared to both Alameda County and the Bay Area as a whole. As of 2020, a typical home in Berkeley was valued at $1,405,908, an increase of 193 percent since 2001. Home values have increased at similar but smaller rates during the same period in the County (+157 percent) and Bay Area (+142 percent). In most Berkeley tracts, between 20 and 40 percent of owners currently overpay. Less than 20 percent of owners overpay in the UC Berkeley, Downtown Berkeley, and northern Le Conte/Elmwood District neighborhoods. There is a concentration of overpaying owners in the Southside neighborhood where more than 80 percent of owners are cost burdened. According to the 2015-2019 ACS, only 2.2 percent of occupied households in this tract are owners. As shown in Table E-30 previously, nearly 90 percent of the population in this tract (4228) are enrolled in college or graduate school.

Figure E-77: Zillow Home Value Index (ZHVI) (2001-2020)



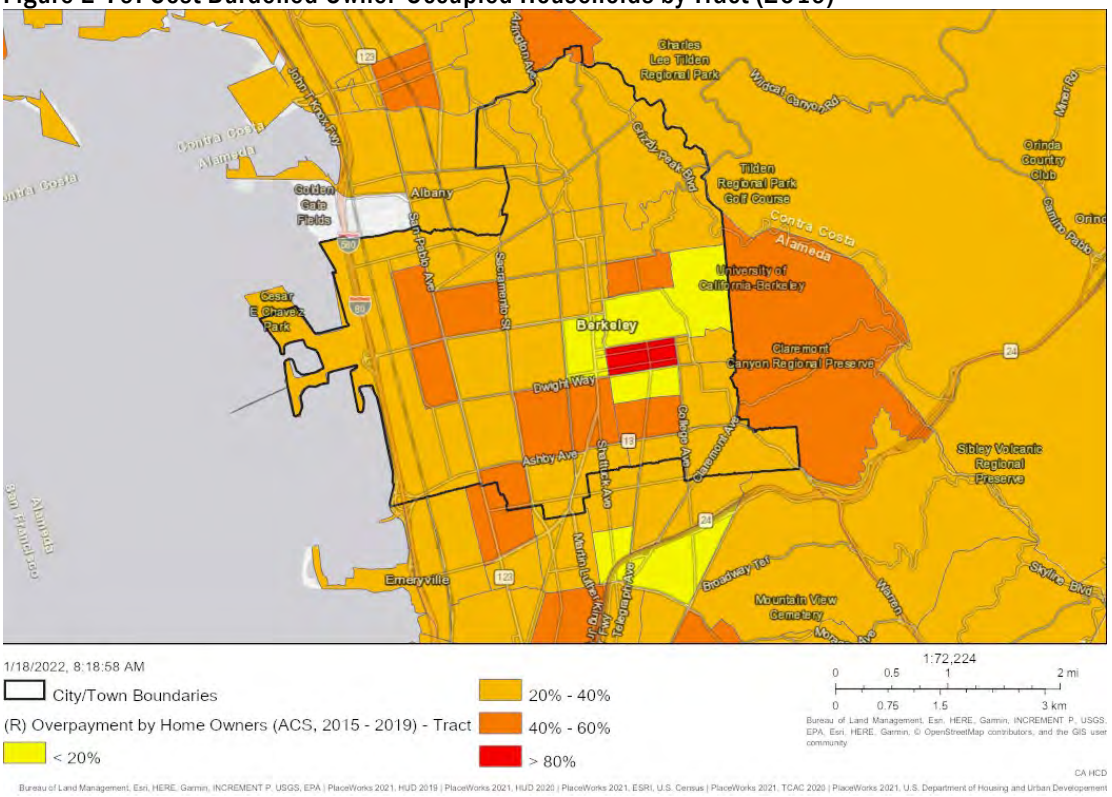
Note: Zillow describes the ZHVI as a smoothed, seasonally adjusted measure of the typical home value and market changes across a given region and housing type. The ZHVI reflects the typical value for homes in the 35th to 65th percentile range. The ZHVI includes all owner-occupied housing units, including both single-family homes and condominiums. More information on the ZHVI is available from Zillow. The regional estimate is a household-weighted average of county-level ZHVI files, where household counts are yearly estimates from DOF's E-5 series
Source: ABAG Housing Element Data Package (based on Zillow, ZHVI), 2021.

Figure E-78: Cost Burdened Owner-Occupied Households by Tract (2014)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Figure E-79: Cost Burdened Owner-Occupied Households by Tract (2019)

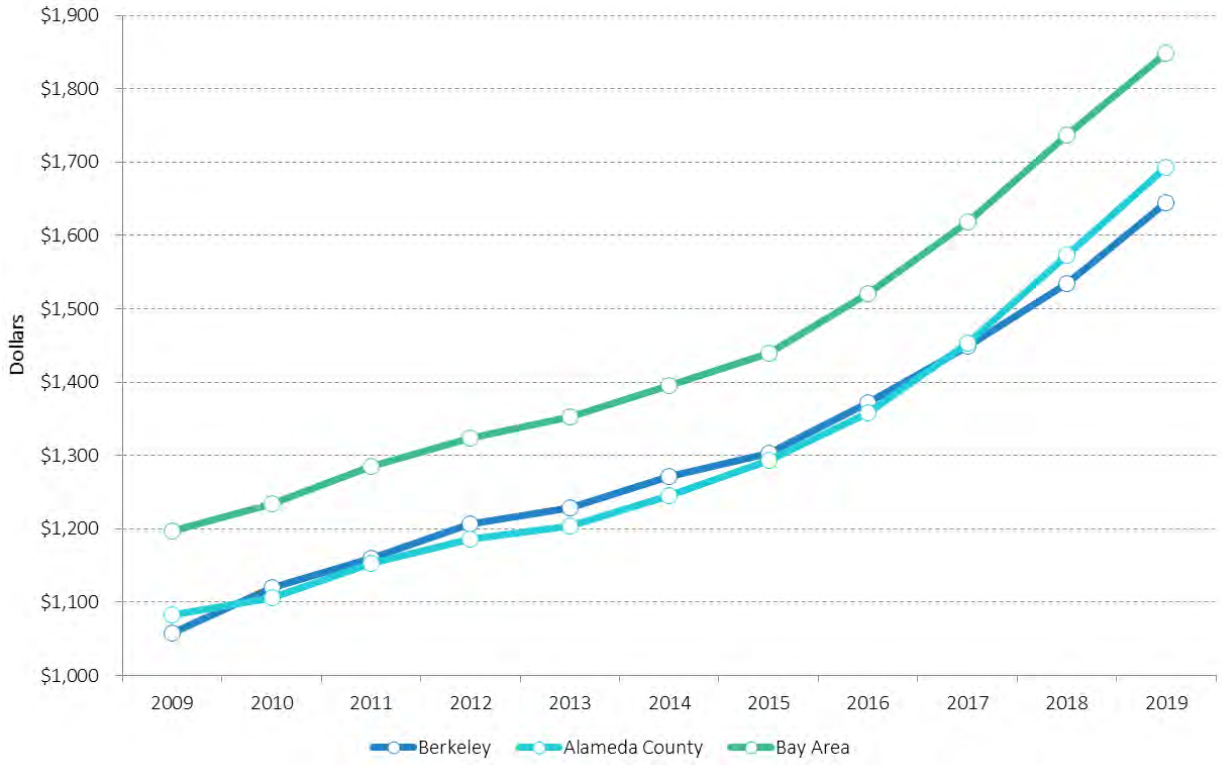


Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Cost burdened renters by tract are compared using the 2010-2014 and 2015-2019 ACS in Figure E-81 and Figure E-82. Unlike the cost burdened owner trend, the proportion of cost burdened renters has varied from tract to tract during this period. The proportion of cost burdened renters has increased in tracts in the Live Oak/Upper North Berkeley, Westbrae, Southside, Central Berkeley, and South Berkeley neighborhoods, but decreased in tracts in the Berkeley Hills/Terrace View, North Berkeley, Le Conte/Lorin/Elmwood District, and Claremont neighborhoods. More than 40 percent of renters are cost burdened in most Berkeley tracts. Between 20 and 40 percent of renters are cost burdened in the northeastern and southern eastern areas of the City.

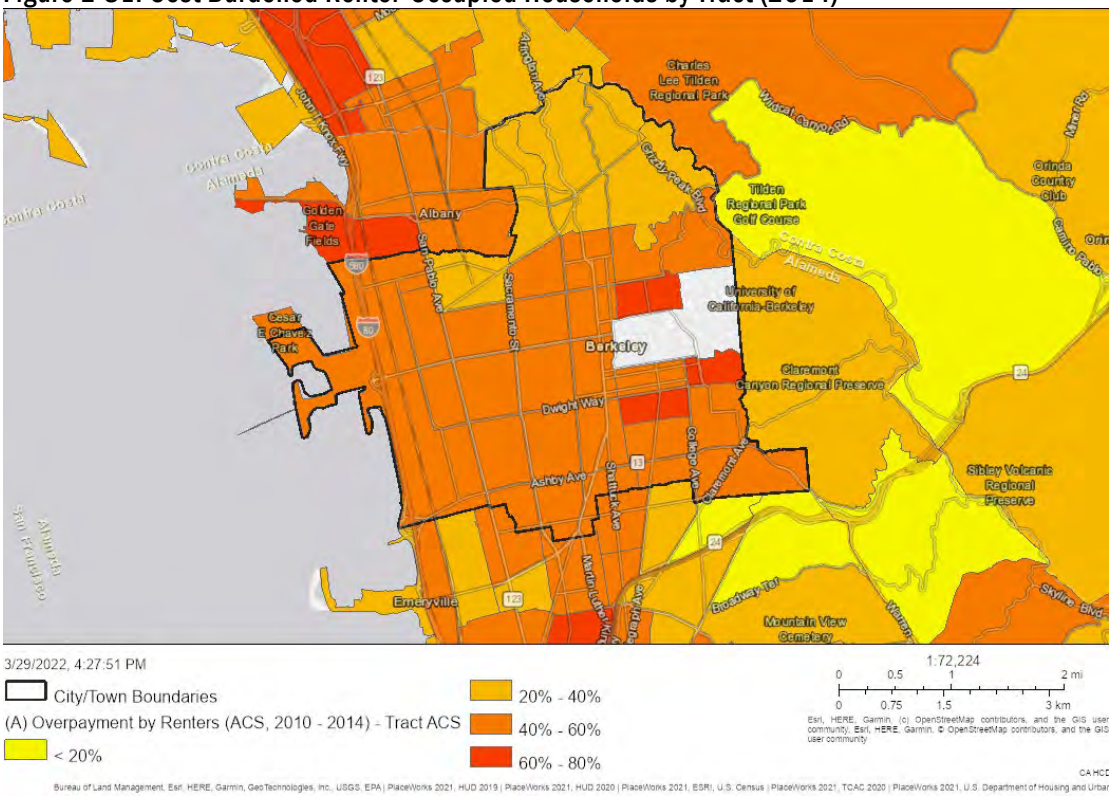
Since 2009, the median contract rent in the City has increased at rates similar to the County and Bay Area (Figure E-80). During this period, the median rent in Berkeley increase by 55.4 percent, higher than the Bay Area (54.6 percent) but lower than the County (56.2 percent). As of 2019, the median contract rent was the highest in the Bay Area ($1,849), followed by the County ($1,692) and the City ($1,644).

Figure E-80: Median Contract Rent (2009-2019)



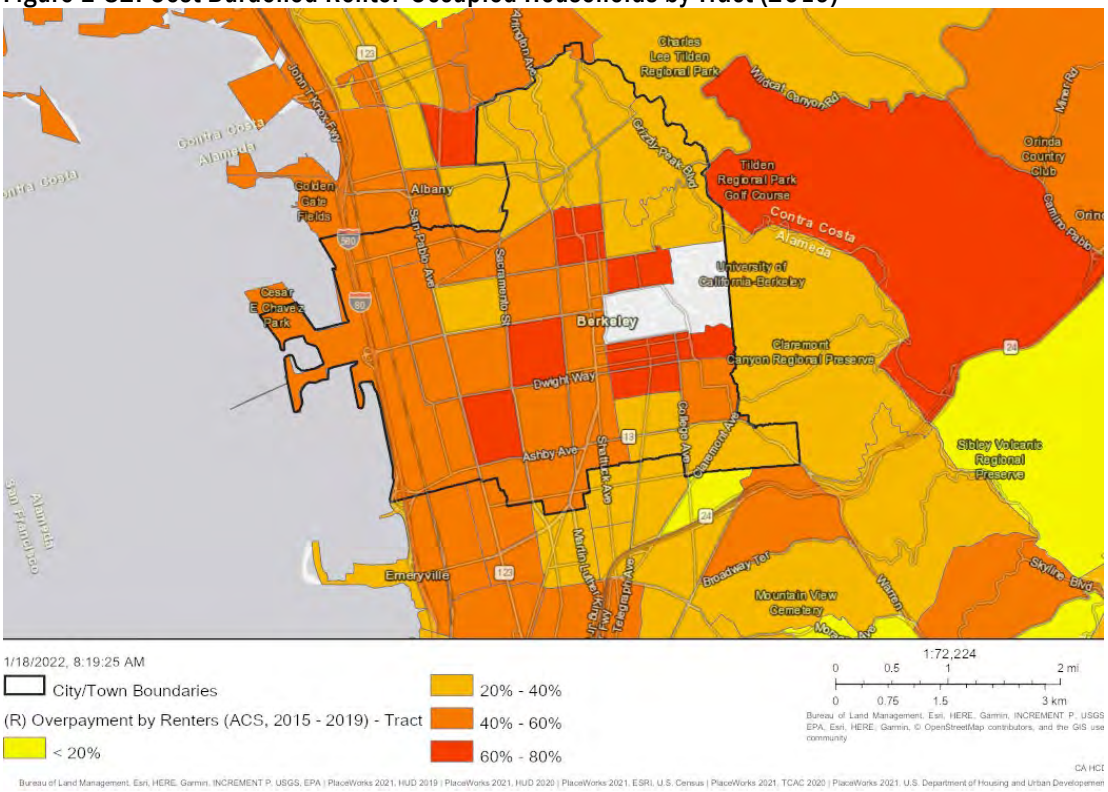
Source: ABAG Housing Element Data Package (based on 2005-2009 through 2015-2019 ACS), 2021.

Figure E-81: Cost Burdened Renter-Occupied Households by Tract (2014)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

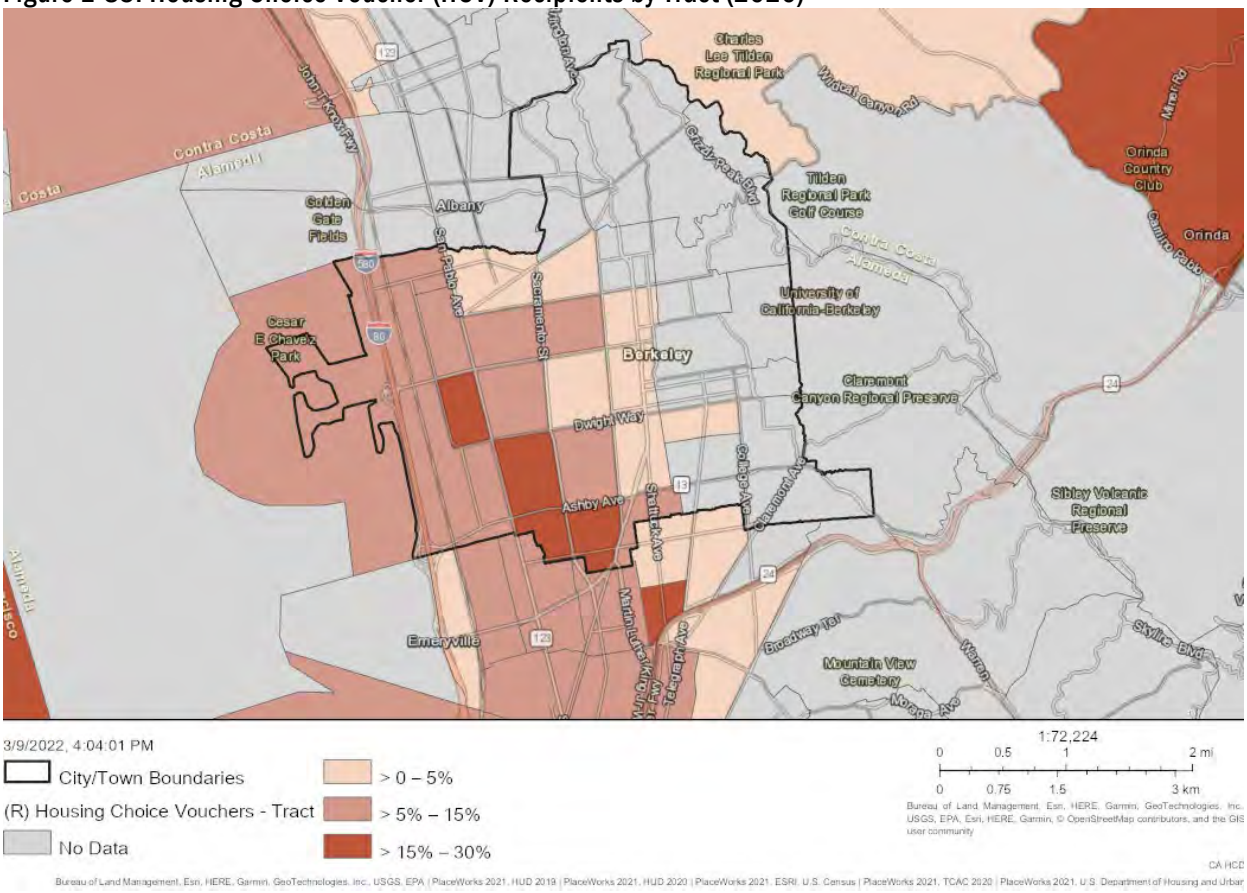
Figure E-82: Cost Burdened Renter-Occupied Households by Tract (2019)



Source: HCD AFFH Data Viewer (2015-2019 ACS), 2022.

Figure E-83 shows housing choice voucher (HCV) recipients by tract in the City. HCV recipients are most concentrated on the western side of the City. Tracts in the northeastern corner of the City and along the eastern City boundary have low levels of HCV recipients.[28] Concentrations of HCV recipients generally correlate with concentrations of overpaying renters, with the exception of tracts surrounding the UC Berkeley campus in the Northside, Southside, Downtown/Central Berkeley neighborhoods. While there is a large population of overpaying renters in this area, these tracts also have large student populations. Section 8 assistance is not provided to individuals enrolled as a student at an institution of higher education or under the age of 24. Tracts 4232, 4233, 4240.01, and 4240.02 have the highest concentration of HCV recipients (>15 percent). In these tracts, between 20 and 40 percent of children live in single-parent female-headed households (see Figure E-35). All but tract 4233 are also considered LMI areas where more than 50 percent of households are low or moderate income (see Figure E-38).

Figure E-83: Housing Choice Voucher (HCV) Recipients by Tract (2020)



Source: HCD AFFH Data Viewer (HUD, 2020), 2022.

Overcrowded Households

Regional Trends. Households with more than one person per room are considered overcrowded and households with more than 1.5 persons per room are considered severely overcrowded. Overcrowding

[28] Please note that to restrict access to tenant information HCV locations are identified in public records by the owner, and not the tenant. Public data pertaining to the locations of HCV program participants are only available as U.S. Census Tract aggregations. Moreover, to protect the confidentiality of those receiving Housing Choice Voucher Program assistance, tracts containing 10 or fewer voucher holders have been omitted from this service.

may indicate an insufficient supply of affordable housing suitable for larger households. Since 2010, overcrowding has become more prevalent countywide. Approximately 5.2 percent of households were overcrowded in 2010 compared to 7.9 percent in 2019. Overcrowding is significantly more prevalent amongst renter-occupied households. As shown in Table E-46, nearly 13 percent of renter-occupied households in the County are overcrowded compared to only 3.5 percent of owner-occupied households. According to 2013-2017 ACS estimates, slightly older than the estimates provided for Alameda County below, 6.5 percent of households in the Bay Area are overcrowded including three percent of owner-occupied households and 10.9 percent of renter-occupied households. Based on this data, overcrowding is slightly more common in Alameda County compared to the Bay Area.

Table E-46: Overcrowding by Tenure – Alameda County (2010 and 2019)

	2019			2010	
	Overcrowded (>1.0 person per room)	Severely Overcrowded (>1.5 persons per room)	Total Households	Overcrowded	Total Households
Owner-Occupied	3.5%	0.9%	308,891	3.1%	293,277
Renter-Occupied	12.9%	5.1%	268,286	7.9%	238,749
All Households	7.9%	2.8%	577,177	5.2%	532,026

Source: 2006-2010 and 2015-2019 ACS (5-Year Estimates).

More than half (52.4 percent) of housing units in Alameda County are single-family detached homes and 8.6 percent are single-family attached units. Of multi-family housing units in the County, 10.4 percent are two to four units and 27.3 percent are five units are more. Table E-47 shows housing units in Alameda County by number of bedrooms. Most housing units in the City have from two to four bedrooms and approximately 21 percent are studio- or one-bedroom units.

Table E-47: Housing Units by Bedrooms – Alameda County (2019)

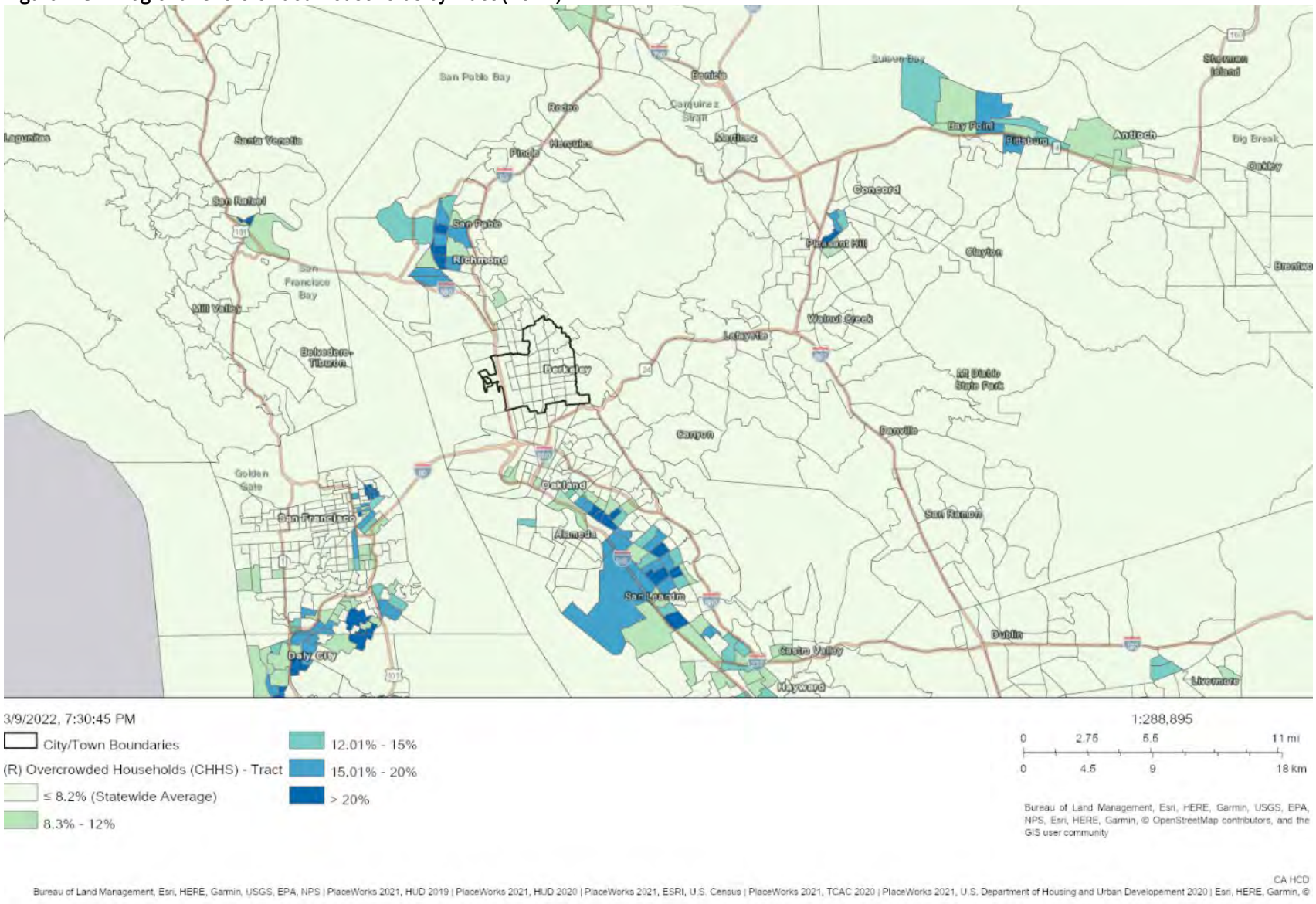
	Housing Units	Percent
No bedroom	29,383	4.8%
1 bedroom	97,445	16.0%
2 bedrooms	172,508	28.4%
3 bedrooms	185,416	30.5%
4 bedrooms	98,030	16.1%
5 or more bedrooms	25,314	4.2%
Total housing units	608,096	100.0%

Source: 2015-2019 ACS (5-Year Estimates).

Figure E-84 and Figure E-85 show overcrowded and severely overcrowded households by tract in the region. The HCD Data Viewer shows tracts where the proportion of overcrowded households exceeds the Statewide average of 8.2 percent. Tracts with overcrowded households are most concentrated in and around the cities of San Leandro, Oakland, south San Francisco, Daly City, Richmond, and Pittsburg/Antioch. A few overcrowded tracts are also located in Pleasant Hill and San Rafael. There are no tracts in Berkeley where more than 8.2 percent of households are overcrowded, indicating that overcrowding is less prevalent in the City compared to nearby jurisdictions to the north and south.

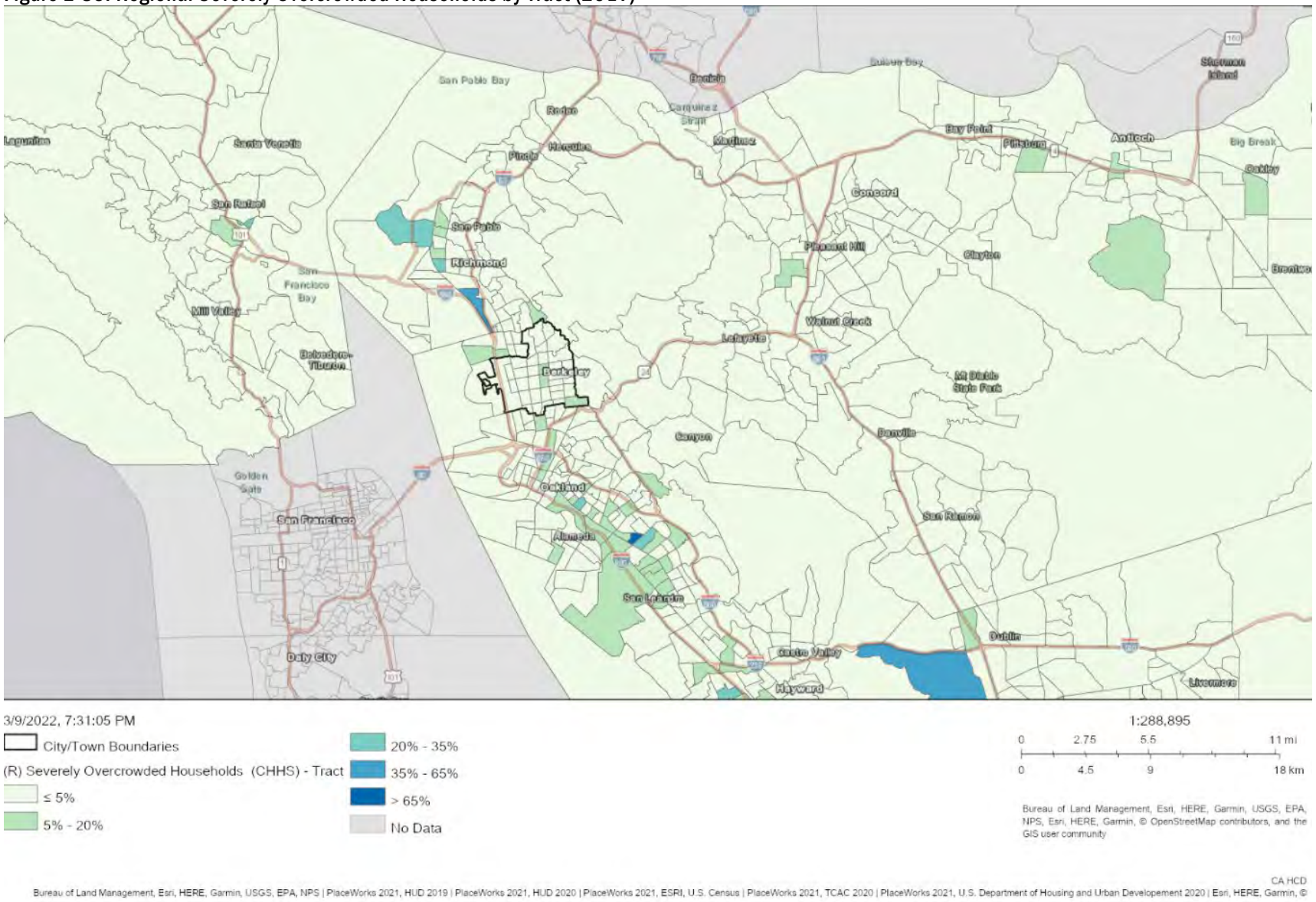
Berkeley does contain some tracts where more than five percent of households are severely overcrowded. In most tracts in the region, less than five percent of households are overcrowded. The severely overcrowded household trend in Berkeley is generally consistent with neighboring jurisdictions. Tracts where more than 20 percent of households are severely overcrowded are located in Richmond, Oakland, and San Rafael.

Figure E-84: Regional Overcrowded Households by Tract (2017)



Source: HCD AFFH Data Viewer (2020 HUD CHAS Data, based on 2013-2017 ACS), 2022.

Figure E-85: Regional Severely Overcrowded Households by Tract (2017)



Source: HCD AFFH Data Viewer (2020 HUD CHAS Data, based on 2013-2017 ACS), 2022.

Local Trends. Overcrowding by tenure and severity for the City of Berkeley is included in Table E-48. Like the county, overcrowding has increased in Berkeley since 2010; 2.3 percent of households citywide were overcrowded in 2010 compared to 4 percent in 2019. However, overcrowding is less prevalent in the City compared to the County. Only four percent of households have more than one person per bedroom including 1.3 percent of owner-occupied households and six percent of renter-occupied households. Persons living with roommates, such as students, are typically at higher risk of overcrowding to reduce housing costs. Despite the prominent student population in the City, the proportion of severely overcrowded households in Berkeley is also lower than the County as a whole. Consistent with the County and Bay Area, overcrowding is significantly more prevalent amongst renters than owners.

Table E-48: Overcrowding by Tenure – Berkeley (2010 and 2019)

	2019			2010	
	Overcrowded (>1.0 person per room)	Severely Overcrowded (>1.5 persons per room)	Total Households	Overcrowded	Total Households
Owner-Occupied	1.3%	0.4%	19,478	0.9%	18,718
Renter-Occupied	6.0%	3.1%	25,874	3.4%	24,471
All Households	4.0%	1.9%	45,352	2.3%	43,189

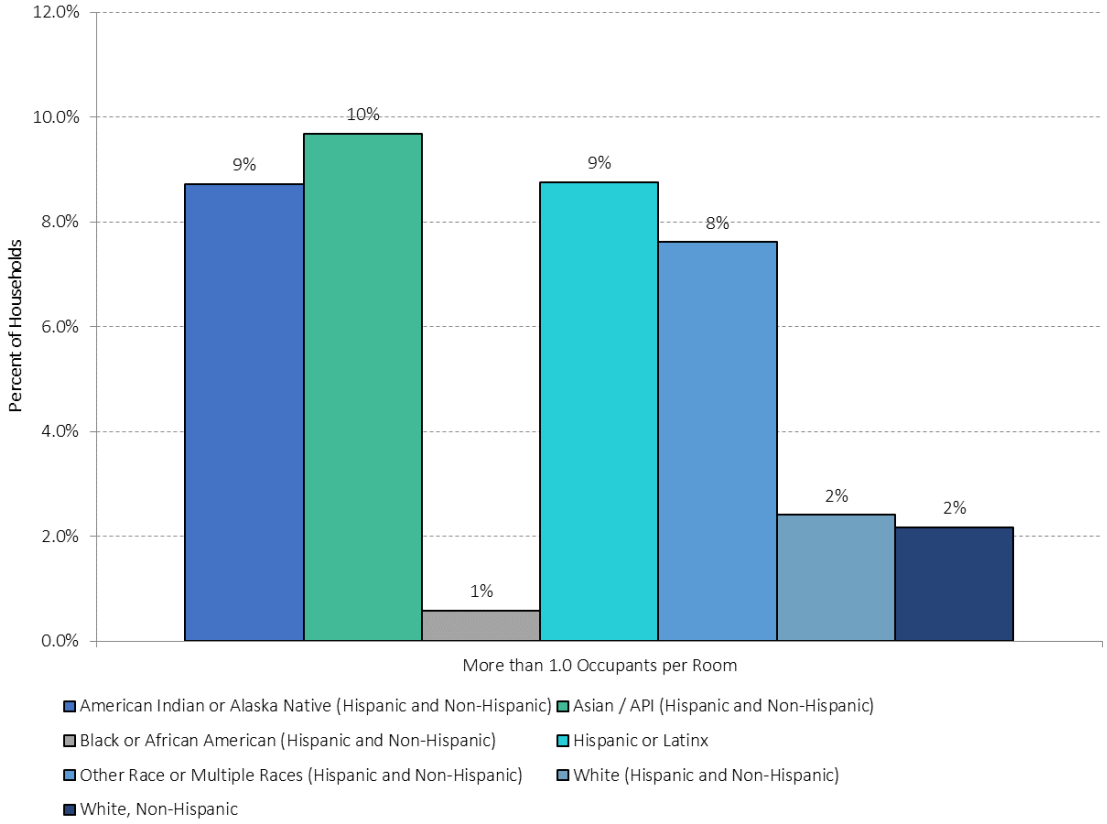
Source: 2006-2010 and 2015-2019 ACS (5-Year Estimates).

Overcrowding may affect various racial/ethnic groups differently due to cultural influences. Some cultures may be more likely to live with extended family members, increasing the need for larger housing units to avoid overcrowding. In Berkeley, Asian/API households have the highest rate of overcrowding (ten percent), followed by American Indian/Alaska Native households (nine percent), and Hispanic/Latinx households (nine percent) (Figure E-86). Conversely, only one percent of Black/African American households and two percent of non-Hispanic White household are overcrowded.

Overcrowding amongst certain racial/ethnic groups in the City may, in part, be due to the UC Berkeley student population. Based on 2015-2019 ACS population estimates and UC Berkeley data,[29] UC Berkeley students represent 35.6 percent of the total City population. As mentioned previously, students are more likely to have lower incomes and live with roommates and are therefore more prone to overcrowding. Table E-49 shows the student populations and overcrowding by race and ethnicity in 2019. Racial/ethnic groups with the highest rate of overcrowding are represented by large student populations. Nearly half of the City's American Indian/Alaska Native and Asian/API populations are UC Berkeley students. Similarly, 35.1 percent of the City's Hispanic/Latino population is a UC Berkeley student. Black/African American households and non-Hispanic White households have the lowest rates of overcrowding. This correlates with UC Berkeley populations, where Black/African American and White students represent only 11.6 percent of the respective City populations. While this trend does not eliminate the racial disparities related to overcrowded households, it may partially explain the discrepancies amongst racial/ethnic groups.

[29] UC Berkeley Office of the Vice Chancellor of Finance, Our Berkeley Enrollment History, 2019. https://pages.github.berkeley.edu/OPA/our-berkeley/enroll-history.html.

Figure E-86: Overcrowding by Race (2019)



ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

Table E-49: Overcrowded Households and Student Populations by Race/Ethnicity (2019)

Race/Ethnicity	Total Population	% Overcrowded Households	UC Berkeley Student Population	
			Persons	Percent of Total
American Indian/Alaska Native	282	8.7%	138	48.9%
Asian/API	25,313	9.7%	12,442	49.2%
Black/African American	9,324	0.6%	1,084	11.6%
Hispanic/Latino	13,853	8.8%	4,861	35.1%
White, non-Hispanic	64,781	2.2%	7,509	11.6%
Total Population	121,485	4.0%	48,204	35.6%

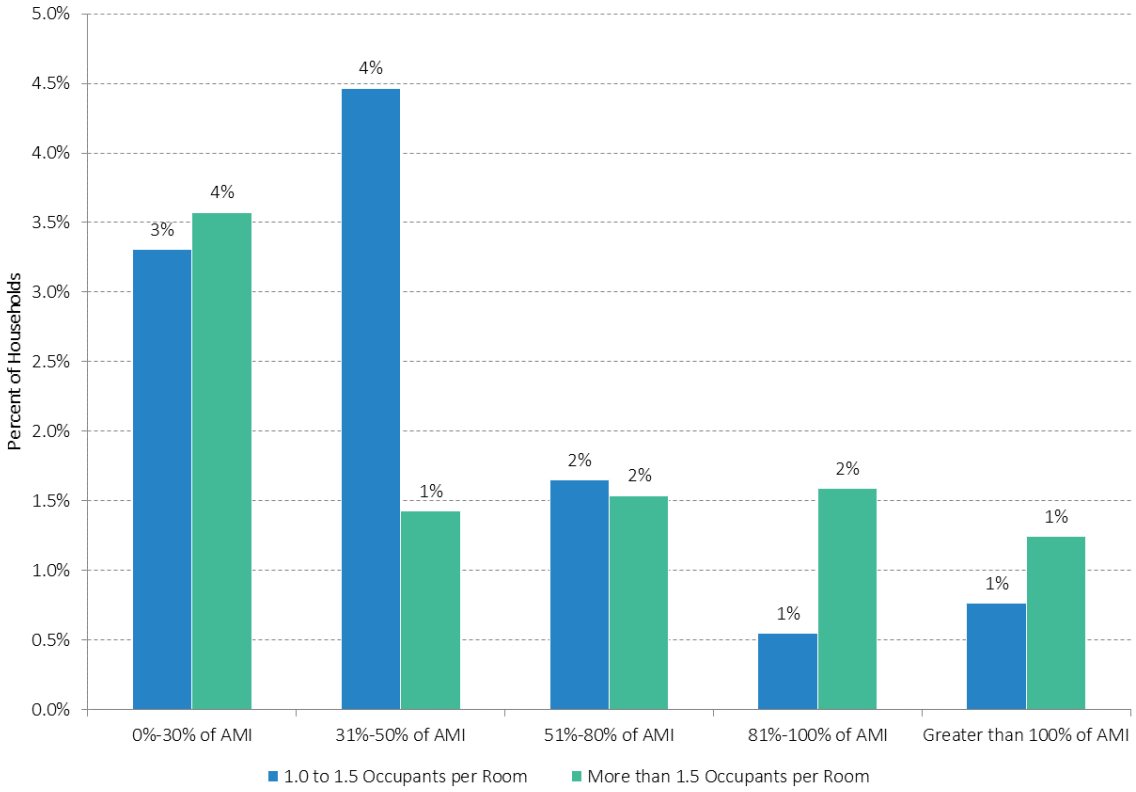
Note: The total population estimates provided by the ACS, college students are counted where "they live and sleep most of the time" (https://www.census.gov/library/stories/2020/01/student-housing-off-campus-with-parents-college-students-count-2020-census.html#:~:text=In%202019%2C%20the%20Current%20Population,from%205.7M%20in%202011.). This estimate may be affected by certain variables including students studying from home due to COVID-19 protocols and students studying abroad. The data provided in this table are used to show the general composition of the City.
Source: 2015-2019 ACS (5-Year Estimates); UC Berkeley Office of the Vice Chancellor of Finance, Our Berkeley Enrollment History, 2019.

Lower income households are more likely to experience overcrowding in order to make housing more affordable. Large families are also more prone to experiencing poverty. According to the 2015-2019 ACS, 3.8 percent of families in Berkeley are below the poverty level. Comparatively, 8.9 percent of families with three or four children, and 59.1 percent of families with five or more children are below the poverty level.

Nearly seven percent of extremely low income households (0 to 30 percent of AMI), 5.9 percent of very low income households (31 to 50 percent of AMI), and 3.2 percent of low income households (51 to 80 percent AMI) are overcrowded. Only 2.1 percent of households earning 80 to 100 percent of the AMI and

two percent of households earning 100 percent or more of the AMI are overcrowded. As discussed in Section E4.2 *Income Level*, young adults have the highest poverty rate in the City compared to other age groups. According to the 2015-2019 ACS, of the population 18 years and older, college-aged students ages 18 to 24 have a significantly higher poverty rate of 72.1 percent compared to adults aged 25 to 34 (19.9 percent), aged 35 to 64 (8.4 percent), and 65 and older (8.5 percent). Young adults, including but not limited to college students, are more likely to have roommates to reduce housing costs and are therefore more likely to live in overcrowded households.

Figure E-87: Overcrowding by Income Level and Severity (2017)



ABAG Housing Element Data Package (2013-2017 HUD CHAS Data), 2021.

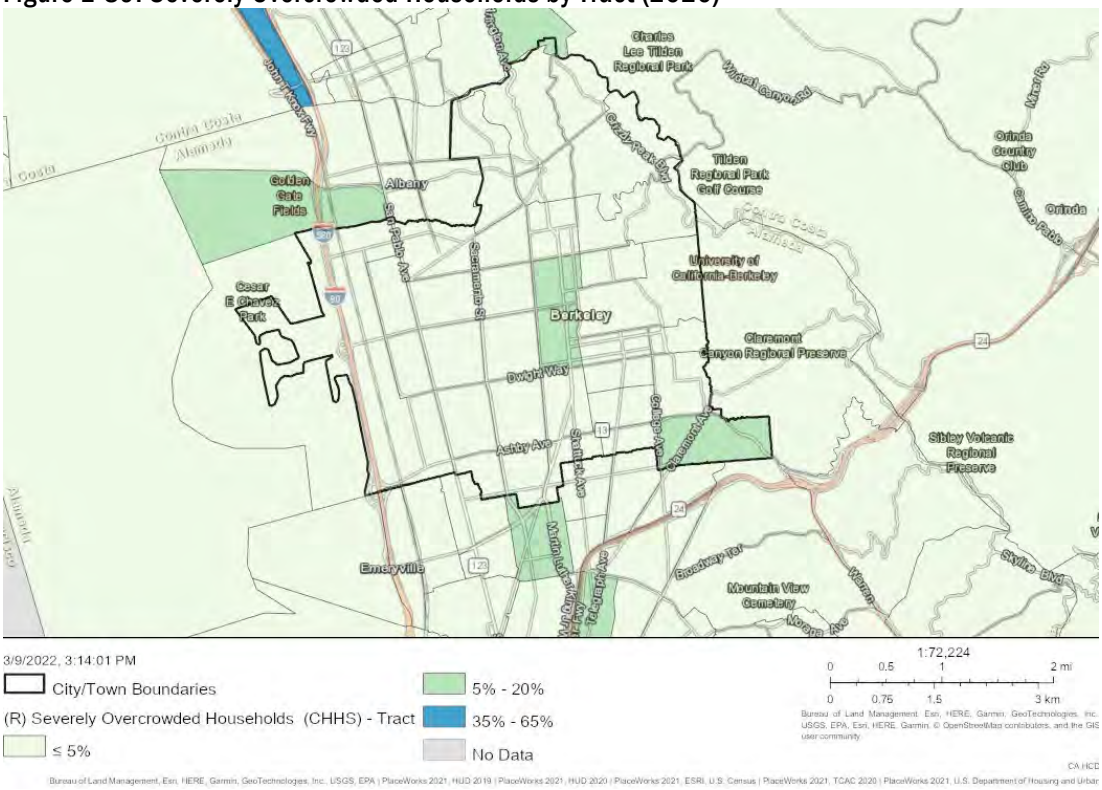
Figure E-88 shows that there are no tracts in the City where more than 8.2 percent of households, the Statewide average, are overcrowded. However, there are three tracts where more than five percent of households are severely overcrowded. Approximately 15 percent of households in tract 4224 (North Berkeley/Central Berkeley neighborhoods), 5.5 percent of households in tract 4229 (Downtown Berkeley/Central Berkeley neighborhood), and 17.7 percent of households in tract 4238 (Claremont/Elmwood District neighborhoods) are severely overcrowded. Tracts 4224 and 4229 have predominant renter populations of 87.9 percent and 97.7 percent, respectively. Tract 4238 is characterized by a large senior population of 30 percent (see Figure E-27). Nearly 40 percent of senior households are considered lower income.[30] Elderly households are more likely to experience housing problems including cost burden, likely part due to lower or lack of income.

[30] ABAG Housing Element Data Package (2013-2017 HUD CHAS Data), 2021

Figure E-88: Overcrowded Households by Tract (2017)

Source: HCD AFFH Data Viewer (2020 HUD CHAS Data, based on 2013-2017 ACS), 2022.

Figure E-89: Severely Overcrowded Households by Tract (2020)



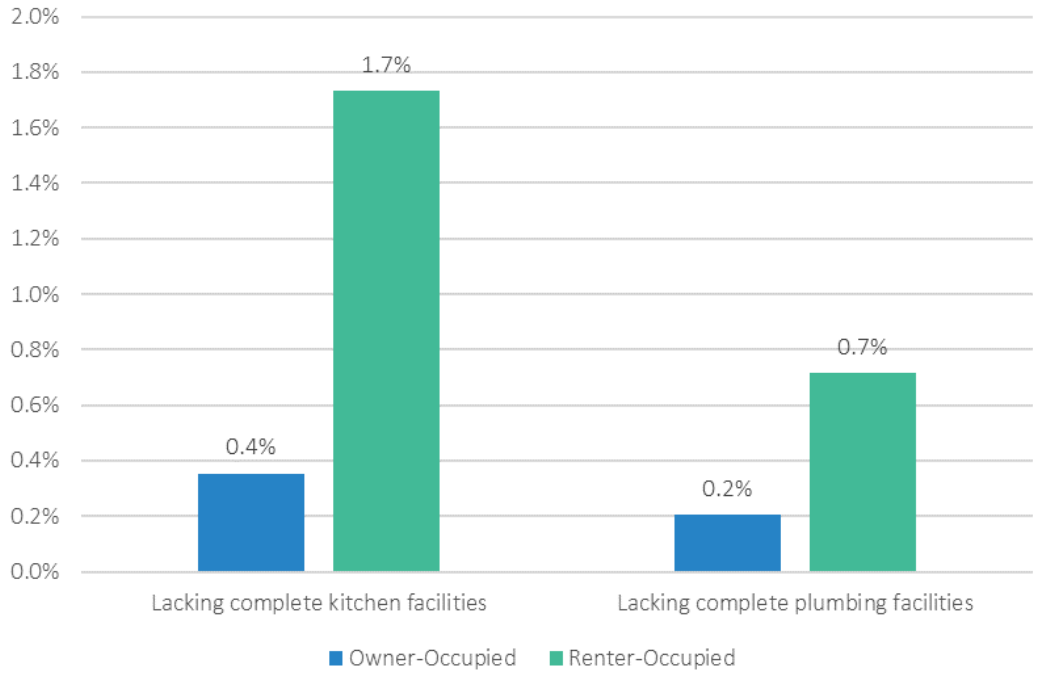
Source: HCD AFFH Data Viewer (2020 HUD CHAS Data, based on 2013-2017 ACS), 2022.

Substandard Housing Conditions

Regional Trends. Incomplete plumbing or kitchen facilities can be used to measure substandard housing conditions. Incomplete facilities and housing age are estimated using the 2015-2019 ACS. In general, residential structures over 30 years of age require minor repairs and modernization improvements, while units over 50 years of age are likely to require major rehabilitation such as roofing, plumbing, and electrical system repairs.

Of housing units in Alameda County, one percent lack complete kitchen facilities and 0.4 percent lack complete plumbing facilities. According to 2006-2010 ACS estimates, 0.5 percent of households lacked complete plumbing facilities, including 0.8 percent of renter-occupied units and 0.3 percent of owner-occupied units. Similarly, 1.5 percent of renter households and 0.3 percent of owner households lacked complete kitchen facilities. The proportion of households lacking complete facilities has decreased for both renters and owners since 2010. Historically and currently, incomplete facilities are more common amongst renter-occupied households. Nearly two percent of renter-occupied households lack complete kitchen facilities and 0.7 percent lack complete plumbing facilities compared to only 0.4 percent and 0.2 percent of owner-occupied households (Figure E-90).

Figure E-90: Housing Units Lacking Complete Facilities – Alameda County (2019)

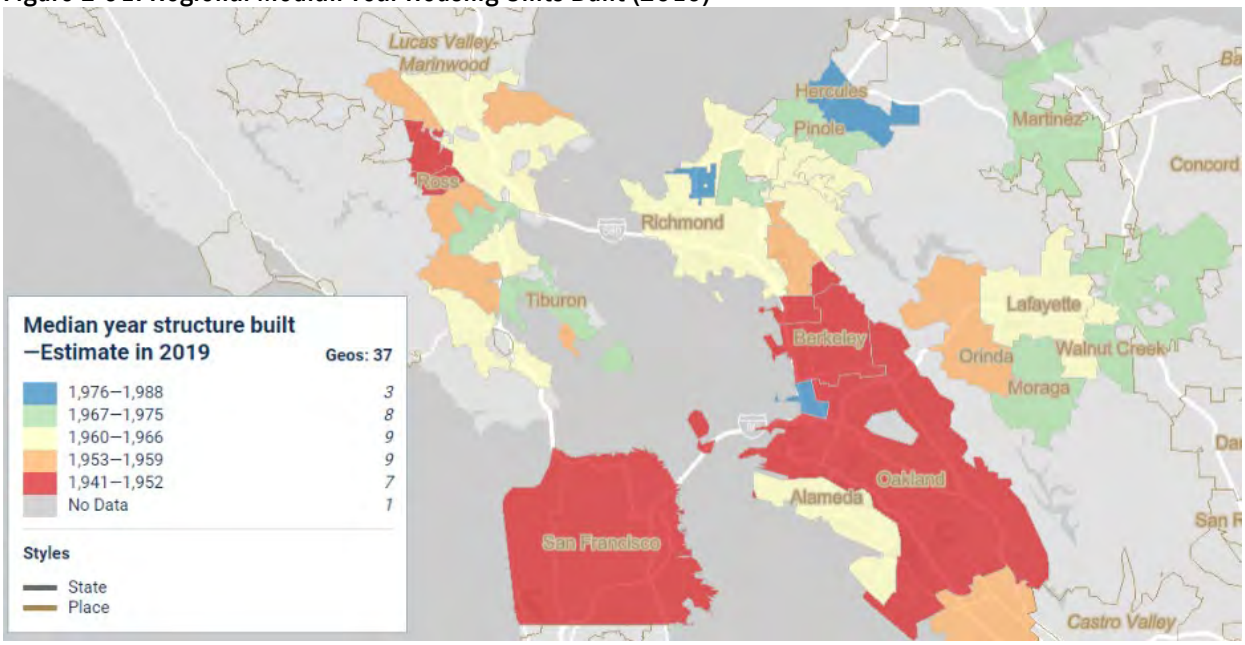


Source: 2015-2019 ACS (5-Year Estimates).

Housing age can also be used as an indicator for substandard housing and rehabilitation needs. As stated above, structures over 30 years of age require minor repairs and modernization improvements, while units over 50 years of age are likely to require major rehabilitation. In the County, 80.6 percent of the housing stock was built prior to 1990, including 52.8 percent built prior to 1970 (Table E-50). Figure E-91 shows median housing age for cities and Census-designated places (CDPs) in the region. The housing stock in Ross (Marin County), Berkeley (Alameda County), Oakland (Alameda County), and San Francisco has the highest median age in the region, ranging from the years 1941 to 1952. Jurisdictions in Contra

Costa County and parts of Marin County tend to have lower median ages compared to western Alameda County and San Francisco.

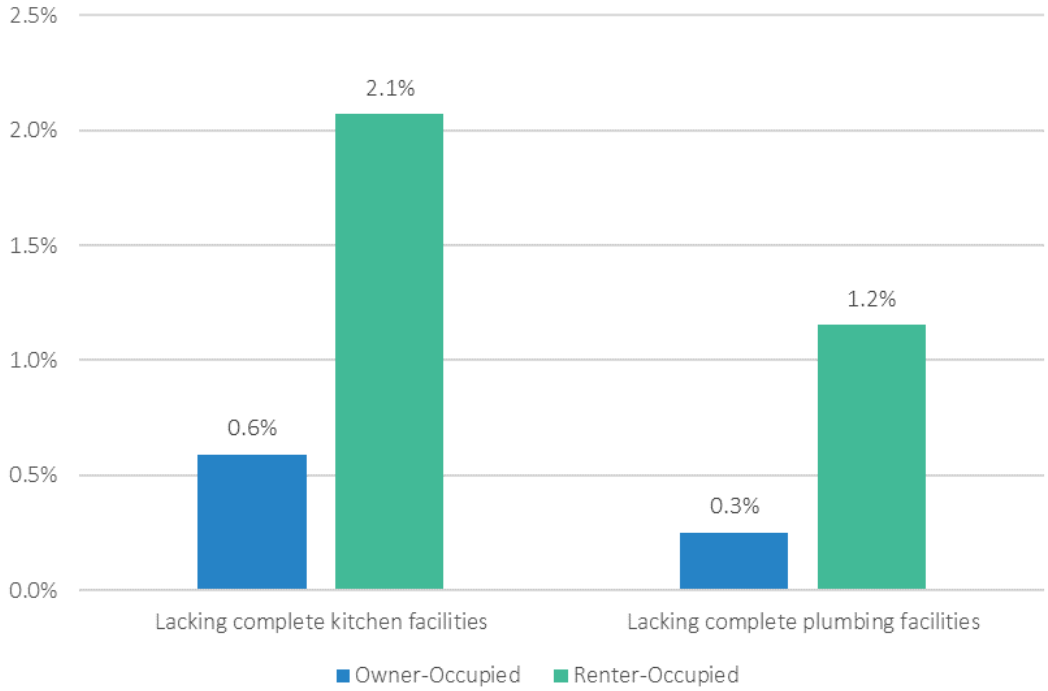
Figure E-91: Regional Median Year Housing Units Built (2019)



Source: 2015-2019 ACS (5-Year Estimates).

Local Trends. Housing units lacking complete kitchen or plumbing facilities are slightly more common in Berkeley than the County. Approximately 1.4 percent of the housing stock lacks complete kitchen facilities and 0.8 percent lacks complete plumbing facilities. Like the county, the proportion of households lacking complete kitchen facilities has decreased since 2010. However, the proportion of households lacking complete plumbing facilities increased during this period. According to 2006-2010 ACS estimates, 0.8 percent of households lacked complete kitchen facilities and 0.4 lacked complete plumbing facilities in 2010. As shown in Figure E-92, like the County, incomplete facilities are more common amongst renter-occupied households in Berkeley. Over two percent of renter-occupied households lack complete kitchen facilities and over one percent lack complete plumbing facilities. As discussed above, Berkeley is characterized by a large renter population representing 57 percent of households Citywide.

Figure E-92: Housing Units Lacking Complete Facilities – Berkeley (2019)



Source: ABAG Housing Element Data Package (based on 2015-2019 ACS (5-Year Estimates)), 2021.

Table E-50 and Figure E-93 show the housing stock age in Berkeley by tract. More than 90 percent of housing units in tracts 4212, 4213, 4214, 4218 (Berkeley Hills, Live Oak, Thousand Oaks, and Northbrae neighborhoods), and 4238 (Claremont/Elmwood District neighborhoods) were built before 1970. Between 80 and 90 percent of the housing stock in most tracts falls within this age group. Tracts 4220 (Berkeley Marina neighborhood), 4229 (Central/North Berkeley neighborhoods), and 4226 (UC Berkeley campus) have the largest proportion of new housing units built in 1990 or later. Of the 33 tracts in the City, more than 90 percent of the housing stock in 24 tracts (72.7 percent) was built before 1990. Aging housing units are not generally concentrated in one area of the City.

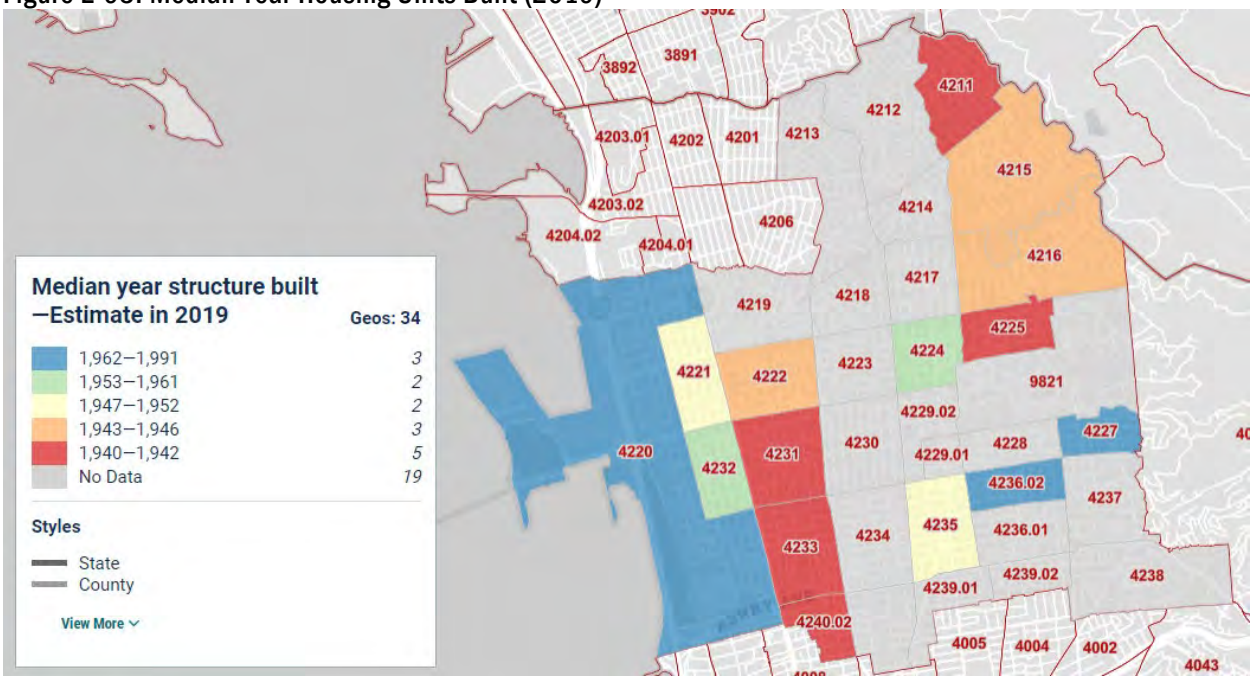
Table E-50: Year Housing Units Built by Tract (2019)

Tract/Jurisdiction	1969 or Earlier (50+ Years)	1970-1989 (30-50 Years)	1990 or Later (<30 Years)	Total Housing Units
4211	87.8%	8.3%	3.9%	866
4212	97.0%	2.6%	0.4%	1,516
4213	95.8%	2.7%	1.4%	1,661
4214	92.0%	6.3%	1.8%	685
4215	84.8%	9.2%	6.0%	1,606
4216	89.4%	7.9%	2.7%	1,674
4217	80.9%	12.4%	6.6%	1,640
4218	92.7%	5.4%	1.9%	886
4219	85.3%	11.2%	3.5%	1,796
4220	38.5%	10.3%	51.2%	1,012
4221	78.0%	11.9%	10.1%	1,278
4222	85.4%	10.5%	4.1%	1,632
4223	74.2%	8.7%	17.1%	1,896
4224	65.8%	22.3%	11.8%	2,239
4225	80.9%	16.6%	2.5%	1,593

Tract/Jurisdiction	1969 or Earlier (50+ Years)	1970-1989 (30-50 Years)	1990 or Later (<30 Years)	Total Housing Units
4226	46.2%	33.3%	20.5%	39
4227	53.9%	39.2%	6.9%	1,194
4228	76.3%	16.9%	6.8%	1,494
4229	42.3%	17.9%	39.8%	2,281
4230	80.0%	15.2%	4.8%	2,235
4231	80.4%	14.1%	5.4%	2,056
4232	65.4%	24.1%	10.6%	1,239
4233	80.2%	7.5%	12.2%	1,715
4234	85.9%	10.6%	3.5%	2,191
4235	65.9%	25.4%	8.6%	1,565
4236.01	85.0%	10.8%	4.1%	1,254
4236.02	63.9%	29.7%	6.3%	2,355
4237	87.3%	12.2%	0.5%	1,455
4238	93.8%	4.0%	2.2%	1,315
4239.01	85.0%	11.6%	3.4%	907
4239.02	85.9%	8.7%	5.4%	760
4240.01	85.6%	9.2%	5.1%	1,560
4140.02	76.4%	6.1%	17.5%	1,079
Berkeley	77.9%	13.5%	8.6%	48,674
Alameda County	52.8%	27.8%	19.4%	608,096

Source: 2015-2019 ACS (5-Year Estimates).

Figure E-93: Median Year Housing Units Built (2019)



Source: 2015-2019 ACS (5-Year Estimates).

Displacement Risk

Regional Trends. UC Berkley's Urban Displacement project defines residential displacement as "the process by which a household is forced to move from its residence- or is prevented from moving into a neighborhood that was previously accessible to them because of conditions beyond their control." As part of this project, the research has identified populations vulnerable to displacement (named "sensitive

communities") in the event of increased redevelopment and drastic shifts in housing cost. Vulnerability was defined using the share of low income residents per tract and other criteria including: share of renters is above 40 percent, share of people of color is more than 50 percent, share of low income households severely rent burdened, and proximity to displacement pressures. Displacement pressures were defined based on median rent increases and rent gaps.

Using this methodology, sensitive communities in the region are most concentrated in the coastal census tracts of Contra Costa, Alameda, and San Francisco County, specifically in the cities of Vallejo, Richmond, Berkeley, Oakland, and San Francisco (Figure E-94). Additional sensitive communities were also identified in Marin County and inland Contra Costa County along Interstate 680 and Highway 24. Compared to nearby coastal jurisdictions, Berkeley has a slightly lower concentration of sensitive communities.

The following key findings were identified by the Urban Displacement Project for the Bay Area:[31]

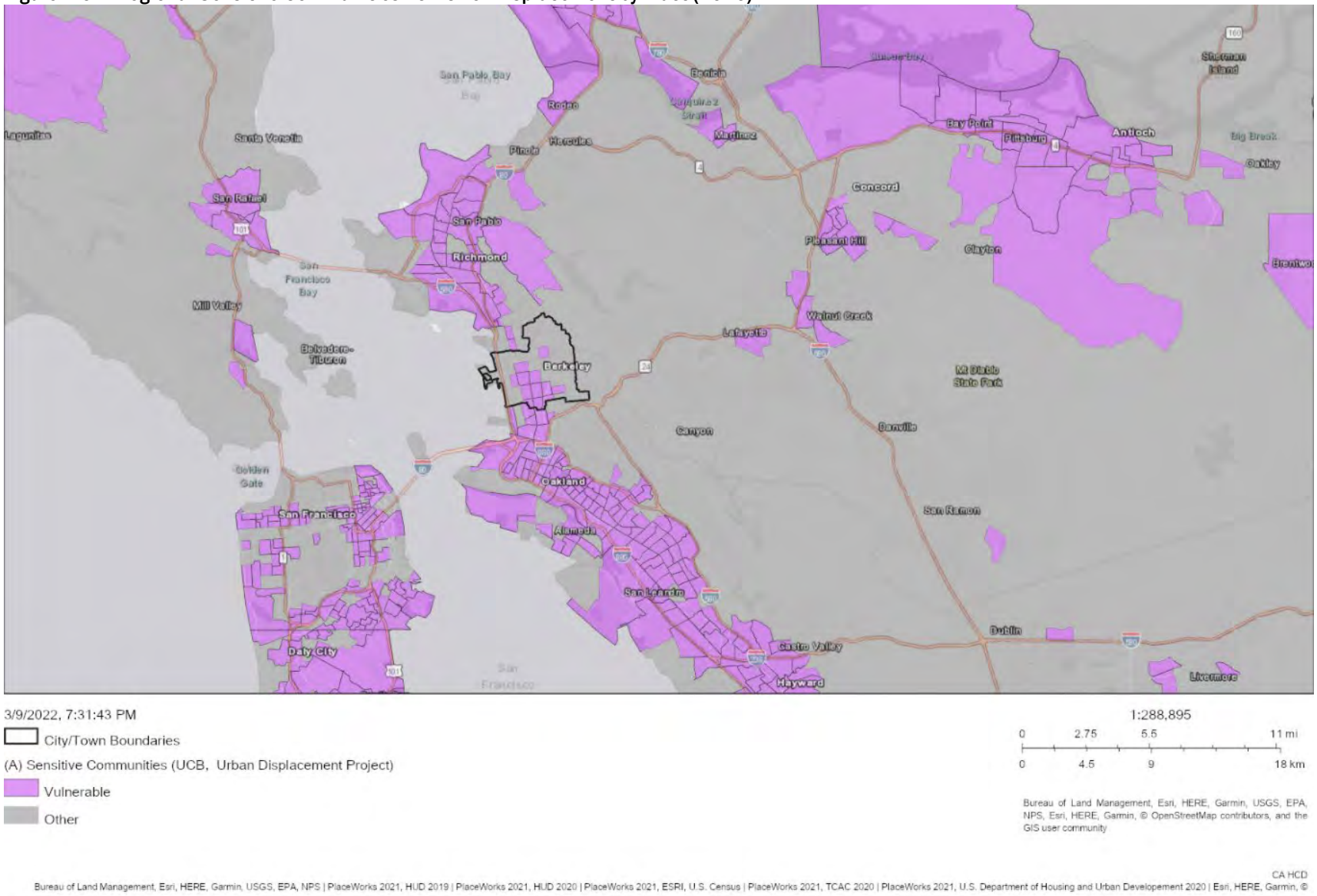
> *As of 2018, over 10% or 161,343 low income households (households making below 80% of AMI) lived in areas at risk of or currently experiencing gentrification. Nearly half of these households live in either Alameda or San Francisco counties.*
>
> *However, consistent with other Strong, Prosperous, And Resilient Communities Challenge (SPARCC) cities, less than 10% of all tracts in the Bay Area are classified as either at risk of or experiencing early or advanced gentrification, suggesting that gentrification is not as prevalent as other forms of neighborhood change. Gentrification risk or occurrence varies by county, however. Ongoing and advanced gentrification is most prevalent in San Francisco (18.5% of all tracts) and Alameda (11.1% of tracts) counties, and least prevalent in Contra Costa, Sonoma, and Yolo counties, mainly due the absence of densely populated, urban tracts.*
>
> *By contrast, just about 30% of all tracts in the region are either at risk or becoming exclusive, or already stable/advanced exclusive, to low income households. This includes 61 tracts that were labeled as in early or advanced stages of gentrification in 2015, reflecting continued shifts in housing market accessibility for low income households. Exclusive tracts are concentrated in suburban counties, including Marin and San Mateo (nearly 70% and 50% are of tracts were classified as such respectively); wealthy enclaves in eastern Oakland and Berkeley; and pockets of San Francisco (making up 30% of all tracts).*
>
> *Compared to 2015 maps, fewer areas of San Francisco are classified as 'At Risk of Gentrification,' and are instead classified as 'Stable Moderate/Middle Income.' This new type captures working-class neighborhoods that are not experiencing the housing market pressures of the rest of the county, so the displacement of low-income households is relatively rare. In contrast, Oakland and South Berkeley continue to display numerous tracts at risk of or undergoing gentrification/displacement.*
>
> *New maps allow users to overlay other data onto gentrification and displacement maps. Overlaying redlining maps digitized by the Mapping Inequality Project at the University of Richmond, the crossover between areas once redlined and low-income and gentrifying tracts is stark, particularly in the East Bay. This relationship is consistent with other cities included in UDP/SPARCC research.*

Concentrations of vulnerable communities generally overlap with other special needs groups and populations of interest including racial/ethnic minority populations, children in female-headed

[31] Urban Displacement Project, SF Bay Area – Gentrification and Displacement, 2021. https://www.urbandisplacement.org/maps/sf-bay-area-gentrification-and-displacement/.

households, LMI households, low resource tracts, and cost burdened renters (see Figure E-16, Figure E-30, Figure E-37, Figure E-48, and Figure E-75).

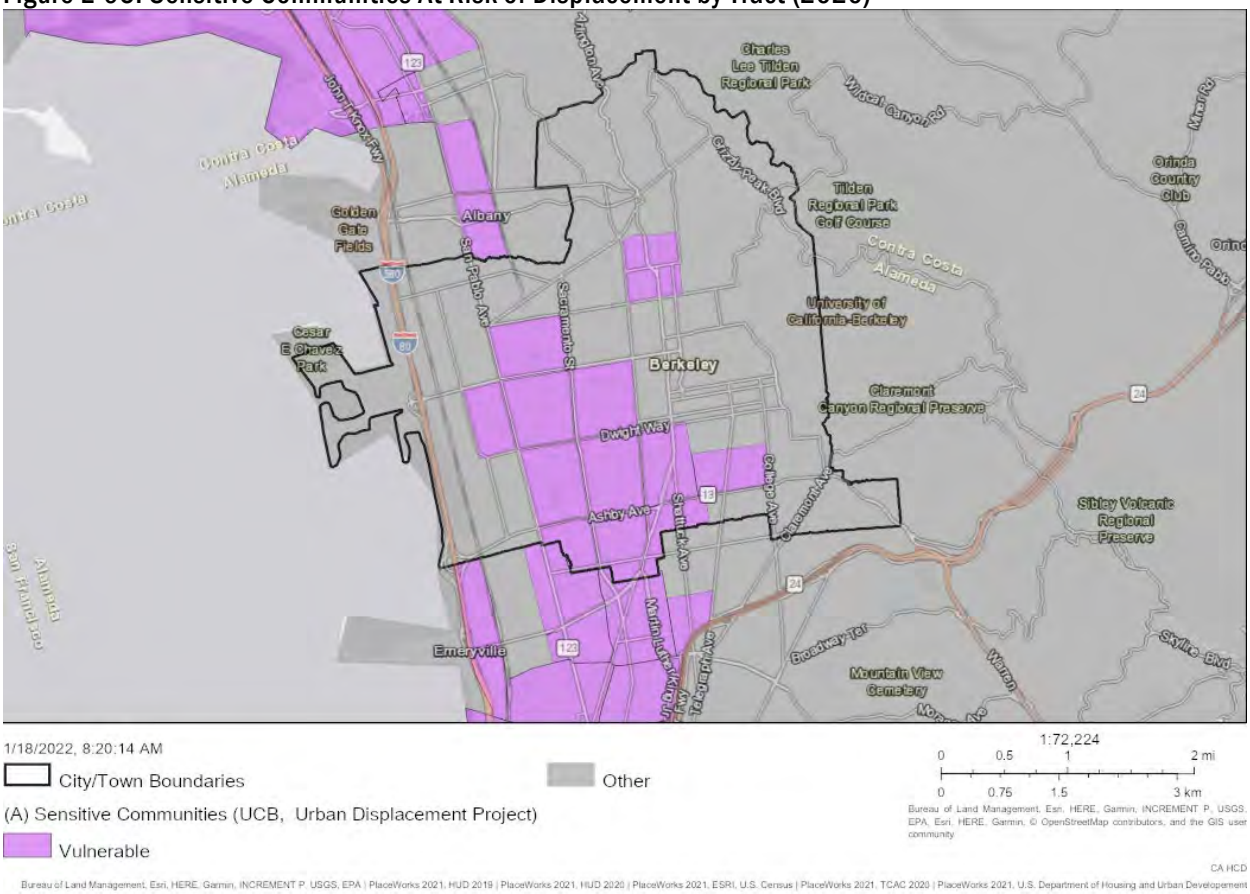
Figure E-94: Regional Sensitive Communities At Risk of Displacement by Tract (2020)



Source: HCD AFFH Data Viewer (UC Berkeley Displacement Project, 2020), 2022.

Local Trends. The Urban Displacement Project identified 12 sensitive communities at risk of displacement in Berkeley (Figure E-95). Most sensitive communities are located in the central and southern areas of the City in the South Berkeley, Le Conte, Elmwood District, Southwest Berkeley, Central Berkeley, and North Berkeley neighborhoods. There is also one sensitive community located in the Live Oak/Upper North Berkeley neighborhoods. Most tracts classified as sensitive communities are TCAC high resource areas. There is one sensitive community along the southern City boundary that is considered a moderate resource (rapidly changing) tract (see Figure E-49).

Figure E-95: Sensitive Communities At Risk of Displacement by Tract (2020)



Source: HCD AFFH Data Viewer (UC Berkeley Displacement Project, 2020), 2022.

The Urban Displacement Project classifies Census tracts by displacement typology. Berkeley tracts fall into the following typologies. Typology criteria is shown below and Berkeley tracts by displacement typology are outlined in Table E-51.

- **Low-Income/Susceptible to Displacement:** (1) Low or mixed income tract in 2018.
- **Early/Ongoing Gentrification:** (1) Low-income or mixed low-income tract in 2018; (2) Housing affordable to moderate or mixed moderate-income households in 2018; (3) Increase or rapid increase in housing costs or above regional median change in Zillow home or rental values between 2012-2018; (4) Gentrified in 1990-2000 or 2000-2018.
- **Advanced Gentrification:** (1) Moderate, mixed moderate, mixed high, or high-income tract in 2018; (2) Housing affordable to middle, high, mixed moderate, and mixed high-income households in 2018; (3) Marginal change, increase, or rapid increase in housing costs; (4) Gentrified in 1990-2000 or 2000-2018.

- **Stable Moderate/Mixed Income:** (1) Moderate, mixed moderate, mixed high, or high-income tract in 2018.
- **Becoming Exclusive:** (1) Moderate, mixed moderate, mixed high, or high-income tract in 2018; (2) Housing affordable to middle, high, mixed moderate, and mixed high-income households in 2018; (3) Rapid increase in housing costs; (4) Absolute loss of low-income households, 2000-2018; (5) Declining low-income in-migration rate, 2012-2018; (6) Median income higher in 2018 than in 2000.
- **Stable/Advanced Exclusive:** (1) High-income tract in 2000 and 2018; (2) Affordable to high or mixed high-income households in 2018; (3) Marginal change, increase, or rapid increase in housing costs.
- **High Student Population:** Nearly a quarter (24.2 percent) of Berkeley tracts are categorized as high student population tracts. High student population tracts are demarcated in gray and are located in and around the UC Berkeley campus (Figure E-96). Stable moderate/mixed income tracts are the second most prevalent tract type in the City (21.2 percent), followed by advanced gentrification tracts (18.2 percent), and low income/susceptible to displacement tracts (12.1 percent). Advanced gentrification tracts are all located in the southern section of the City in the South Berkeley, Lorin, and Elmwood District neighborhoods. Most block groups in this area have populations of people of color exceeding 40 percent (see Figure E-21). About half of block groups in these tracts have racial/ethnic minority populations exceeding 60 percent, higher than the Citywide average of 46.7 percent. Advanced gentrification tracts have TCAC opportunity area classifications of moderate resource (rapidly changing), high resource, and highest resource (see Figure E-49). In general, the proportion of costs burdened renters has increased in these tracts since the 2010-2014 ACS (see Figure E-81 and Figure E-82). Most Early/ongoing gentrification and advanced gentrification tracts were redlined in the 1930s. Historical trends including redlining are further described in Section E4.6 *Historical Trends*. Low income/susceptible to displacement, stable moderate/mixed income, and becoming exclusive tracts are not concentrated in a single area of the City.

Stable/advanced exclusive tracts are located only in the northeastern area of Berkeley in the Berkeley Hills, Cragmont, Thousand Oaks, and Live Oak neighborhoods. These tracts are characterized by large elderly populations ranging from 22 to 33 percent, significantly higher than the 14.3 percent Citywide according to the 2015-2019 ACS (see Figure E-27). Elderly residents aged 65 and older have lower poverty rates (8.5 percent) compared to the total Berkeley population (19.2 percent) (see Table E-27). As discussed in Section E4.2, *Integration and Segregation*, this area is generally more affluent and has larger White populations compared to the rest of the City. Less than 40 percent of the population in most block groups in stable/advanced exclusive tracts belong to a racial or ethnic minority group and more than 40 percent of householder in these tracts live with a spouse. Further, all block groups in these tracts have median incomes exceeding $125,000 (see Figure E-47).

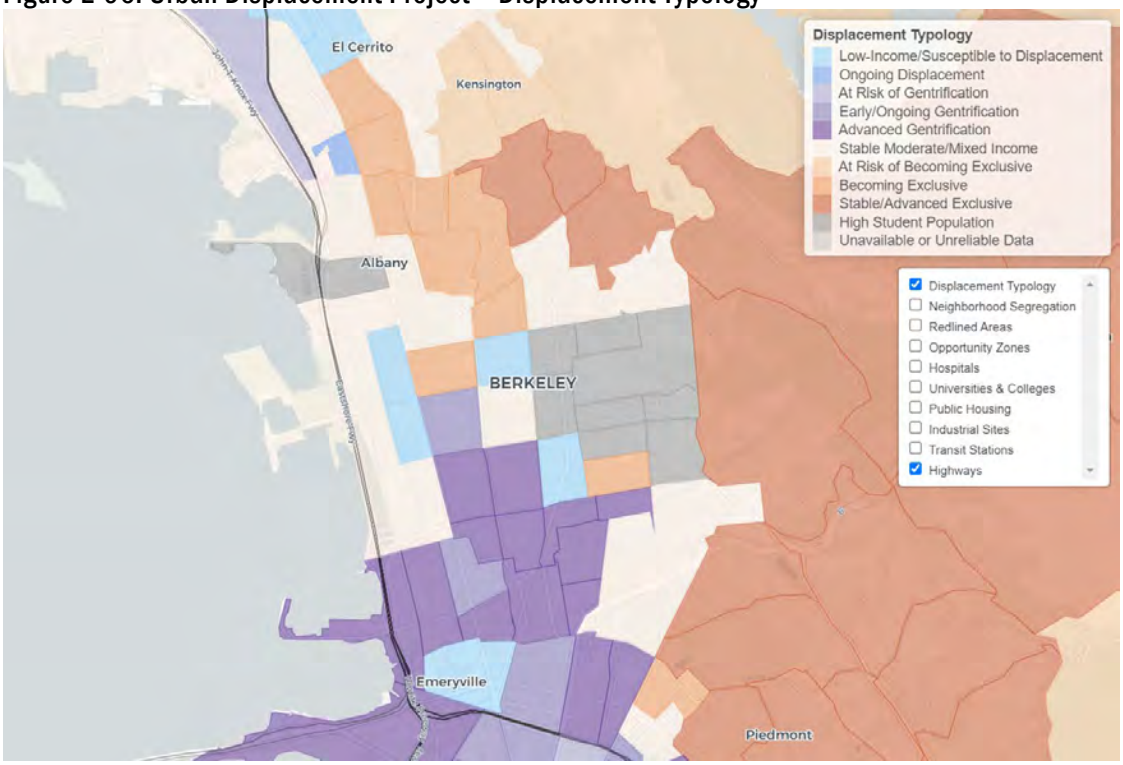
Table E-51: Berkeley Census Tracts by Displacement Typology

Displacement Typology	Tracts	Distribution of Tracts	
		Number	Percent
Low Income/Susceptible to Displacement	4221, 4223, 4232, 4235	4	12.1%
Early/Ongoing Gentrification	4231	1	3.0%
Advanced Gentrification	4233, 4234, 4239.01, 4239.02, 4240.01, 4240.02	6	18.2%
Stable Moderate/Mixed Income	4214, 4216, 4217, 4219, 4220, 4230, 4238	7	21.2%
Becoming Exclusive	4213, 4218, 4222, 4236.01	4	12.1%
Stable/Advanced Exclusive	4211, 4212, 4215	3	9.1%
High Student Population	4224, 4225, 4226, 4227, 4228, 4229, 4236.02, 4237	8	24.2%

Total	--	33	100.0%

Source: Urban Displacement Project, SF Bay Area – Gentrification and Displacement, 2021.

Figure E-96: Urban Displacement Project – Displacement Typology



Source: Urban Displacement Project, SF Bay Area – Gentrification and Displacement, 2021.

Table E-52 shows the distribution of households by tenure and displacement risk. Renter-occupied households are more likely to be susceptible to or experience displacement or be at risk of experiencing gentrification. Over 60 percent of owner-occupied households are in "stable moderate/mixed income" or "at risk of experiencing exclusion" tracts. Displacement often disproportionately affects renters as rent prices increase and housing units become unaffordable to lower or moderate income households. It is relevant to note than a significantly larger proportion of renter-occupied households are in "other" tracts, which includes high student population tracts. Tracts with large student populations are often renter-dominated. Overall, households are generally evenly distributed between tracts at risk/experiencing displacement (20.6 percent), stable moderate/mixed income tracts (21.6 percent), and tracts at risk of experiencing exclusion (20.1 percent). Only 12.2 percent of all households are susceptible to or experiencing displacement.

Table E-52: Households by Displacement Risk and Tenure (2019)

Displacement Typology (Tract)	Owner-Occupied		Renter-Occupied	
	Households	Percent	Households	Percent
Susceptible to or Experiencing Displacement	1,964	10.1%	3,556	13.8%
At risk of or Experiencing Gentrification	3,777	19.4%	5,552	21.5%
Stable Moderate/Mixed Income	5,451	28.1%	4,334	16.8%
At risk of or Experiencing Exclusion	6,514	33.5%	2,570	10.0%
Other	1,724	8.9%	9,780	37.9%
Total	19,430	100.0%	25,792	100.0%

Source: ABAG Housing Element Data Package (Urban Displacement Project; 2015-2019 ACS (5-Year Estimates)), 2021.

The City currently offers 21 anti-displacement policies and programs. The Urban Displacement Project (UDP) has identified 14 best practices for local governments, 11 of which are implemented by the City. Policies shown in Table E-53 are organized by the "Three P's" framework: Protection, Preservation, and Production. The Three P's are promoted by housing advocates as a balanced approach to preventing displacement by protecting current at-risk community members, preserving existing affordable housing, and producing new affordable housing.

Table E-53: Anti-Displacement Strategies (2021)

Policy	Description	UDP Best Practice
Protection		
Eviction Moratorium	The Berkeley City Council adopted the Berkeley Emergency Response Ordinance to protect residents from evictions if they are unable to pay rent due to COVID-19's impacts.	
Fair Chance to Housing for Formerly Incarcerated People	Property owners are prohibited from using criminal background checks to screen tenant applications.	
First Source Hiring	First Source hiring ordinances ensure that City residents are given priority for new jobs created by municipal financing and development programs.	X
Home Retention/Rental Assistance	The City provides financial assistance up to $5,000 for low income residents at risk of eviction to remain in their current living arrangement. Residents impacted by COVID19 are eligible for up to an additional $10,000.	
Just Cause for Eviction ordinance	Nearly all 26,000 rental units in Berkeley have eviction protections for no-fault causes.	X
Landlord/Tenant Mediation	The Rent Board offers landlord/tenant mediation to settle disputes and facilitate positive long-term relationships.	X
Rent Stabilization/Rent Control	Over 19,000 units (approx. 70%) are subject to rent stabilization ceilings.	X
Relocation Protections and Assistance	Tenants who are mandated to vacate their unit temporarily or permanently at no-fault are provided protections (including a right to return) and relocation funding (provided by the landlord).	
Rent Review Board	The Rent Board provides education to tenants and landlords on tenant's rights related to Just Cause Evictions and Rent Stabilization.	X
Source of Income Protection	Property owners are prohibited from refusing to rent to an applicant based on their source of income (e.g., Section 8 and other Housing Choice Voucher programs, Social Security, disability, unemployment or veterans' benefits).	
Preservation		
Community Land Trusts	Northern California Community Land Trust (NCLT) and Bay Area Community Land Trust (BACLT) serve Berkeley and receive direct support from the City for the acquisition and rehabilitation of local properties as well as organizational capacity building.	X
Condominium Conversion Regulations	The Condo Conversion ordinance limits the conversion of rental units to condominiums to 100 per year and includes an Affordable Housing Mitigation Fee for each unit converted. Fees generated from condo conversions provided $3M in revenue for the Housing Trust Fund program since 2009.	X
Senior and Disabled Rehabilitation Loan Program	The City offers deferred, no-interest loans to assist low-income senior and disabled homeowners in repairing/modifying their homes to eliminate conditions that pose a threat to their health and safety and to help preserve the City's housing inventory.	
Single Room Occupancy (SRO) Preservation	The Berkeley Housing Authority provides subsidies for 98 SROs.	X
Small Sites Program (SSP) Pilot	The SSP Pilot supported the acquisition and renovation of small, multifamily rental properties with up to 25 units. The City received	

Policy	Description	UDP Best Practice
	one application during the pilot and awarded $1.6M to BACLT for the renovation of Stuart Street Apartments. There are currently no funds available in this program.	
Foreclosure/Mortgage Assistance	The City participates on the Mortgage Credit Certificate (MCC) Program through Alameda County. MCC recipients may take up to 15% of their annual mortgage interest payments as a dollar for dollar tax credit against their federal income taxes. Qualified homebuyers can adjust their federal income tax withholdings, which will increase their income available to pay the monthly mortgage	X
Production		
Commercial Linkage Fee	This linkage fee on new commercial development generates revenue dependent on the type of development: Office $5.00/sf, Retail $5.00/sf, Industrial $2.50/sf when greater than 7,500 sf. 20% of fees go towards childcare programs. The Commercial Linkage fee has generated over $4.4M in revenue for the HTF program since 1992.	X
Housing Trust Fund (HTF) program	The City supports the development and rehabilitation of non-profit affordable housing properties via the HTF program. The HTF is supported by a combination of federal, state, and local sources, including the Affordable Housing Mitigation fee. Voters adopted Measure O in 2018 to provide the City with $135M in bond funding for affordable housing.	X
Jobs-Housing Linkage fee (Affordable Housing Mitigation fee)	All new market-rate housing developments are subject to an Affordable Housing Mitigation fee (AHMF) of $39,746 per unit for each market rate unit built with an option to provide Below Market Rate (BMR) units onsite in-lieu of the fee. The fee adjusts biennially to reflect the Construction Cost Index (CCI). The AHMF generates the majority of the City's local contribution to the HTF program, with over $12.6M in revenue since 2015. The in-lieu BMR option has provided over 400 permanently affordable units onsite.	X
Public Land Survey	HHCS conducted a survey to identify opportunities for affordable housing development on City-owned property in 2017 and 2019. West Berkeley Service Center was identified by Council as an opportunity site for future affordable housing development. Vacant City properties were converted into shelters to house homeless individuals at high-risk of COVID-19.	

Source: City of Berkeley, Current Anti-Displacement Initiatives, 2021.

Berkeley is also in the process of developing an affordable housing preference policy and a Tenant Opportunity to Purchase Act (TOPA) ordinance. Anti-displacement policies in development are outlined below:

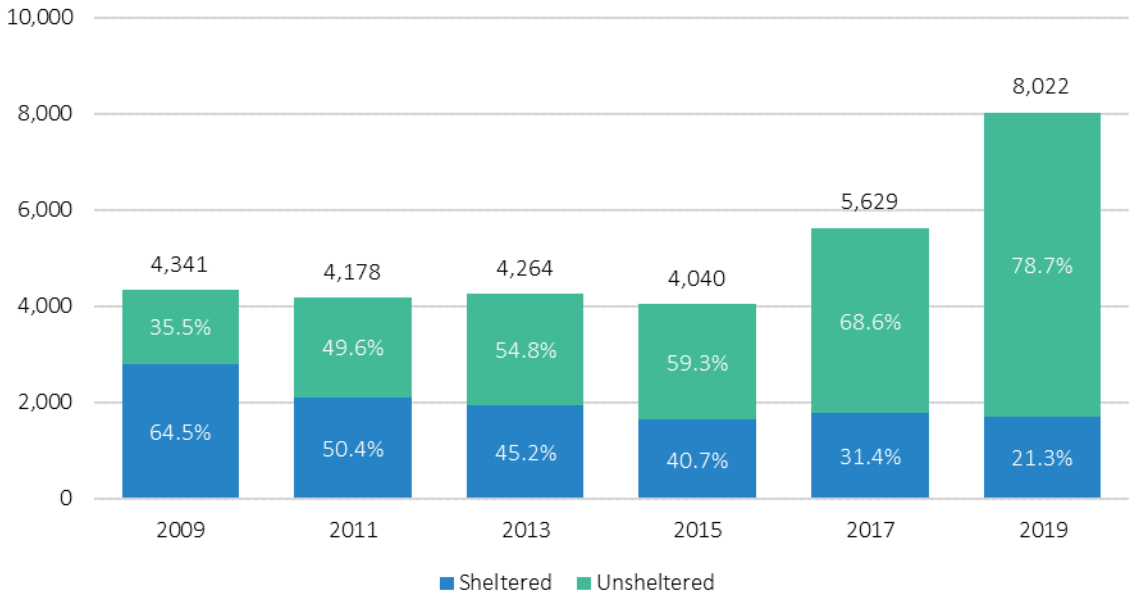
- **Affordable Housing Preference Policy:** A preference policy would provide households with ties to Berkeley a priority in applying for new affordable housing units based on specific criteria. Multiple preferences can be layered to create a preference ranking system (e.g., displaced from Berkeley, neighborhood proximity, families with small children).
- **Tenant Opportunity to Purchase Act (TOPA) Ordinance:** TOPA provides tenants the right to purchase a rental property when the owner puts it on the market or accepts an offer from another potential buyer. The housing would be transitioned into permanently affordable housing or land trusts. Tenants may assign their rights to a qualified affordable housing provider or community land trust.

Homelessness

Regional Trends. Communities are required by HUD to conduct a Point-in-Time (PIT) Count of individuals, youth, and families experiencing homelessness. Due to the COVID-19 pandemic, the Alameda County PIT Count was postponed from 2021 to February 2022. As of April 2022, the results from February 2022 PIT Count have not been released. This analysis relies on the 2019 Alameda County Homeless Count and Survey to assess homelessness in the County.

As exhibited in Figure E-97, the population of persons experiencing homelessness in the County has increased over the last decade. Between 2017 and 2019, the population of persons experiencing homelessness increased by 42.5 percent, while the Countywide population increased only 1.7 percent. Similarly, the population in Alameda County increased 12.1 percent between 2010 and 2019, while the homeless population increased 84.8 percent between 2009 and 2019.[32] The unsheltered homeless population has also increased significantly, representing only 35.5 percent of the homeless population in 2009 but 78.7 percent in 2019.

Figure E-97: Alameda County Homeless Population Trend (2009-2019)



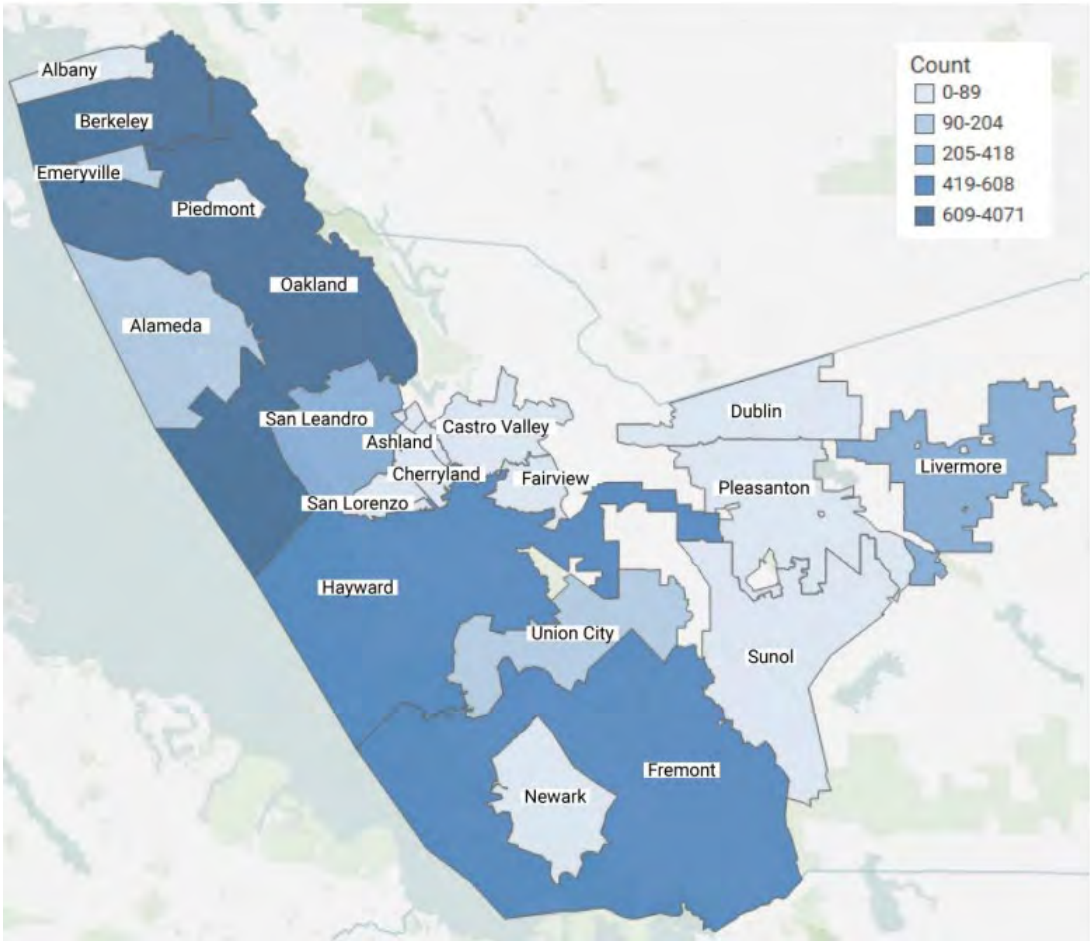
Source: Alameda County Homeless Count and Survey Comprehensive Report, 2019.

Populations of persons experiencing homelessness are most concentrated in the cities of Berkeley and Oakland, followed by Hayward and Fremont. It is important to note that these cities have the largest populations countywide. When accounting for City population, Emeryville has the largest proportion of persons experiencing homelessness (1.5 percent of total population), followed by Oakland (one percent), Berkeley (0.9 percent), and San Leandro (0.5 percent). The population of persons experiencing homelessness Countywide account for 0.5 percent of the total population. Racial/ethnic minority populations are most concentrated in Emeryville, Oakland, San Leandro, Hayward and Fremont, LMI households are most concentrated in Oakland and San Leandro, and TCAC low resource tracts are most concentrated in Oakland, San Leandro, and Hayward (see Figure E-16, Figure E-37, and Figure E-48).

[32] 2006-2010, 2013-2017, and 2015-2019 ACS (5-Year Estimates).

Table E-54 shows the change in homeless population by jurisdiction from 2017 to 2019. During this period, Emeryville (+514 percent), Pleasanton (+289 percent), San Leandro (+284 percent), and Union City (+165 percent) had the highest increases in homeless populations. The populations of persons experiencing homelessness in Albany and Dublin have decreased since 2017. Berkeley, Oakland, Hayward, and Fremont had homeless population increases below or similar to the Countywide average.

Figure E-98: Total Number of Persons Experiencing Homelessness by Jurisdiction (2019)



Source: Alameda County Homeless Count and Survey Comprehensive Report, 2019.

Table E-54: Homeless Population by Jurisdiction (2017-2019)

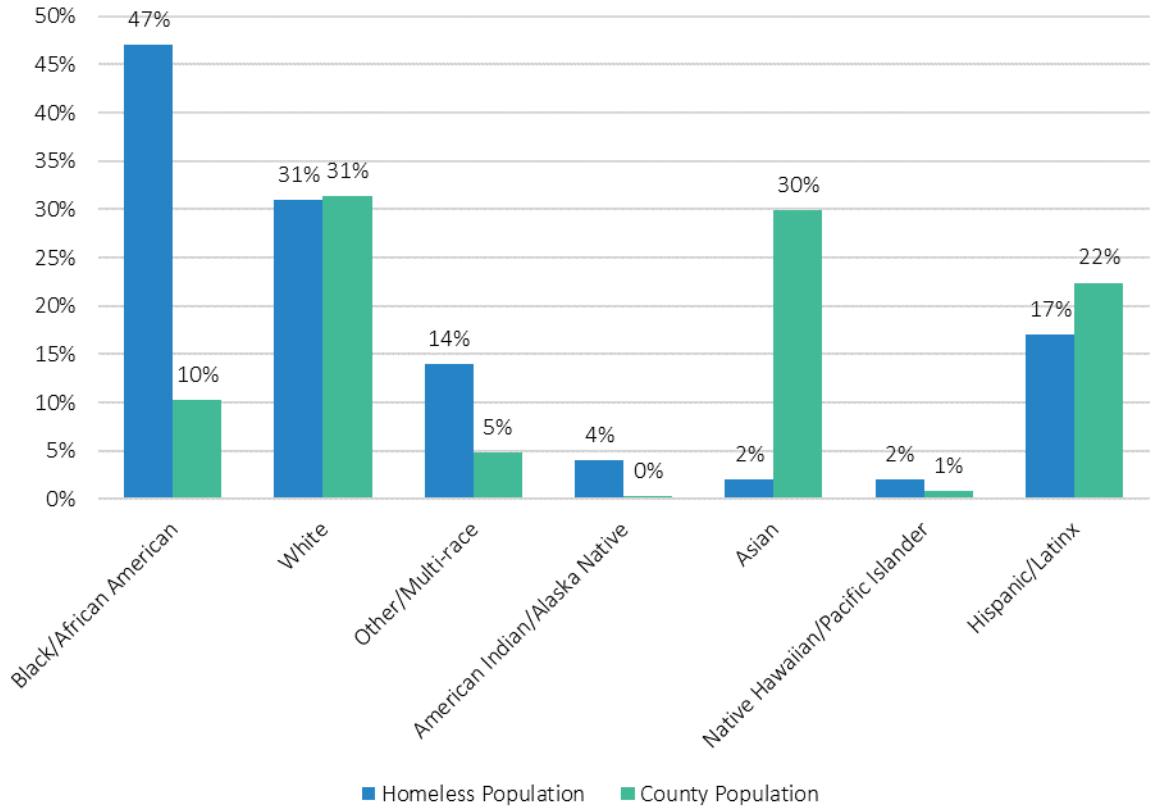
Jurisdiction	2017	2019	Percent Change
Alameda	204	231	+13.2%
Albany	66	35	-47.0%
Berkeley	972	1,108	+14.0%
Dublin	21	8	-61.9%
Emeryville	29	178	+513.8%
Fremont	479	608	+26.9%
Hayward	397	487	+22.7%
Livermore	243	264	+8.6%
Newark	70	89	+27.1%
Oakland	2,761	4,071	+47.4%
Piedmont	0	0	--
Pleasanton	18	70	+288.9%

San Leandro	109	418	+283.5%
Union City	40	106	+165.0%
Unincorporated	220	349	+58.6%
Total	5,629	8,022	+42.5%

Source: Alameda County Homeless Count and Survey Comprehensive Report, 2019.

Certain racial or ethnic groups are often overrepresented in the homeless population. In Alameda County, Black/African American individuals represent 47 percent of the homeless population but only 10 percent of the population countywide (Figure E-99). The other/multi-race, American Indian/Alaska Native, and Native Hawaiian/Pacific Islander populations are also overrepresented in the homeless population. Conversely, only two percent of the population of persons experiencing homelessness are Asian and 17 percent are Hispanic/Latinx compared to 30 percent and 22 percent countywide, respectively. As outlined in Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*, Black/African American population (20 percent), American Indian/Alaska Native population (15 percent), and population of a race not listed ("other") (14.4 percent) have the highest poverty rates in the County.

Figure E-99: Homeless Population vs. County Population (2019)



Source: Alameda County Homeless Count and Survey Comprehensive Report, 2019; 2015-2019 ACS (5-Year Estimates).

According to the 2019 Alameda County Homeless Survey, 57 percent of respondents reported living in Alameda County for 10 or more years, while only 12 percent lived in the County for less than a year. Prior to becoming homeless, 39 percent of respondents reported living with friends or relatives and 37 percent owned or rented a home. Most persons experiencing homelessness in the County (63 percent) have been homeless for a year or longer. Federally reported homeless subpopulations are presented in Table E-55.

The proportion of homeless persons in families with children has significantly decreased since 2015, representing only seven percent of the homeless population in 2019. Chronically homeless individuals and homeless adults with serious mental illness continue to be prevalent groups in Alameda County.

Table E-55: Federally Reported Homeless Subpopulations – Alameda County (2015-2019)

	2015		2017		2019	
	Persons	Percent	Persons	Percent	Persons	Percent
Persons in Families with Children	985	24%	711	13%	524	7%
Unaccompanied Youth and Young Adults	299	7%	991	18%	731	9%
Chronically Homeless	689	17%	1,652	29%	2,236	28%
Veterans	388	10%	531	9%	692	9%
Adults with Serious Mental Illness	714	18%	1,622	29%	2,590	32%
Adults with HIV/AIDs	68	2%	157	3%	207	3%
Total Homeless Population	4,040		5,629		8,022	

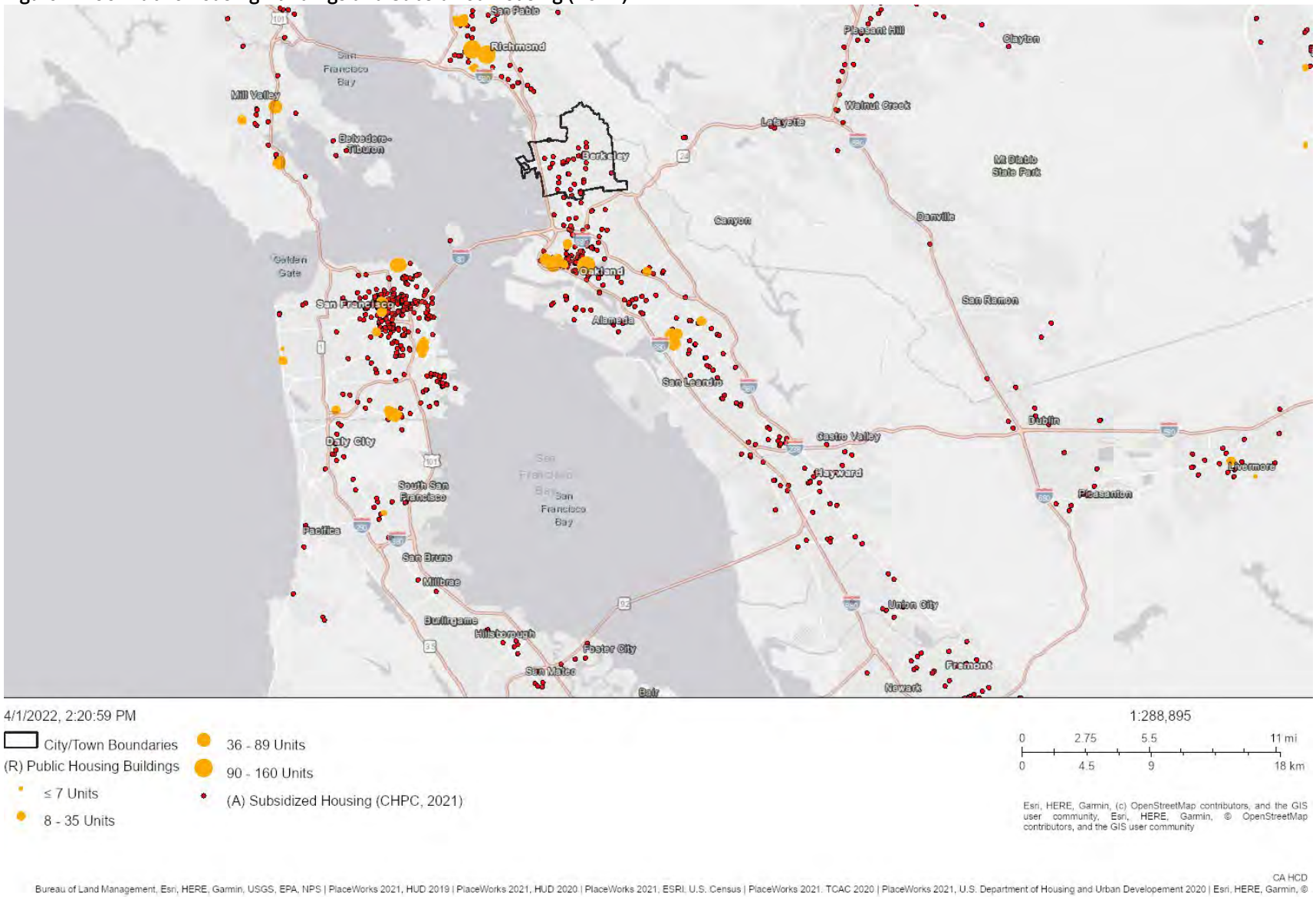
Source: Alameda County Homeless Count and Survey Comprehensive Report, 2019.

Survey respondents were also asked to identify uses for funding to end homelessness. Over half (52 percent) of respondents identified affordable rental housing and 38 percent identified permanent help with rent. Employment training and job opportunities (31 percent), 24/7 basic sanitation services (25 percent), behavioral health services (22 percent), and emergency shelter (20 percent) were also among the top recommendations.

Public housing buildings and subsidized housing in the region is included in Figure E-100. Both public housing buildings and subsidized housing projects are located throughout the region and are especially concentrated in eastern San Francisco and Oakland. Public housing buildings and subsidized housing is generally more prevalent in San Francisco and Alameda County compared to Contra Costa County and Marin County. Alameda County has the highest rate of occupied emergency shelter beds in the region. Approximately 80 percent of emergency shelter beds in the County are occupied compared to only 50 percent in Contra Costa County, 38.9 percent in San Francisco, and 43.3 percent in Marin County (Figure E-101). Emergency shelters are most prevalent in San Francisco and northwestern Alameda County from Berkeley to San Leandro.

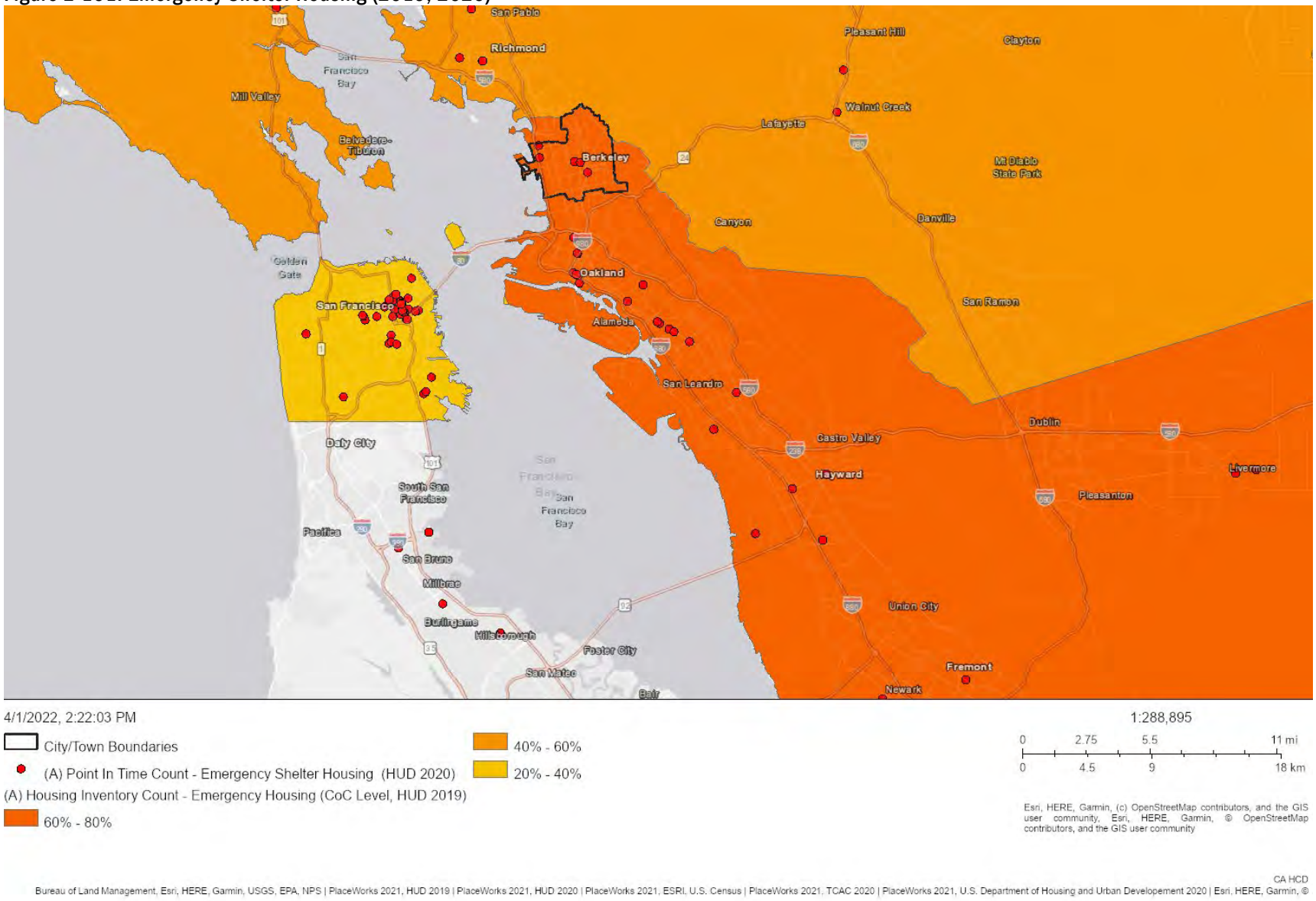
Public

Figure E-100: Public Housing Buildings and Subsidized Housing (2021)



Source: HCD AFFH Data Viewer (California Housing Partnership Corportion (CHPC), 2021), 2022.

Figure E-101: Emergency Shelter Housing (2019, 2020)



Source: HCD AFFH Data Viewer (HUD, 2019/2020), 2022.

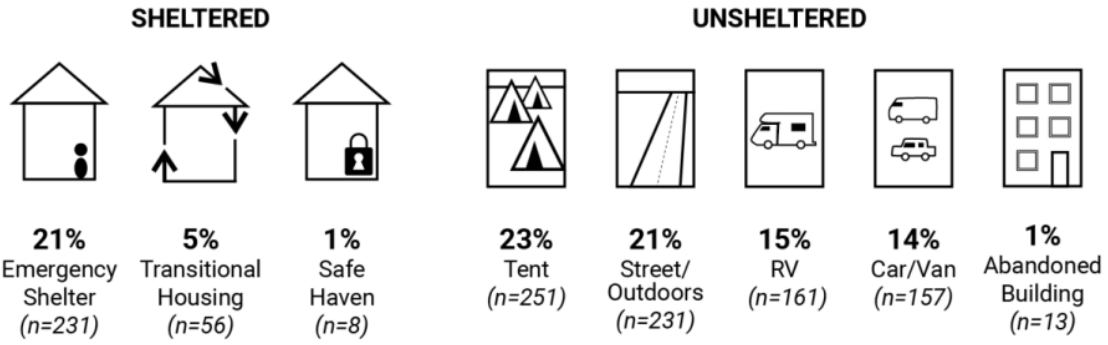
Local Trends. Since 2015, the population of persons experiencing homelessness in the City has increased at a consistent rate. Between 2015 and 2017 the homeless population increased by 16.5 percent and another 14 percent between 2017 and 2019. The homeless population in Berkeley represents 14 percent of the total population experiencing homelessness in Alameda County. Comparatively, the total Berkeley population represents only 7.3 percent of the total County population according to 2015-2019 ACS estimates. Berkeley has a slightly lower share of unsheltered individuals compared to Alameda County (Table E-56). Nearly a third of the homeless population in the City resided in vehicles (car, van, or RV), followed by tents (23 percent), street/outdoors (21 percent), and emergency shelters (21 percent) (Figure E-102).

Table E-56: Homeless Population by Shelter Status (2019)

	Unsheltered		Sheltered		Total
	Persons	Percent	Persons	Percent	
Berkeley	813	73.4%	295	26.6%	1,108
Alameda County	6,312	78.7%	1,710	21.3%	8,022

Source: City of Berkeley Homeless Count and Survey Comprehensive Report, 2019.

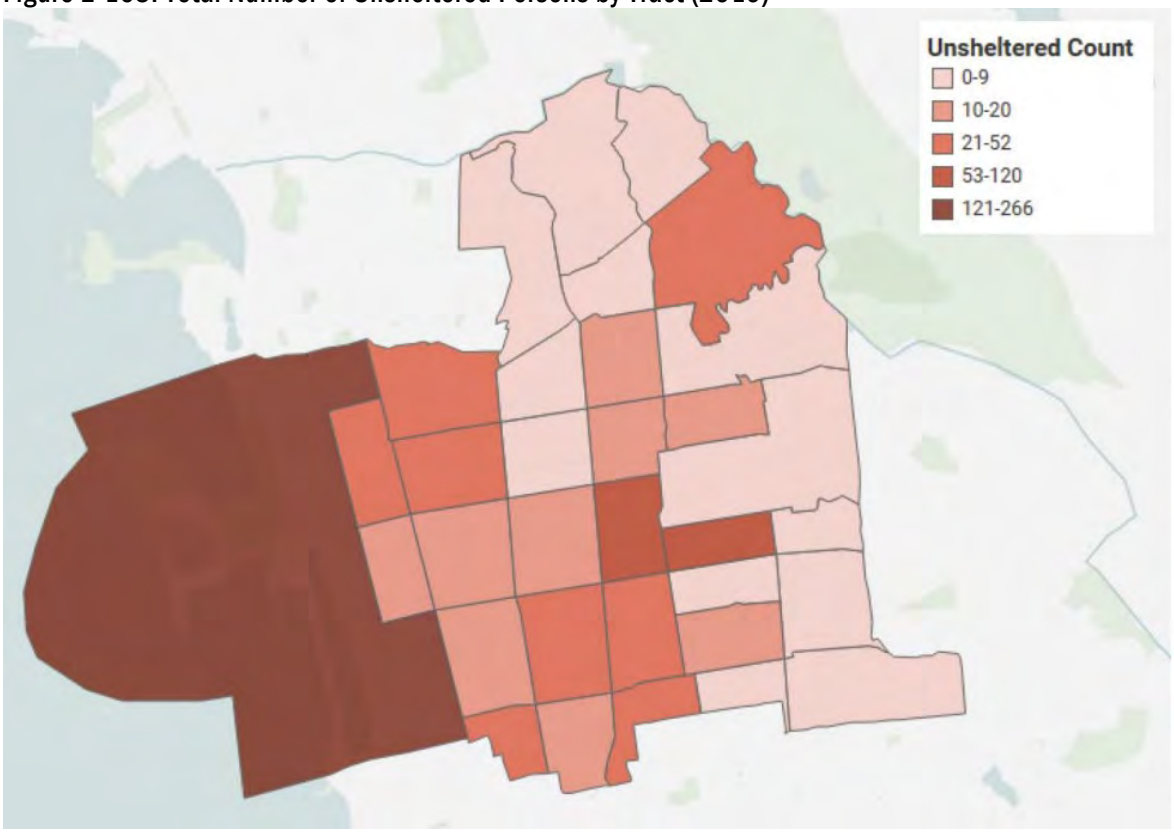
Figure E-102: Persons Experiencing Homelessness by Location (2019)



Source: City of Berkeley Homeless Count and Survey Comprehensive Report, 2019.

Populations of persons experiencing homelessness are most concentrated in tracts 4220 (Berkeley Marina neighborhood), 4228 (Southside neighborhood), and 4229 (Downtown Berkeley/Central Berkeley neighborhood), while tracts along the eastern City boundary and in the northeastern corner of the City had the lowest number of persons experiencing homelessness (Figure E-103). Tracts 4220 and 4229 are classified as moderate resource tracts, while tract 4228 is the only low resource tract in the City (see Figure E-49). Between 60 and 80 percent of the population in most block groups contained in these tracts belong to a racial or ethnic minority group and more than 75 percent of households in tracts 4228 and 4229 are low or moderate income (see Figure E-21 and Figure E-38). As discussed in Section *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*, tracts 4228 and 4229 are R/ECAP tracts and are characterized by large student populations. However, persons experiencing homelessness in these tracts are likely not primarily students, as only seven percent of the homeless population in the City is unaccompanied youth or young adults, lower than nine percent Countywide.

Figure E-103: Total Number of Unsheltered Persons by Tract (2019)



Source: City of Berkeley Homeless Count and Survey Comprehensive Report, 2019.

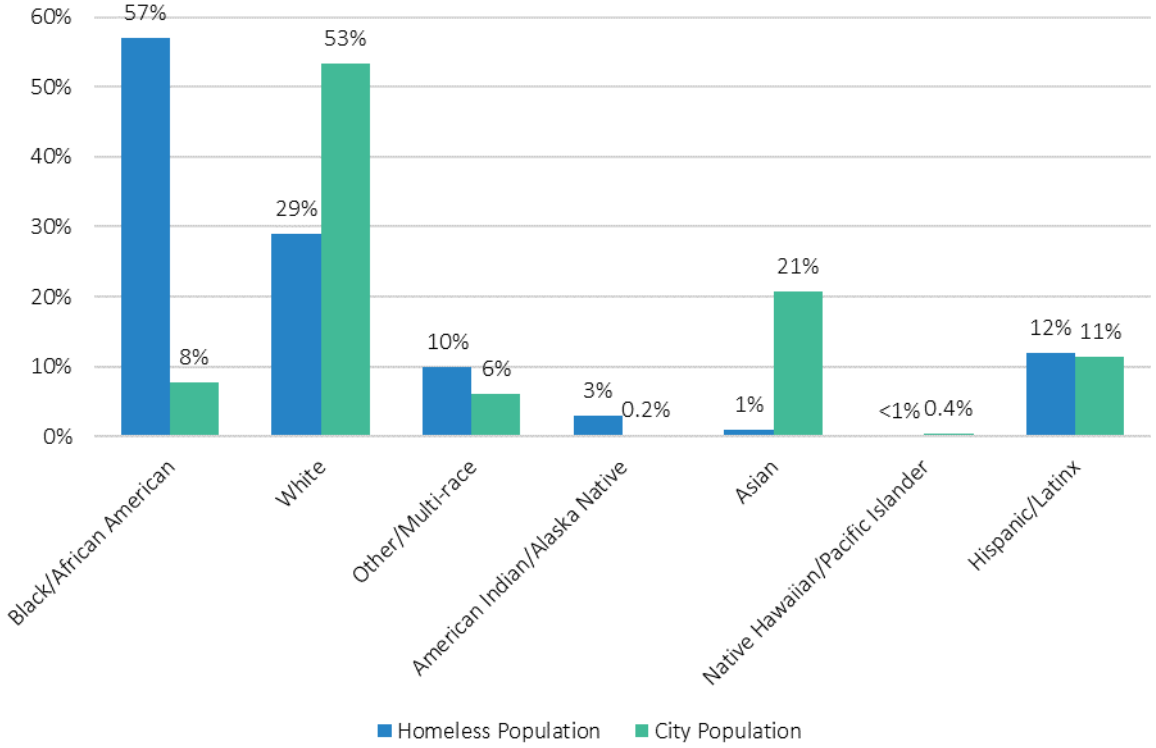
Like the County, Black/African American individuals are overrepresented in the Berkeley homeless population. As shown in Figure E-104, Black/African American persons represent 57 percent of the homeless population but only eight percent of the total City population. The other/multi-race population, American Indian/Alaska Native population, and Hispanic/Latinx population are also overrepresented in the homeless population but to a much lesser extent than the Black/African American population. The Asian population represents 21 percent of the City population but only one percent of the homeless population. Similarly, the White population represents 53 percent of the City population but only 29 percent of the White population.

As outlined in Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*, the White population has the lowest poverty rate of 12.1 percent. Although there are very few Asian individuals experiencing homelessness, the Asian/API population has the highest poverty rate of 36.9 percent. The high poverty rate amongst Asian/API residents is likely affected by the large Asian/API student population in the City. Students are more likely to have low incomes. Approximately one percent of the total Berkeley population experiences homelessness, while 10 percent of student respondents reported having experienced homelessness at some point since arriving at UC Berkeley according to a 2017 UC Berkeley survey. However, most students that reported experiencing homelessness were "couch surfing" or living in other people's homes. This population is not recorded by the County PIT Count. Student homelessness and poverty is further described in Section E4.6 *Student Poverty and Mobility*.

Consistent with the composition of the homeless population in the City, Black/African American Berkeley residents had the second highest poverty rate in the City (25.4 percent), after the Asian/API population,

followed by the American Indian/Alaska Native population (24.5 percent), and Hispanic/Latinx population (20.5 percent).

Figure E-104: Homeless Population vs. Berkeley Population (2019)



Source: City of Berkeley Homeless Count and Survey Comprehensive Report, 2019; 2015-2019 ACS (5-Year Estimates).

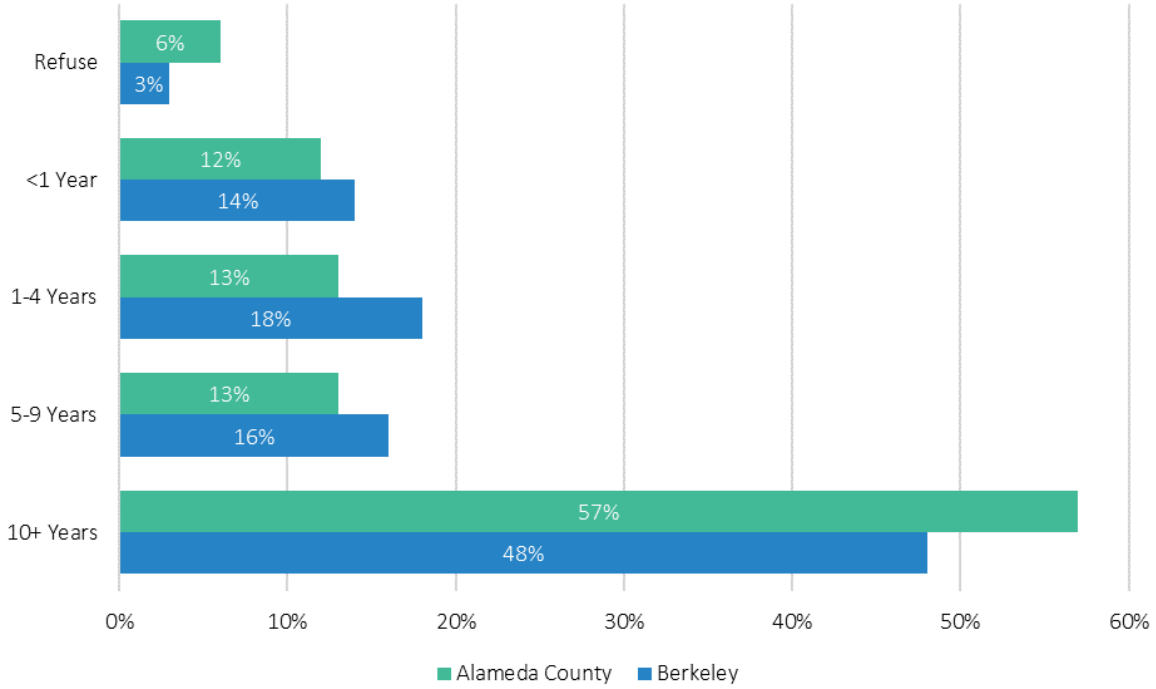
As mentioned above, federally reported homeless subpopulations include unaccompanied youth and young adults, persons in families with children, chronically homeless individuals, and veterans. Berkeley has a smaller share of homeless unaccompanied youth/young adults, persons in families with children, and veterans than the County. The 2019 PIT Count estimates 35 percent of the Berkeley homeless population is chronically homeless, compared to only 28 percent in Alameda County.

During the 2019 PIT Count, 257 surveys were conducted in Berkeley. Respondents were questioned on various subjects including but not limited to place of residence, prior/current living arrangements, duration and recurrence of homelessness, primary cause of homelessness, and homeless services. A larger proportion of Berkeley respondents have moved to Alameda County in recent years (Figure E-105). Approximately 57 percent of the homeless population countywide has lived in the County for more than 10 years compared to only 48 percent in the City. Immediately prior to experiencing homelessness, a larger proportion of persons in Berkeley lived in subsidized housing (12 percent) or jail/prison (eight percent) compared to the County. A majority of Berkeley respondents (64 percent) also stated they have been homeless for a year or more. Berkeley respondents cited job loss (18 percent), eviction/foreclosure (17 percent), mental health issues (15 percent), and substance issues (12 percent) as the primary cause for homelessness. Like the County, Berkeley survey respondents identified the following uses for funding to end homelessness:

- Affordable rental housing (58 percent)
- Employment training and job opportunities (43 percent)

- Permanent help with rent/subsidy (29 percent)
- Substance use and/or mental health services (28 percent)
- Housing with supportive services (22 percent)
- 24/7 basic sanitation (19 percent)

Figure E-105: Length of Time Spent in Alameda County (2019)



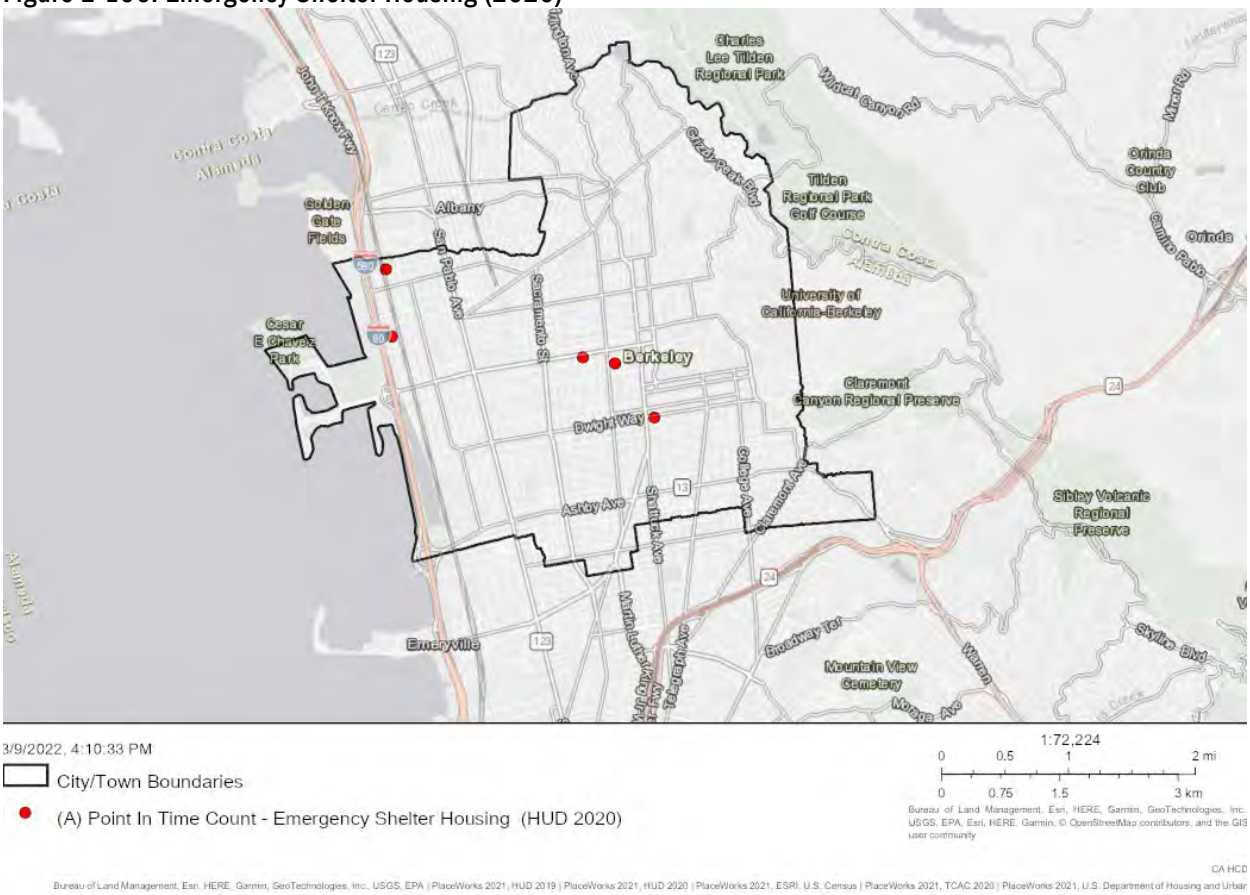
Source: City of Berkeley Homeless Count and Survey Comprehensive Report, 2019.

The City of Berkeley offers the following homeless services:

- ***Homeless Shelters:*** The City funds local service providers to offer 256 shelter beds across the community.
- ***Pathways STAIR Navigation Center:*** STAIR Navigation Center offers a 45-bed, 24/7, service-rich shelter to get people living on the streets sheltered and housed as soon as possible, employs an outreach team to connect with residents in encampments and bring them into shelter, and provides services to transition unhoused people into permanent supportive housing.
- ***Rapid Rehousing:*** The City connects homeless households with housing navigators and provides financial assistance to transition people into housing and help them sustain their rent overtime.

There are five emergency shelters located in the City. Three are located in or adjacent to tracts 4228 and 4229 and two are located in tract 4220 (Figure E-106). The location of emergency shelters in the City likely affected the distribution of homeless individuals shown in Figure E-104.

Figure E-106: Emergency Shelter Housing (2020)



Source: HCD AFFH Data Viewer (HUD, 2020), 2022.

E4.6 OTHER RELEVANT FACTORS

Home Loans

Home loan applications in Berkeley by race and income are shown in Table E-57. Of all mortgage applications filed in 2018 and 2019, 63.2 percent were originated, 16.3 percent were denied, and 2.7 percent were approved not accepted. Hispanic/Latinx and Black/African American applicants were denied at the highest rates of 24 percent and 23.9 percent, respectively. Conversely, applications submitted by White and Asian/API residents were originated or approved at the highest rates of 67.9 percent and 65.3 percent, respectively. This pattern may indicate unfair lending practices are occurring in the City.

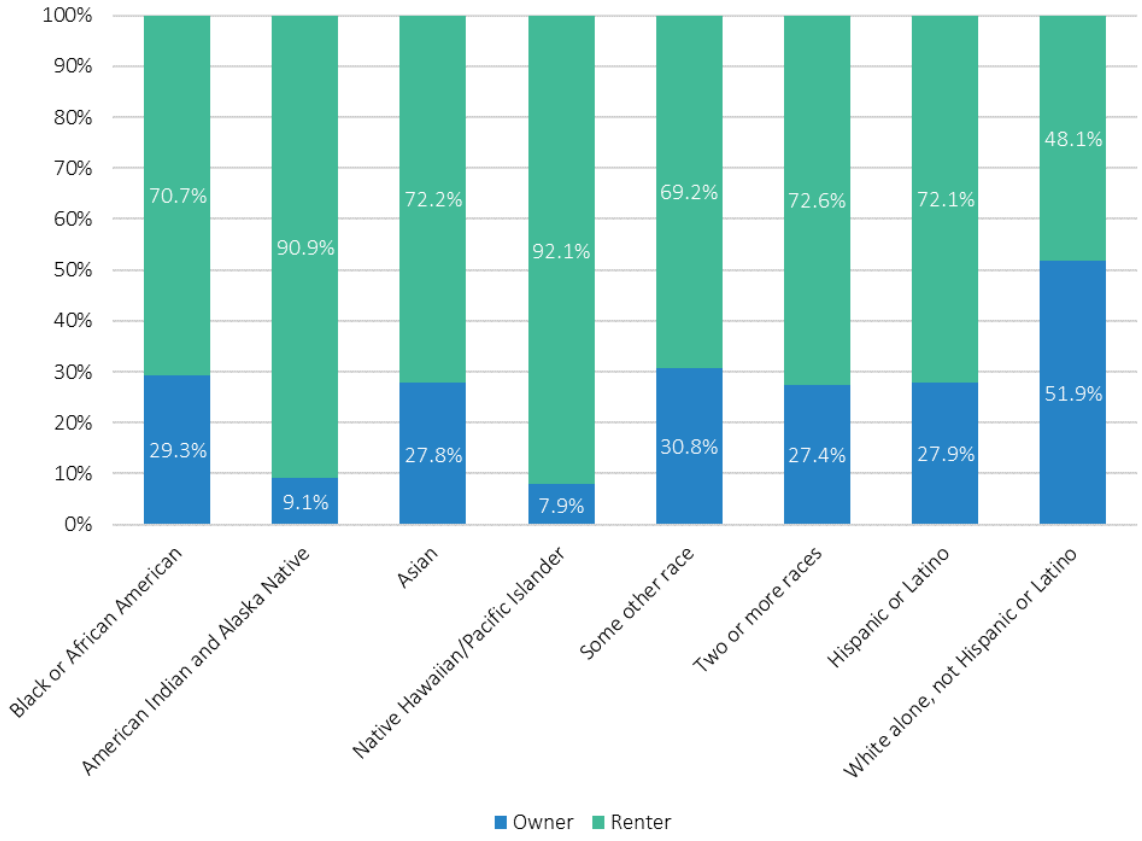
As presented in Figure E-107, non-Hispanic White households have significantly higher home ownership rates (51.9 percent) than all other racial/ethnic groups in the City. Non-Hispanic White residents also have the lowest poverty rate of 12.1 percent and highest median income of $107,660 (see Chapter E4.3, *Racially or Ethnically Concentrated Areas*). All other racial/ethnic groups in the City have median incomes below $100,000. Hispanic/Latinx and Black/African American populations have significantly higher rates of poverty of 20.5 percent and 25.4 percent, respectively.

Table E-57: Mortgage Applications and Acceptance by Race/Ethnicity (2018-2019)

	Amer. Ind./ Ala. Nat.	Asian/API	Black/ Afr. American	White	Hispanic/ Latinx	Unknown	All
Approved Not Accepted	13.3%	2.0%	4.3%	2.3%	1.9%	3.5%	2.7%
Denied	13.3%	19.7%	23.9%	15.3%	24.0%	14.3%	16.3%
Withdrawn	20.0%	11.0%	17.4%	12.8%	14.3%	13.8%	13.1%
Incomplete	13.3%	4.0%	7.2%	4.0%	6.5%	5.3%	4.7%
Originated	40.0%	63.3%	47.1%	65.6%	53.2%	63.1%	63.2%
Total	15	401	138	1,692	154	867	3,267

Source: ABAG Housing Element Data Package (based on Federal Financial institutions Examination Council's (FFIEC) Home Mortgage Disclosure Act (HMDA) loan/application register (LAR) files, 2018-2019), 2021.

Figure E-107: Tenure by Race (2019)



Source: 2015-2019 ACS (5-Year Estimates).

Open Space and Recreation

According to the Plan Bay Area 2040, a strong regional movement emerged during the latter half of the 20th century to protect farmland and open space. Local governments adopted urban growth boundaries and helped lead a "focused growth" strategy with support from environmental groups and regional agencies to limit sprawl, expand recreational opportunities, and preserve scenic and natural resources. However, this protection has strained the region's ability to build the housing needed for a growing population. In addition, maintaining the existing open space does not ensure equal access to it.

Since 1977, the City has significantly increased the amount and type of available open space. According to the City's Open Space and Recreation Element, there is over 12 acres of parkland available per 1,000

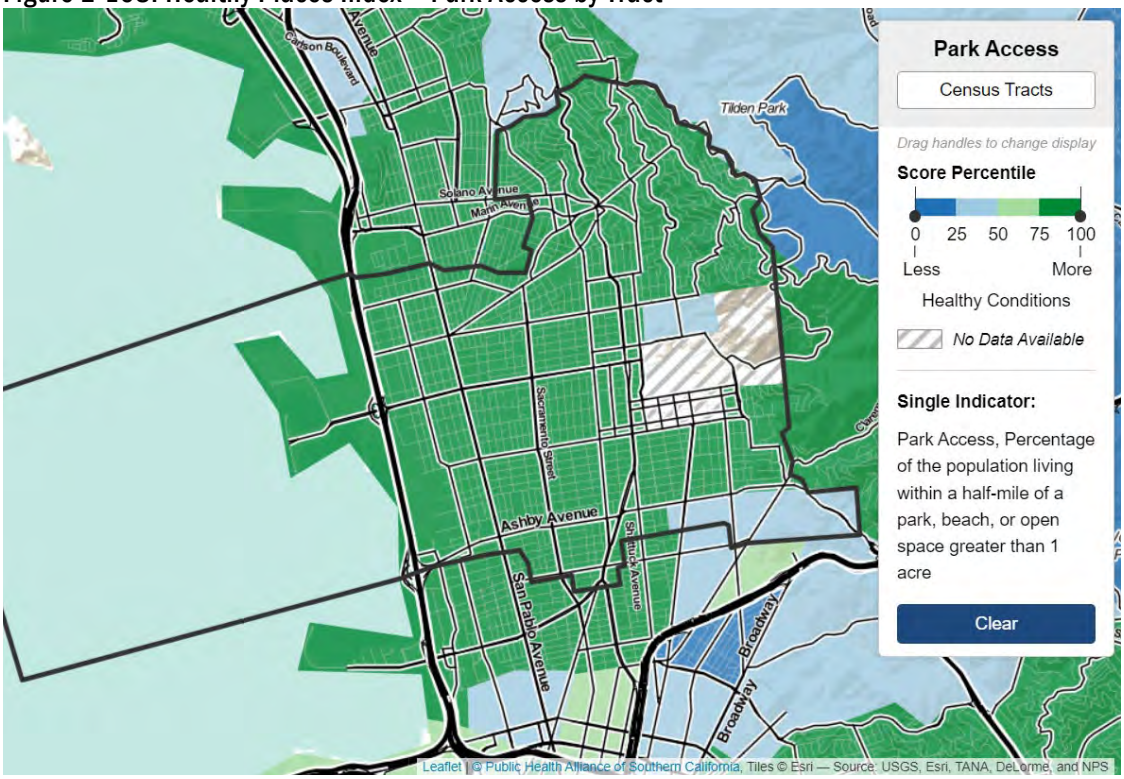
residents including the Bay Trail, Eastshore State Park, Tilden Regional Park, and Claremont Canyon Regional Reserve. Since 1977, over 120 acres of parkland has been added to the City. Measure L and Measure Q, passed in 1986, required all existing open space be preserved for open space use and, established the waterfront as an area primarily for recreation and provided public access to the waterfront. A map of existing parks, green areas, senior centers, swim centers, community centers, trails, and paths is provided in Figure E-109.

The City established the "Trees Make Life Better" program and anticipates that between 1,000 and 1,800 new trees will be planted in south and west Berkeley using grant funding. Through this program, the City aims to improve quality of life through greenhouse gas reduction, temperature stabilization, and heating/cooling cost reduction. City staff has identified eight areas for tree planting throughout the South Berkeley, Southwest Berkeley, Central Berkeley, 4th Street, Northwest Berkeley, and Gilman neighborhoods. As exhibited in Figure E-71 previously, this section of the City has the lowest CalEnviroScreen 4.0 scores indicating these communities bear the highest pollution burden and may contain sensitive populations.[33]

The Healthy Places Index provides tract-level data for percent of population living within a ½ mile of a park, beach, or open space greater than one acre. Figure E-108 shows that nearly all Berkeley tracts score in the highest percentile for park access. Tract 4225 (Northside neighborhood), tract4238 (Claremont/Elmwood District neighborhoods), and 4239.02 (Elmwood District/Lorin neighborhoods) scored in the second percentile (0.25-0.50) for park access. The southeast tracts (4238 and 4239.02) are generally affluent areas with better environmental conditions, while tract 4225 has higher concentrations of lower-income populations and households. However, tract 4225 received a CalEnviroScreen percentile score of 23.1, indicating that environmental conditions in this area are good despite the lack of accessible open space.

[33] Pollution indicators include but are not limited to: Ozone, PM 2.5, diesel particulate matter, drinking water contaminants, pesticide use, traffic impacts, cleanup sites, hazardous waste generators. Sensitive population indicators include asthma, cardiovascular disease, and low birth weight infants. CalEnviroScreen 4.0 scores also take the following socioeconomic indicators into consideration: educational attainment, housing-burdened low-income households, linguistic isolation, poverty, and unemployment.

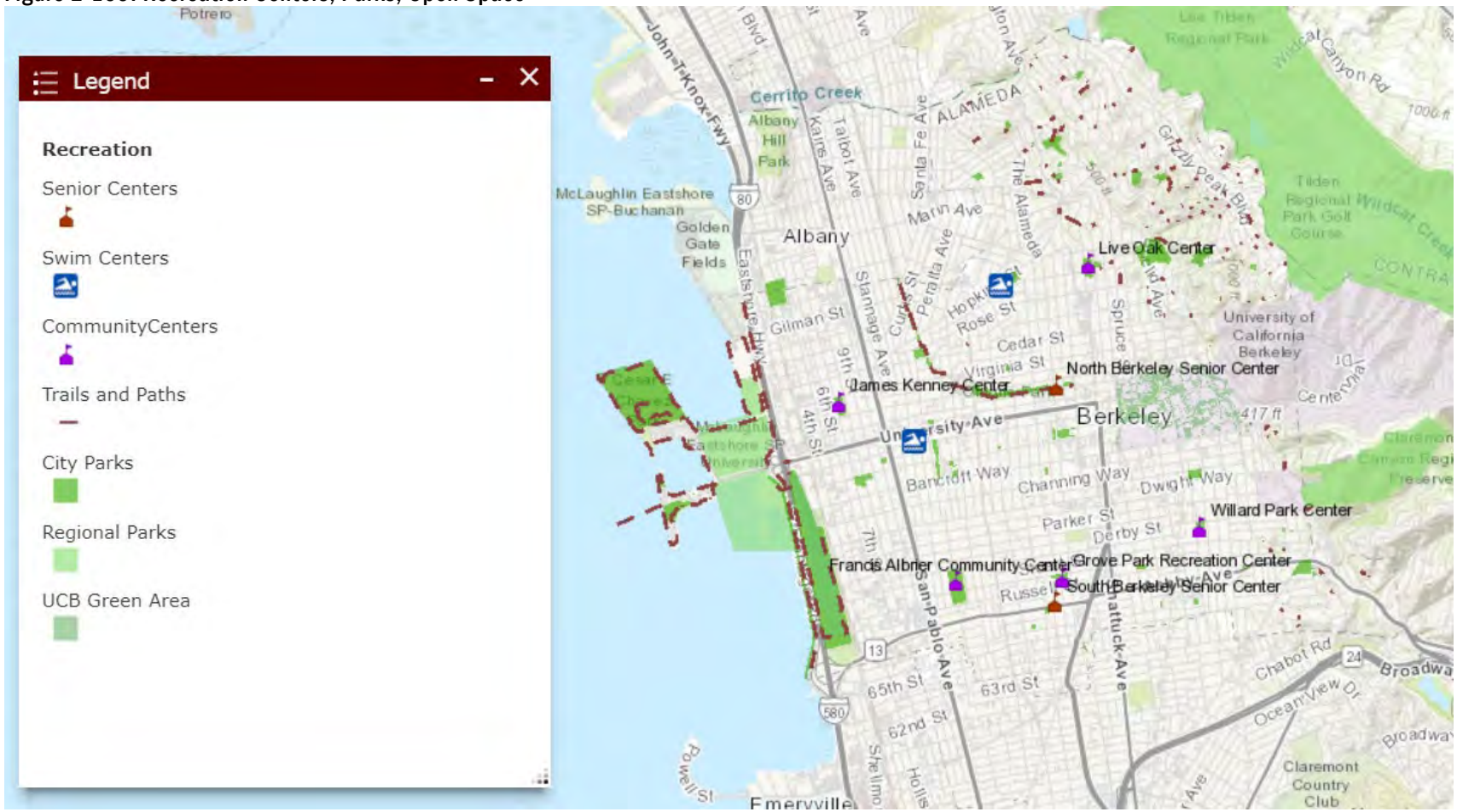
Figure E-108: Healthy Places Index – Park Access by Tract



Source: California Healthy Places Index (HPI), accessed March 2022.

Public

Figure E-109: Recreation Centers, Parks, Open Space

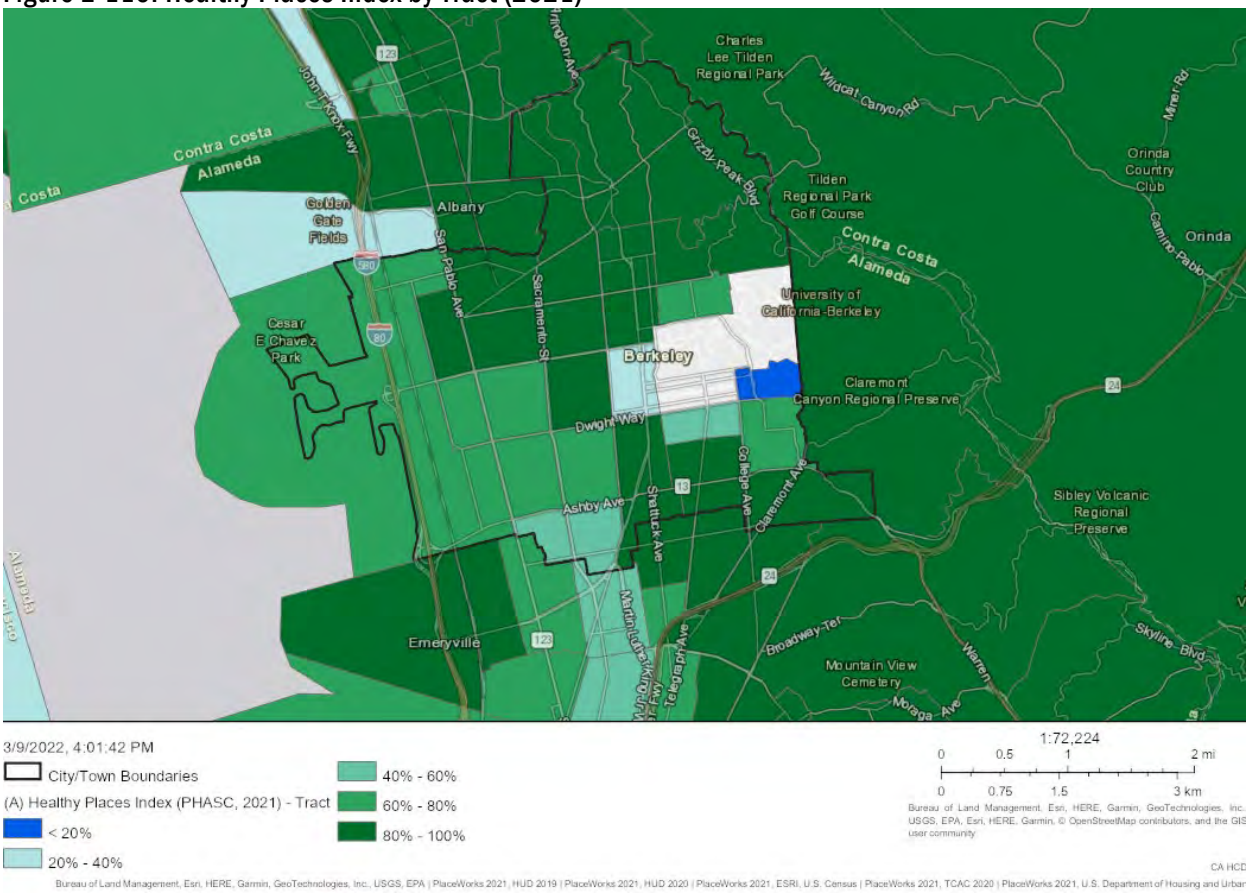


Source: City of Berkeley Community GIS Portal, accessed March 2022.

Healthy Places

This analysis utilizes the Healthy Places Index (HPI) to measure transportation opportunities and park accessibility in the City (see Section E4.4 *Transportation*, and Section E4.6 *Open Space and Recreation*). The HPI is a new tool that allows local officials to diagnose and change community conditions that affect health outcomes and the wellbeing of residents. The HPI tool was developed by the Public Health Alliance of Southern California to assist in comparing community conditions across the state and combines 25 community characteristics such as housing, education, economic, and social factors into a single indexed HPI Percentile Score, where lower percentiles indicate lower conditions. Figure E-110 shows the HPI percentile scores for Berkeley tracts. Most tracts in the City tend to have HPI scores above 60 percent. Tracts with the highest HPI scores exceeding 80 percent are concentrated in the northeastern, central northern, and southeastern areas of the City. Tracts surrounding the UC Berkeley campus, specifically Tract 4227 scoring under 20 percent, have lower HPI index values.

Figure E-110: Healthy Places Index by Tract (2021)



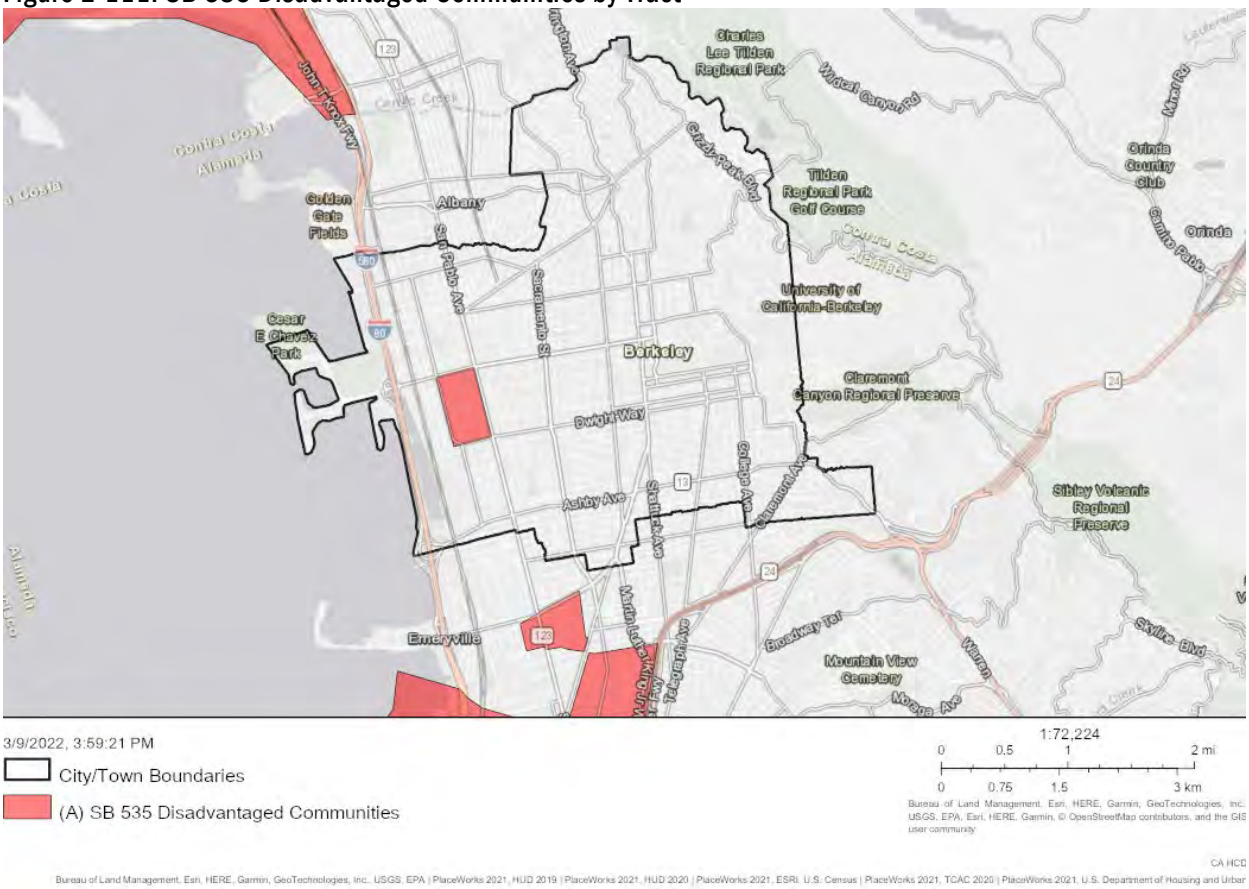
Source: HCD AFFH Data Viewer (Public Health Alliance of Southern California (PHASC), 2021), 2022.

SB 535 Disadvantaged Communities

Disadvantaged communities in California are specifically targeted for investment of proceeds from the State's cap-and-trade program. Known as California Climate Investments (CCI), these funds are aimed at improving public health, quality of life and economic opportunity in California's most burdened communities at the same time they're reducing pollution that causes climate change. As identified using the HCD AFFH tool, there is one tract in Berkeley that is classified as a "disadvantaged community" located in the Southwest Berkeley neighborhood (Figure E-111).

In this tract, between 61 and 80 percent of the population belongs to a racial or ethnic minority group, 12.9 percent of the population experiences a disability, and 59.4 percent of households are LMI (see Figure E-21, Figure E-26, and Figure E-38). Most households in this tract are renter-occupied and 52.7 of renters are cost burdened (see Figure E-72 and Figure E-82). This tract has one of the worst CalEnviroScreen 4.0 scores in the City of 42.4, followed only by the Berkeley Marina neighborhood (see Figure E-71).

Figure E-111: SB 535 Disadvantaged Communities by Tract



Source: HCD AFFH Data Viewer (Office of Environmental Health Hazard Assessment (OEHHA), 2021), 2022.

Student Poverty and Mobility

As discussed previously, Berkeley is characterized by a large student population mostly due to the University of California – Berkeley. Approximately 29 percent of the population is enrolled in college or graduate school in the City, significantly larger than 8.5 percent in Alameda County. Students tend to have lower or no income and therefore have higher poverty rates (see Section E4.3 *Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)*).

UC Berkeley conducted a survey in 2017 that received upwards of 9,000 partial or complete responses from undergraduate, graduate, and postdoc students.[34] Of these students, 10 percent reported having experienced homelessness at some point since arriving at UC Berkeley. Homelessness was defined as "not having stable or reliable housing (e.g., living on the street, in vehicles, motels, short-term rentals, camp grounds, single-occupancy facilities, or couch surfing in other people's homes for temporary sleeping

[34] UC Berkeley Office of Planning and Analysis, Housing Survey Findings, Fall 2017. https://housing.berkeley.edu/wp-content/uploads/HousingSurvey_03022018.pdf.

arrangements)." Many of these living situations, such as motels, short-term rentals, and couch surfing, are not counted towards the overall PIT count in the City (see Section E4.5 *Homelessness*). Over 70 percent of undergraduate and graduate respondents reported they were couch surfing at the time of homelessness, and over 50 percent of postdoc students reported living in short-term rentals. Half of respondents indicated that it took more than one month to find their current housing.

A 2017 study on the role of colleges in intergenerational mobility found that the median family income of a UC Berkeley student is $119,900 and 54 percent of students come from families in the top 20 percent.[35] Compared to the State, UC Berkeley students are among the highest for median family income, average income percentile, and share of students in the top 0.1 percent. Of post-grad UC Berkeley students, 22 percent moved up two or more income quintiles and 4.9 percent moved from the bottom to top income quintile, some of the largest shares compared to the PAC-12 and State.

While students may contribute to the poverty rate citywide, UC Berkeley students also tend to come from wealthier families. Regardless, students may require housing that caters to their needs. According to the 2017 UC Berkeley housing survey, a majority of students cited affordability as the most or second most important factor in potential housing, followed by proximity and safety.

Historical Trends

The following is provided by HCD and describes historical redlining trends.

"The Home Owners' Loan Corporation (HOLC) was created in the New Deal Era and trained many home appraisers in the 1930s. The HOLC created a neighborhood ranking system infamously known today as redlining. Local real estate developers and appraisers in over 200 cities assigned grades to residential neighborhoods. These maps and neighborhood ratings set the rules for decades of real estate practices. The grades ranged from A to D. A was traditionally colored in green, B was traditionally colored in blue, C was traditionally colored in yellow, and D was traditionally colored in red:

1. **A (Best):** Always upper- or upper-middle-class White neighborhoods that HOLC defined as posing minimal risk for banks and other mortgage lenders, as they were "ethnically homogeneous" and had room to be further developed.
2. **B (Still Desirable):** Generally nearly or completely White, U.S. -born neighborhoods that HOLC defined as "still desirable" and sound investments for mortgage lenders.
3. **C (Declining):** Areas where the residents were often working-class and/or first or second generation immigrants from Europe. These areas often lacked utilities and were characterized by older building stock.
4. **D (Hazardous):** Areas here often received this grade because they were "infiltrated" with "undesirable populations" such as Jewish, Asian, Mexican, and Black families. These areas were more likely to be close to industrial areas and to have older housing.

Banks received federal backing to lend money for mortgages based on these grades. Many banks simply refused to lend to areas with the lowest grade, making it impossible for people in many areas to become homeowners. While this type of neighborhood classification is no longer legal thanks to the Fair Housing Act of 1968 (which was passed in large part due to the activism and work of the NAACP and other groups),

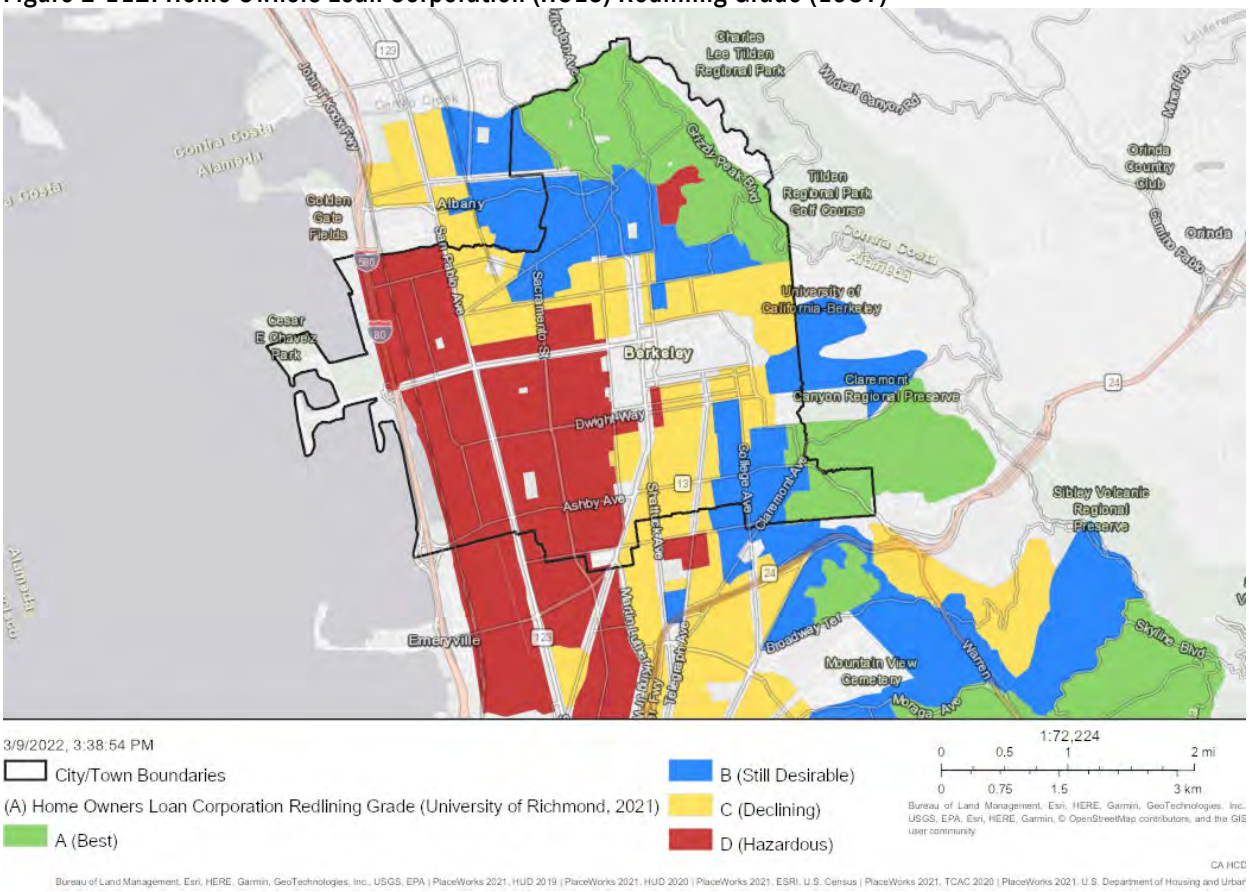
[35] Chetty, R. (Stanford University and National Bureau of Economic Research (NBER); Friedman, J. N. (Brown University and NBER); Saez, E. (UC Berkeley and NBER); Turner, N. (US Treasury); Yagan, D. (UC Berkeley and NBER). (2017). Mobility Report Cards: The Role of Colleges in Intergenerational Mobility. https://www.nytimes.com/interactive/projects/college-mobility/university-of-california-berkeley.

the effects of disinvestment due to redlining are still observable today. For example, the health and wealth of neighborhoods in Chicago today can be traced back to redlining (Chicago Tribune).

In addition to formerly redlined neighborhoods having fewer resources such as quality schools, access to fresh foods, and health care facilities, new research from the Science Museum of Virginia finds a link between urban heat islands and redlining (Hoffman, et al., 2020). This layer comes out of that work, specifically from University of Richmond's Digital Scholarship Lab."

Redlining grades in Berkeley are presented in Figure E-112. Most of Berkeley was categorized as C- or D-grade, indicating these communities had large immigrant and non-White populations and substandard housing units. Redlined neighborhoods include Gilman, Northwest Berkeley, 4th Street, Southwest Berkeley, and parts of North Berkeley, Central Berkeley, South Berkeley, and Berkeley Hills. Neighborhoods with A- or B-grades include Berkeley Hills, Terrace View, Live Oak, Thousand Oaks, Northbrae, Elmwood District, and Claremont. A- and B-grade neighborhoods directly correlate with more affluent and White areas of the City today. As shown in previous sections of this AFFH analysis, these areas have larger White populations, lower poverty rates, fewer LMI households, and higher median incomes (see Figure E-21, Figure E-38, Figure E-40, and Figure E-47). These areas are also exclusively TCAC high and highest resource areas with fewer cost burdened renter households, and smaller homeless populations (see Figure E-49, Figure E-82, and Figure E-103). Redlined areas are shown to have the opposite trends (larger non-White populations, cost burdened renters, lower median incomes, etc.).

Figure E-112: Home Owners Loan Corporation (HOLC) Redlining Grade (1937)



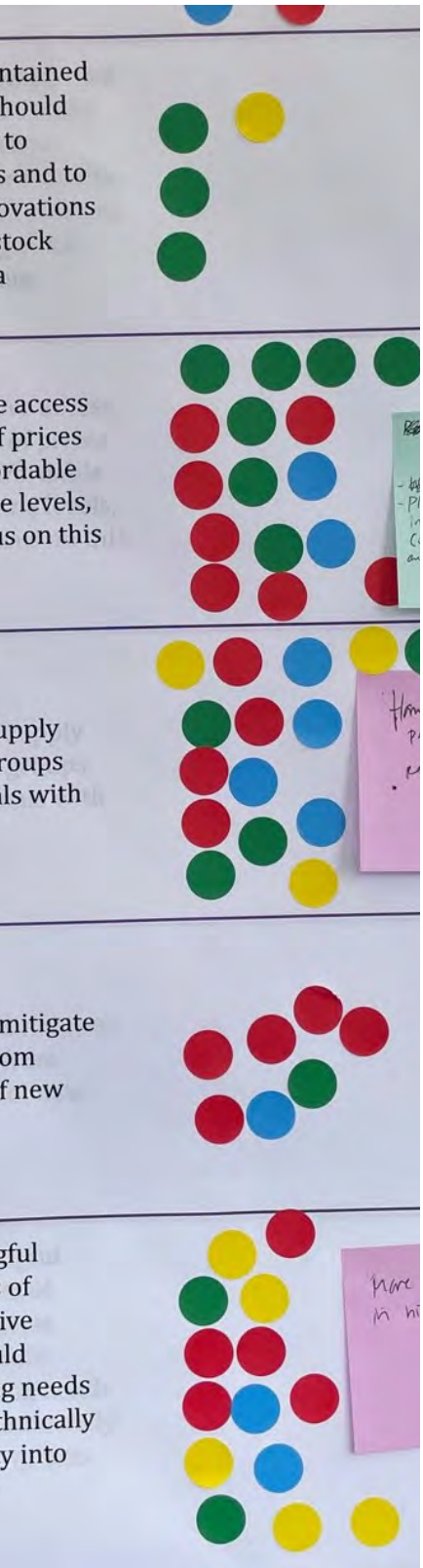
Source: HCD AFFH Data Viewer (University of Richmond, 2021), 2022.

The Urban Displacement Project presented "Redlining in Berkeley: The Past is Present" to the Berkeley Rent Stabilization Board in February 2020.[36] The Urban Displacement Project identified the following ongoing impacts of redlining in Berkeley:

- **Racial and economic segregation:** Most (74%) of redlined neighborhoods are low-to-moderate income today; most (64%) of these neighborhoods are POC neighborhoods today (NCRC, 2018)
- **Inequality:** Cities where more of the redlined areas are currently POC neighborhoods have significantly greater economic inequality; gentrification associated with less segregation but greater economic inequality (NCRC, 2018)
- **Environment and health:** Higher levels of diesel particulate and higher asthma-related health needs today (Nardone et al, 2019)
- **Climate:** Redlined neighborhoods were hotter -- 5 degrees on average, but up to 13 degrees – in 94% of 108 cities (Hoffman et al, 2020)

[36] Partnership for the Bay Area's Future, Challenge Grant Fellow, City of Berkeley Former Program Director, Urban Displacement Project – Redlining in Berkeley: the Past is Present, February 20, 2020. https://www.cityofberkeley.info/uploadedFiles/Rent_Stabilization_Board/Level_3_-_General/SPECIAL_Item%206._Redlining%20in%20Berkeley%20presentation_02.20.20_FINAL(2).pdf.

APPENDIX F
Outreach and Engagement



F1 COMMUNITY WORKSHOPS

In the Fall of 2021, the City of Berkeley hosted the first of three public workshops to provide an update on the planning process and gather input at key stages of the 2023-2031 Housing Element Update. Staff shared information including but not limited to an overview of the project, a sites inventory, and the Pubic Draft Document. This section will include a summary of each workshop, the slides from the presentations given at each workshop, and a summary of the input that was received.

F1.1 COMMUNITY WORKSHOP #1 - OCTOBER 27, 2021

OVERVIEW

On Wednesday, October 27, 2021 from 6:00-8:00 pm, the City of Berkeley hosted a community workshop for the 2023-2031 Housing Element Update. The primary objectives of the meeting were to:

Provide an overview of the Housing Element Update and its planning process;

Share information about recent developments that will help inform the housing plan;

Get initial community input on housing assets, issues, and opportunities.

The workshop was held virtually on Zoom, and approximately 70 people participated. Mayor Jesse Arreguín opened the meeting, followed by a 20-minute presentation from the project team. The presentation provided an overview of the purpose of the housing element and described the overall process. The slides and video recordings were made available on the project website.

A brief question and answer period followed the project team's presentation; participants also used this time to complete a demographic poll to provide detail on the profile of workshop participants.

In the second part of the workshop, participants were randomly placed into one of five Zoom breakout groups to discuss three questions. Each group had a facilitator and a note-taker. The discussion questions were:

What is working well with housing in Berkeley? What are Berkeley's housing strengths (e.g., programs, types of housing, location of housing, etc.)?

What are the issues or challenges with housing in Berkeley?

What types of new housing should there be in Berkeley, and where should different types be located?

An invitation and log-in information for the public workshop were sent to more than 200 subscribers of the Housing Element email list and flyers for the event were posted at 15 sites throughout Berkeley during the month of October, including public libraries, senior and community centers, grocery stores, local retailers, and on utility poles near public parks.

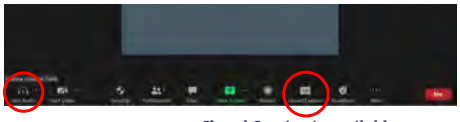
Figure F-1 Community Workshop #1 Presentation

HOUSING ELEMENT UPDATE
6th Cycle 2023-2031
Community Workshop #1:
Assets, Issues, & Opportunities
October 27, 2021

Welcome!

Logistics

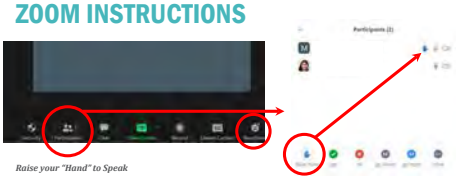
ZOOM INSTRUCTIONS



Join Audio *Closed Caption is available*

- Two options:
  - *Use your device's audio*
  - *Call in using a cell phone*

ZOOM INSTRUCTIONS



Raise your "Hand" to Speak

- Please use the "Raise Hand" feature if you want to speak. On a phone, press *9.
- Please remain muted until called on.
- You can also use the CHAT function to ask questions and share input during the meeting and small group exercise.

Help with Technical Issues

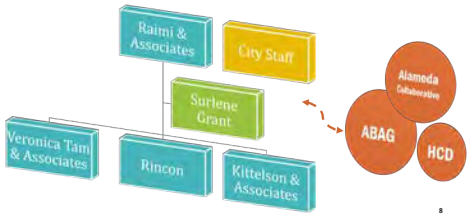
Zoom Host

Email: sami@raimiassociates.com

6

Overview

Housing Element Team



8

Meeting Objectives

- Provide an overview of the Housing Element Update process
- Share information about Berkeley that informs the housing plan
- **Get initial community input on housing assets, issues, and opportunities**

Agenda

- Overview of the Housing Element
- Demographic Poll and Short Q&A
- **Small Group Discussion**
- Next Steps

Housing Element

The Berkeley General Plan is a comprehensive and long-range statement of priorities and values developed to guide public decision-making in future years.

All land use approvals and decisions must be consistent with the goals, objectives, and policies of the General Plan.

The Berkeley General Plan contains the following "Elements":

1. Land Use
2. Transportation
3. **Housing** ← We are here
4. Disaster Preparedness and Safety
5. Open Space and Recreation
6. Environmental Management
7. Economic Development and Employment
8. Urban Design and Preservation
9. Citizen Participation

12

Required Element of the General Plan

Plan for Regional Housing Needs Allocation (RHNA)

Must be updated every 8 years and certified by HCD

Currently planning for the 6th cycle (2023-2031)

Statutory deadline is January 31, 2023

The City's 8-year plan for **meeting the housing needs of everyone in the community.**

A Strategic Plan Priority Project
Create affordable housing and housing support services for its most vulnerable community members.

13

Regional Housing Needs Allocation (RHNA)

For each region, the State analyzes:
+ Jobs to homes ratio
+ Proximity to jobs and education centers
+ Expected job and population growth
+ Demographic trends that affect housing demand

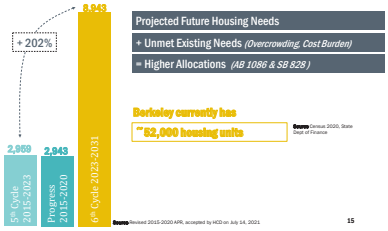
= # of units to plan for in each region, by income level

= Regional Housing Needs Allocation, or RHNA

- The methodology for distributing the RHNA was approved in January 2021
- The Bay Area must plan for 441,176 new housing units during the 6th cycle (vs. 187,990 in 5th cycle)
- Berkeley's draft 6th cycle RHNA is 8,934 units
- The final RHNA will be issued by ABAG in December 2021

14

Regional Housing Needs Allocation (RHNA)
5th & 6th cycle



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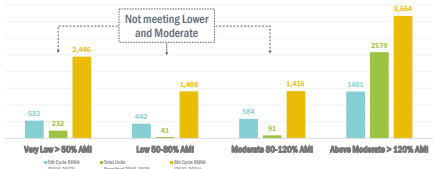
Regional Housing Needs Allocation (RHNA)
5th & 6th cycle



Streamlined Ministerial Approval for eligible 50% affordable projects *(SB 35)*

Source: Revised 2015-2020 APR, accepted by HCD on July 14, 2021

16

ADEQUATE SITES
TO ACCOMMODATE RHNA
such as:

- Pipeline Projects
- Accessory Dwelling Units
- Available vacant and underutilized sites
- Rezoning

STRATEGIES
FOR HOUSING PRODUCTION & EQUITY
such as:

- Incentives & Subsidies
- Homebuyer & Housing Rehabilitation Assistance
- Inclusionary Housing & Housing Trust Funds
- Rent Stabilization & Tenant Protections

17

Sites Inventory

Publicly-owned or leased sites	Vacant sites that could be developed with residential	Nonvacant sites that could be developed with housing units or more housing units	Nonvacant sites that could be rezoned for residential or more housing units

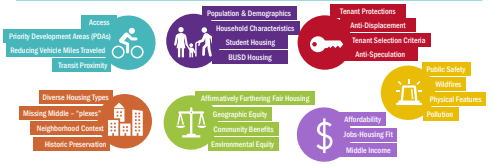
- City is not required to *build* or *finance* the housing, but must *plan and accommodate* for it
- Does not automatically authorize the construction of residential developments
- Private Property - No obligation by property owner or tenant to take action
- Reliant on the development industry (market rate & affordable) to construct housing units

18

Berkeley's Housing Types and Locations

19

Housing Considerations



Affirmatively Furthering Fair Housing *(AB 686)*

20

Why is the Housing Element important?

- Cities that miss the Housing Element deadline:
  - Pay fines
  - Risk litigation
  - Lose eligibility for (or priority for) State grants, like
    - Local Planning and Permanent Local Housing Allocation (SB 2) grants
    - HCD-administered Housing Trust Funds
    - Sustainable Communities and Affordable Housing (AHSC) grants
- Cities that don't meet RHNA lose local control for certain types of affordable housing projects

21

COMMUNITY OUTREACH AND ENGAGEMENT STRATEGIES

- ❑Web site
- ❑Email list
- ❑Stakeholder Interviews
- ❑Small Group Meetings and Focus Groups
- ❑Survey
- ❑Public Workshops
- ❑City Board and Commission Meetings
- ❑City Council Work Sessions

OUTREACH & ENGAGEMENT STRATEGIES

22

Priorities and Ideas Already Shared by the Community

- Preserve existing affordable housing
- Add new affordable housing, including permanently affordable, deed-restricted housing
- Add new market-rate housing
- Prevent displacement of current residents
- Provide long-term housing for the homeless

23

The 6th Housing Element Update Process

Note: This is a general timeline and actual timing may change.

24

Learn More and Stay Involved!

www.cityofberkeley.info/HousingElement

HousingElement@cityofberkeley.info

25

Demographic Poll

POLL INSTRUCTIONS

Open a web browser
(on second device or in another window)

Go to:
https://www.menti.com/12n7ksa1mq
(link is in the Zoom chat)

or

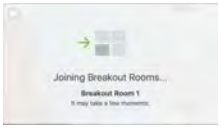
enter code **6152 9554** at **menti.com**

Questions?

Breakout Room Discussion

Breakout Process

- **Zoom Host** will randomly distribute participants
- **Facilitator** will manage time & participation
- **Participants** can share comments verbally and/or in the Zoom Chat
- **Notetaker** will take notes on screen
- **Recorded** for backup
- 70 minutes



31

Breakout Questions

1. What is **working well** with housing in Berkeley? What are Berkeley's housing **strengths** (eg, programs, types of housing, location of housing, etc.)?
2. What are the **issues or challenges** with housing in Berkeley?
3. What **types** of new housing should there be in Berkeley, and **where** should different types be located?

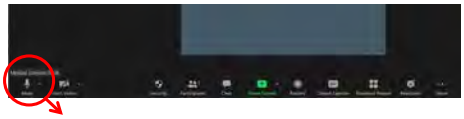
32

Ground Rules

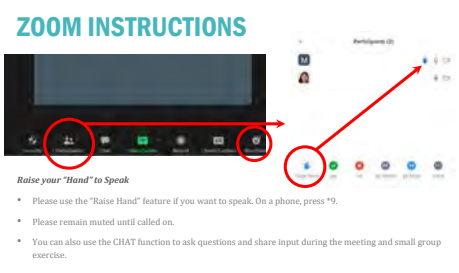
- Video on (not mandatory)
- Conversational courtesy
  - One speaker at a time
  - Be mindful of the time and your use of it
  - Listen
- Differences of opinion -> Ok
- No personal attacks
- Please mute yourself unless speaking
  - Facilitator will invite people to unmute themselves

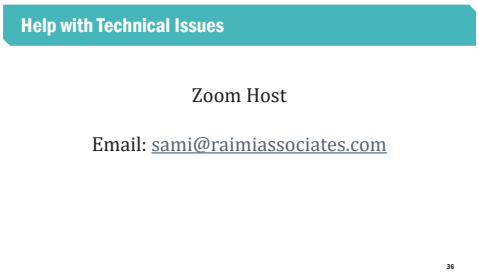
33

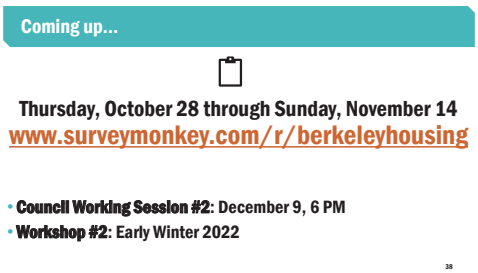
ZOOM INSTRUCTIONS

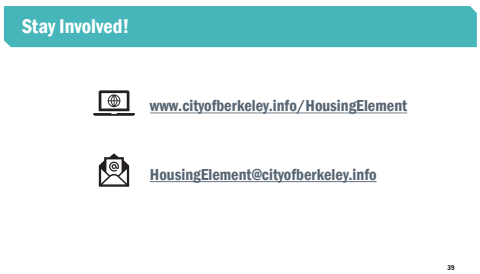


Once Audio is Connected – Please Mute
Please remain muted until it is your turn to speak.
To un-mute, press the same button. On a phone, press *6.









SUMMARY OF INPUT

Housing Strengths

Participants were asked to identify Berkeley's housing strengths. The responses are summarized below:

- **High quality of life:** As a city, Berkeley has many assets that make it an attractive place to live, including unique neighborhoods, easy access to Downtown, good walkability, availability of high frequency public transportation, and access to nature and parks.
- **Access to BART and high-quality transit:** The three Berkeley BART stations provide public transportation options for residents; the station area zoning standards are a strength for future housing opportunities. Other transit options, such as bus, bike share, and car share, were noted as strengths when used as a last-mile solution with BART and independently.
- **Diverse of housing stock:** The City has a diverse housing stock in various neighborhoods with different architectural styles and unit sizes (i.e., single-family, duplex, triplex, mixed-use, apartments, etc.).
- **Large and increasing number of ADUs:** The prevalence of ADUs (Accessory Dwelling Units) offers more housing options for residents; ADUs have become easier to build in recent years which is increasing the housing stock.
- **New affordable housing units:** The recently built affordable housing such as the Berkeley Way Apartments (on Berkeley Way between Shattuck Avenue and Milvia Street) and the Jordan Court project (on the corner of Oxford and Cedar Streets) provide housing for low-income families and seniors.
- **New market-rate housing:** Newly constructed market-rate housing offers additional housing options and contributes to overall supply; market-rate housing Downtown near transit presents an opportunity for longtime residents to stay in Berkeley as their housing needs change.
- **Improved permitting process:** The reduction of regulatory barriers contributes to a more efficient and less expensive process of building new housing; Berkeley's process has become more efficient and is comparable to what is found in other municipalities in the region.
- **Elimination of parking requirements:** No minimum parking requirement in new residential
- construction allows for the construction of more housing units due to lower costs.
- **Diversity of policies and programs that support housing production:** Many existing policies and programs are assets to the Berkeley community, including inclusionary housing, rent stabilization measures, participatory planning processes, housing trust fund, tenant protections, and housing maintenance programs.

Housing Weaknesses

Participants were asked to identify Berkeley's housing weaknesses. The responses are summarized below:

- **High cost of housing:** Housing in Berkeley is expensive for both renters and owners. Rents are high compared to the region and housing prices make homeownership out of reach for many people.
- **Gentrification:** Gentrification has occurred throughout Berkeley over the years and continues to occur due to high housing costs and demand and increasing student population. This leads to displaced residents, increased lack of economic diversity, and negative impacts on the fabric of the community.
- **Lack of affordable housing:** There is currently not enough low- and moderate-income housing in the City to serve the range of income levels represented in Berkeley.
- **Lack of infrastructure to support densification in the Hills:** There is a lack of infrastructure to support the densification of underutilized parcels in the Hills. This leads to an unequal distribution of new housing in other parts of the City.
- **Organized opposition to housing:** Individuals and groups protest housing projects, thereby slowing down and hindering the process. "NIMBYSM" has impacted the number of new housing units that are built.
- **Lack of transit-oriented housing:** There is not enough housing near existing BART stations or along high-quality bus transit corridors. These areas are opportunities for increased densities.
- **Environmental barriers to new housing:** There are concerns that new housing will impact the natural environment including the heat island effect, stormwater runoff, increased greenhouses gas emissions, and lack of biodiversity. Environmental concerns should be considered with the location and design of new housing.
- **Slow permitting process:** Long and inefficient permitting processes due in part to organized opposition, are a significant barrier to new development. This reduces the potential for new housing and increases housing costs.
- **Policy concerns:** Concerns related to housing policies, including Tenants Opportunity to Purchase Act (TOPA) not being adopted; a concern that the inclusionary housing requirement will increase the cost of housing; and a concern that the impact fees for affordable housing are too low.
- **Lack of support for homebuyers:** Individual homebuyers lack support and face a difficult process.
- L**ack of support for small property owners.** Small landlords who own few properties do not receive support from the City. There are multiple barriers and regulations that increase the burden on property owners with only a few units.
- **Student housing not counted towards RHNA:** A large student population exists; however, the State HCD does not count student housing towards meeting RHNA.
- **Unattractive design of new housing:** Multi-family and higher density structures lack aesthetically pleasing design; there is a need for objective design standards.
- **Negative perception of density:** There is a perception that density comes in limited forms (i.e., towers) and cannot be consistent with the character of lower density neighborhoods.
- **Need to increase housing stock:** Overall housing supply needs to grow without sacrificing quality.
- **Current and past inequalities:** The community is still addressing the legacy of segregation and other issues that stem from historical injustices such as redlining.
- **Homelessness:** There are insufficient solutions for the homelessness crisis.

New Housing Types and Locations

Participants were asked to identify the types of new housing that should be created in Berkeley and where it should be located. The following is a summary of general comments and location-specific comments. The map summarizes locations grouped by site type.

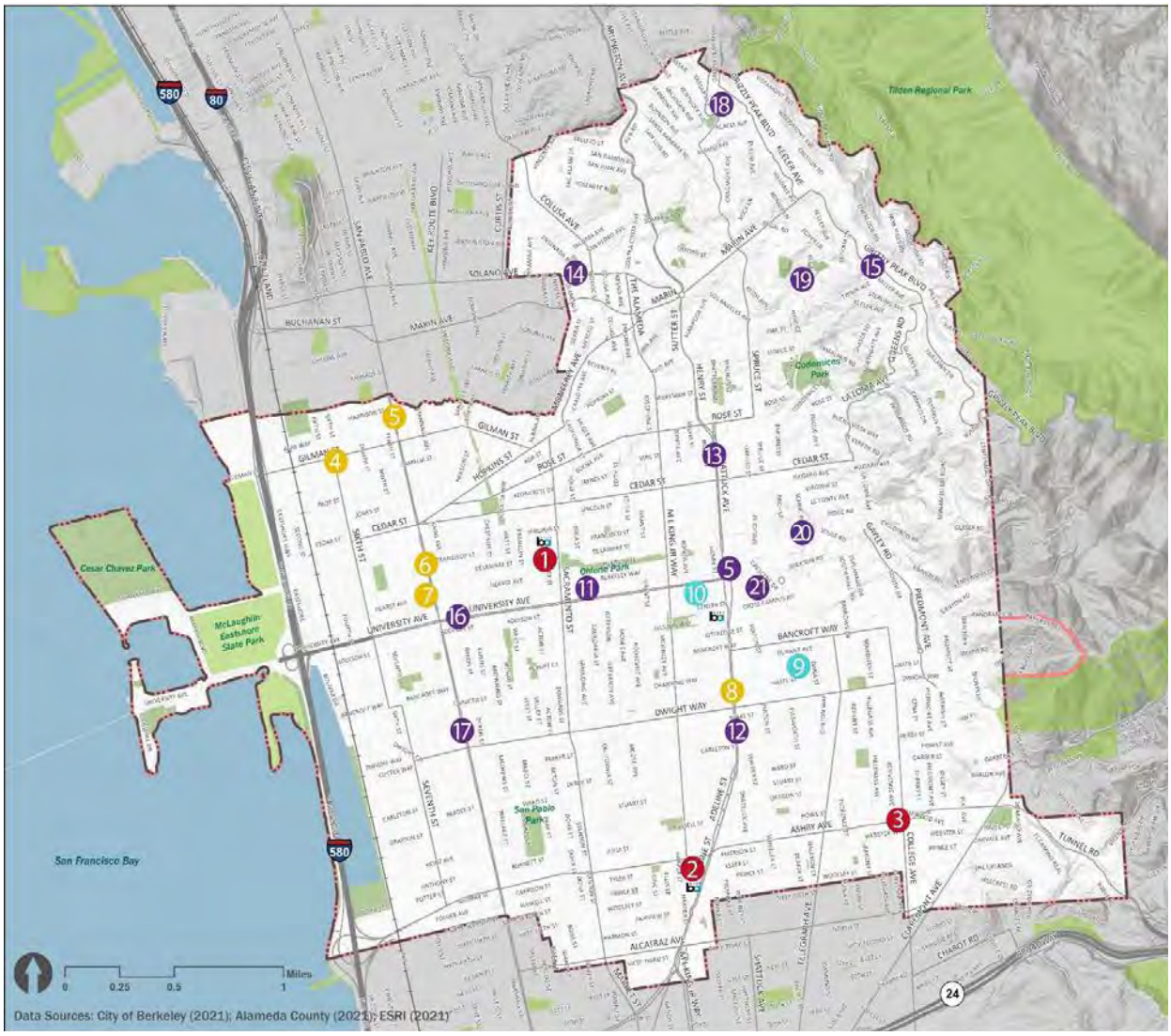
General Comments

- New housing developments should be made available for those at all income levels.
- There is an opportunity to build workforce housing for educators and City staff.
- Build mixed-use housing above existing uses along corridors, including College Ave., Shattuck Ave., University Ave., Telegraph Ave., MLK Way, Ashby Ave, and San Pablo Ave.
- Add more density along bike corridors, such as California St. and Virginia St.
- All residential areas have some potential to accept more housing.
- Allow more sites for small houses and RV sites throughout the City.
- Create new housing in appropriate locations based on the current neighborhood context.
- There is limited public transportation in the Hills.
- Build innovative pedestrian, bicycle, and public transportation options.
- Reinvest in ferry/ rail/ light rail/ bus, etc.
- Based on current density, need to question assumptions in RHNA allocation and address impacts to traffic and pedestrian safety.
- Implement tenant protection policies; pass TOPA.
- Allow "cottage cluster" housing type.
- Build more housing in historically green-lined areas, areas with restrictive covenants.
- Preserve community in connection with the expansion of housing (i.e., black community).
- Think about the impact of development on traditionally marginalized communities/ neighborhoods which experienced disinvestment.

Location-Specific Comments

- North Berkeley BART – Add greater density; add more multi-family housing.
- Ashby BART
- Ashby Ave. and College Ave. – Develop the City-owned parking lot
- Sixth St. and Gilman St. – Convert the two vacant cottages near Berkeley Unified School District (BUSD) parking lot to a tent camp for the homeless using the existing bathrooms; The bus parking lot should be moved to an alternate location.
- Harrison St. and San Pablo Ave. – Convert to parking for RVs owned by low-income households. Has been vacant for about four years;
- San Pablo Ave. and Francisco St. - Create low-income and homeless housing on abandoned car repair/service station, which is underutilized.
- 1822 San Pablo Ave. (Albatross Pub) – Build housing at this location, which closed during the pandemic.
- Shattuck Ave. and Haste St.
- Southside – Build more housing for students.
- Downtown – Create higher density housing especially for students; build on the lot at 2226 Fulton St.
- Area around Ohlone Park – Build more multi-family housing; 5-7 stories with accessibility from Ohlone.
- S. Shattuck Ave. – Build multi-family housing; 5-7 stories with accessibility to Ashby BART.
- N. Shattuck Ave. – Create new multi-family housing; 5-7 stories.
- Solano Ave. – Develop new housing.
- Grizzly Peak Blvd. – Build multi-family and mixed-income housing.
- University Ave. - Convert one-story commercial uses to mixed-use; develop/redevelop for affordable housing with added density.
- San Pablo Ave. – Add more development.
- Grizzly Peak Blvd. - Repurpose existing structures in this area of the City.
- Euclid Ave. between Regal Rd. and Hearst Ave. – Add new multi-family.
- 1798 Scenic Ave (Pacific School of Religion) - Build senior housing.
- UC Berkeley campus - Build more housing on campus park.

Figure F-2 Map showing summary of input on housing types and locations



Publicly owned or leased sites
1. North Berkeley BART
2. Ashby BART
3. Ashby Ave. and College Ave. (City-owned lot)

Vacant sites that could be developed with residential
4. Sixth St. and Gilman St.
5. Harrison St. and San Pablo Ave.
6. San Pablo Ave. and Francisco St.
7. 1822 San Pablo Ave. (Albatross Pub)
8. Shattuck Ave. and Haste St.

Nonvacant sites that could be developed with housing units
9. Southside
10. Downtown

Nonvacant sites that could be rezoned for residential or more housing units
11. Area around Ohlone Park
12. S. Shattuck Ave.
13. N. Shattuck Ave.
14. Solano Ave.
15. Grizzly Peak Blvd.
16. University Ave.
17. San Pablo Ave.
18. Area around Grizzly Peak Park
19. Euclid Ave. between Regal Rd. and Hearst Ave.
20. 1798 Scenic Ave. (Pacific School of Religion)
21. UC Berkeley campus

City Limits
Sphere of
Water
Parks/Open
Freeway
Major Streets
Local Streets

BREAKOUT ROOM COMMENTS

Below are the unedited comments as recorded during the small group discussions. They have not been modified or reformatted.

Question 1: What is working well with housing in Berkeley? What are Berkeley's housing strengths (e.g., programs, types of housing, location of housing, etc.)?

Group 1:

- City has a great housing stock from small square footage to rather large square footage homes
- City has done well creating new housing - market rate in particular
- Some low-income affordable housing has been built in last few years, more needs to be built
- New market rate housing in downtown near transit is providing opportunities for people who have lived here for generations to stay as housing needs change
- City Council is considering TOPA, if passed will be good for housing in Berkeley
- Permitting process is pretty good comparatively in region
- Could be useful to think of housing in terms of bedrooms rather than units (larger homes with multiple bedrooms)

Group 2:

- Berkeley's bones are diff from suburban communities, former streetcar suburb, ecologically friendly and walkable places.
- Participatory planning as a tool
- Public transportation, easy to get around different parts of Berkeley, allows for not owning a car
- Commercial and residential areas not as far apart
- High density housing
- Variety of housing, (single family residential, ADU's, apartment bldgs, high/low rise
- Access to outdoors
- 3 Bart stations and others that are close/ walkable
- Rent board (RSB) resource for tenants and landlords, still rents are high
- Inclusionary housing
- Staff and leadership, want more housing built, more balanced housing, and concerned with justice
    - Alene, housing programs to facilitate, housing trust fund, inclusionary housing ordinance, programs that help w/ maintenance, (such as senior weatherize, preservation, special needs, homeless prevention
    - UC, ABAG, MTC
    - Funding, programs: Adeline corridor, San Pablo Ave, electrification
    - Reduction of barriers, edu re permitting process
    - Streamlining, efficiency & costs
- New construction not req'd to have parking, instead to provide bike/transit passes
    - Alene -> parking reform program, since parking increases cost of housing, TDM Transportation Demand Mgmt, bike parking
- Berkeleyside, a way to know whats going on
- Q: pandemic shifts

Group 3:

- Additional densification
- Different housing types are great w/ different levels of density
- Diversity of aesthetics, historical architecture
    - Low cost aesthetics
- Parks
- Walkable
- Great transportation (AC transit!)
    - Overhead times/ intervals could be improved
    - Expanded routes to various areas

Group 4:

- Inclusionary
- Housing trust fund
- Berkeley Way
- Mixed use projects in downtown and southside
- SB35
- Voters support funding affordable housing
- Renter protections
- BART and housing
- ADUs- lots, all over
- Getting rid of parking minimums, reduces costs of development and thus rents
- Central Berkeley- duplex, triplex, small apartments work well in existing residential districts
- Housing of various kinds (duplex, Single-Family, gardens, triplex)
- Can bike to downtown

Group 5:

- Recent SB 35 implementation.
- Oxford Street affordable housing
- BART station zoning standards
- Tenant protections
- Emphasis on dense, infill housing
- Existing housing stock is dynamic. Different sizes and densities
- Berkeley is in a context of larger Bay Area housing economy; Berkeley does not control all aspects of the housing situation
- [Can Berkeley support additional inhabitants?]
- Market rate housing was produced; low and moderate income range
- ADUs have become easier to produce. Can we do even more? JADUs could also help.
- Diverse neighborhoods that are appealing. Older neighborhoods; college/student areas; commerce
- I'm a big fan of housing on transit corridors and how it's feasible to live without a car in Berkeley

Question 2 - What are the issues or challenges with housing in Berkeley?

Group 1:

- More housing within easy walking distance of BART stations, less than a mile or half mile. A little over a mile is just far enough that I'm more likely to take my car.
- Better utilize underutilized grand square footage in the hills
- Distribute housing more equitably in the city
- New housing creates environmental issues - traffic, water, etc.
- Permit departments are impossible - too long to get through permit process
- Not enough low-income housing
- Gentrification
- No infrastructure to support densification in the hills - water, earthquakes, fire
- Restoration of key system would help - funiculars, etc densify hills
- Only rich people live here because of market rate development being built, lose economic diversity
- TOPA - not passed/implemented
- Housing near transit is too expensive -signal that demand > supply for that type of housing
- Existing housing will be renovated and price will increase if more market rate housing is not built, part of affordability issue
- Lacking low/moderate housing stock
- Large single-family residences in the hills could be split into duplexes (reasons why: smaller families today than previously, more older people who are staying in homes/empty nesters)
- In the hills, narrow streets without sidewalks, poor road maintenance would be constraints to densifying
- Objections by neighbors of projects that comply with guidelines slow projects down

Group 2:

- Home buying process (article berkeley is most difficult in US to buy)
- Cost, required help from family

- Cost of housing
- Berkeley doesn't support buyers, support for sellers and existing owners/resident
- Taxes (Prop 13) structure is unfair, dis-incentives ppl from moving in or older folks from moving.
- Education needed of programs to allow people to downsize and take (at least a portion) of their tax benefit w/ them
- Within defined areas or throughout state?
- Housing affordable to working families / individuals
- Theme of homeownership, affordable housing discussion tends to focus on rental
- Wealth gap, and able to pass down that wealth (help w/ downpayment)
- Decreasing diversity, people getting priced out, will they be ever be able to come back
- Recommended book: Whiteness of wealth, By Dorthy A. Brown, (passing down wealth and housing)
- Climate goals, greenhouses gases from transportation, importance of urban areas in supporting bio diversity has not been considered. Need to live with nature
- Hardscape and lack of permeable surfaces, run off
- Less nature, heat island effect
- Time it takes to development to be approved, process (shadow considerations,
- People that affordable housing is for don't get to be part of the process/vote
- People are not able to participate in our process
- Pace needs to increase rapidly, projects take too long to be approved, and then cost increases
- North Berkeley BART, currently has single family housing surrounding it. We haven't taken full advantage of infrastructure
- Should be permitted to be build housing near
- Segregation, history redlining, zoning has been used as tool of segregation historically
- Pace of project review, (may not be biggest hurdle), barrier to affordable housing in berkeley is due to lack of financing
- Concern that inclusionary req will increase cost of housing
- Transportation: congestion, safety for cyclists, additional housing req's city to be more bike/ walk/transit friendly including protected bike lanes. Need to provide open space for residents of add'l units.
- Difficult for those not originally in area to find housing, more resources needed to help folks find housing and link people to housing.
- Re: Biodiversity, regenerative cities,
- People are living in their cars
- Difficulties of purchasing a home, cost of renting, for 2 bedroom, value
- Ministerial approval, concern about process that doesn't allow input
- Long term homeowners concern about shadows, something being taken away
- Sale of homes, concern about larger developments
- Cost of rental housing
- Lots of vacancies, why not a vacancy tax, housing is available but not affordable
- Who will own Berkeley, what will homeownership vs corporate ownership look like
- Fractional ownership, condo conversion law, to convert TIC/duplex to condo was difficult, how to streamline that process/fees
    - Alene -> condo conversion ordinance, community land trusts, purchasing of ADU's
- Community land trusts, what would make it more possible to support non-profit development, to make lower income housing sustainable for homeowners. Has been successful in other parts of the country. Is it a financial issue? To allow ppl to benefit from equity they have/get in housing and use it
- Bldg regulations, connection between those and Zoning. " Zoning can't rent old home that doesn't meet code" but bldg will say we don't have leeway, to look at property and criteria (if not letter of the law) and should be rentable (amnesty programs for non-compliant Zoning if CBC)

- Re: redlining. Economic diversity, programs to support ppl to rent
- Renting

Group 3:

- Parking (downtown)- nowhere to park for those who work in the CIty
- Affordability issues for renters and owners x2
  - Need to increase housing production
  - Inclusionary zoning
  - Housing bond
  - Down for all the strategies!
- NIMBYISM → folks against density; sometimes property owners
- Change the perception of what density looks like
- More attractive/aesthetically pleasing multifamily structures/buildings
- What do we want to preserve/ continue?
  - Eclectic styles
  - Characteristics of different neighborhoods → maintain while growing
  - Intentional investment in the built environment → enhance quality of the public experience
  - There's not a tradeoff between quality of built environment and denser environments x 3
  - Aim for high quality and quantity!
  - We need to consider the life cycle of development (city/ society/ infrastructure) → the contex

Group 4:

- Lots of new apartments on San Pablo, other places, are market rate (will be counted in RHNA numbers? Not counted if student housing- developed and owned by UC)
- segregation (income, race)
- City doesn't have enough low-income and moderate-income units (developers are developing higher priced units, not subject to rent control). Developers can offer free rent for a few months (they need 80% occupancy to secure their loans). [The City doesn't build the required units]
- Not enough support for small property owners (people who own a few units)
- Mitigation fee is too low, so City can't build/fund the needed units. Market rate units develop a need for affordable units. Fee should be closer to $84,000, not $37,000. Consultant report in April- Streetlevel Advisors
- Hard to meet BMR goals. Plan for more BMR housing, maybe it will be more likely to be built?
- Equity- don't put too much in one category in one area. Don't just put new housing in "the flats." Urban Footprint
- Lots of seniors -- if you remove students from the data. Seniors want parking, the ability to have pets, affordable units.
- Parking is an issue. Downtown in particular (more so for seniors)
- Seniors as landlords. (fixed income, hard to buy out tenant)
- Don't discriminate against people of different ages eg, 80 yos vs 60 yos
- Make sure same rules apply to homeowners as to landlords.
- Didn't meet previous goals for low and moderate income goals. Not enough places for people to live. Unhoused people.
- Restrictions can drive up costs (shadows, parking)
- Ideas- shared living model. Poets Corner. Like a GLA. Co-op. Affordability requirements don't apply
- Idea- Oakland, foster children, shared bathroom and kitchen (Youth Spirit Artworks)
  - Youth Spirit Artworks is the org that did that Oakland example of housing for young adults leaving the foster system

Group 5:

- Homelessness
- UC-constructed student housing that the City is not getting credit for; City needs to get credit for it, especially if we lose local control based on our not meeting our RHNA target
- Tenant protections weakened by state law (Costa Hawkins); voters have not supported efforts to reverse

- More affordable housing should be welcome; RHNA numbers are not a ceiling.
- Very expensive to build, generally; not just in Berkeley.
- Organized opposition to housing development
- Entitlement process in Berkeley is long, cumbersome, expensive and easy to obstruct
- People being priced-out/displacement; negative impact on community fabric
- Parking requirements can reduce the number of units built
- People living in vehicles
- Mismatch between housing that is constructed and the ability of students and other Berkeley residents to afford them
- A popular perception that density is bad
- Perception that density comes in only one, or a few, forms (towers, for example). Density can be added consistent with predominant physical neighborhood context.
- A growing population; rules needs to change to address that
- How to make these changes without seeming heavy handed and negatively affecting the character of the city
- Large student population but no method to get credit for housing provided for them.
- Parking and traffic; where are vehicles going to park at North Berkeley BART station?
- Lack of objective design and zoning standards (setbacks, solar access)
- Many recent projects have been poorly designed; making it hard for people to feel good about density
- Berkeley doesnt control transit service. Except for BART, anything else can be changed since routes aren't fixed. Makes TOD difficult.

Question 3 – What types of new housing should there be in Berkeley, and where should different types be located?

Group 1:

General Notes

- Multi-fam and mixed-income housing in hills on Grizzly Peak along route 65
- Use to have streetcars - Grizzly Peak and The Alameda - and walk down the stairs to the flats and ferry to SF
- Current density: 11K+ ppl per sq.mi. second to SF. Most dense city in east bay - need to question assumptions in RHNA allocation and address impacts to traffic, pedestrian safety
- More sites for small houses and RV sites carefully and thoughtfully designed throughout the city

Comments

- Repurpose existing structures in this area of the city
- Add a tram on Marin Ave for access to housing
- Corner of Sixth and Gilman and above them - 2 cottages vacant near BUSD lot - could be homeless tent encampment (existing bathrooms)
- Abandoned car repair/service stations underutilized - these places have infrastructure for low-income and homeless housing
- Harrison and San Pablo - vacant for maybe 4 yrs (parking for about 10 recreational vehicles for low-income)
- S. Shattuck with accessibility to Ashby BART multi-fam 5-7 stories
- Sacramento from Hopkins to University
- More multi-fam 5-7 stories housing with accessibility from Ohlone
- New housing here
- N. Shattuck - new housing multi-famy 5-7 stories
- Euclid between Regal and Hearst wide enough - new multi-fam could go here
- Multi-fam on bus route on Grizzly Peak, road wide enough in emergency, bus route downtown

Group 2:

Stickies

- more affordable senior housing: service-rich.
- University- convert 1 story commercial to mixed-use
- Unhoused: tiny homes- add to ADU ord. (under

200 sq. ft.)

- Main streets- stores with apartments above (College, Shattuck, University, Telegraph, MLK, Ashby, SPA), (x3)
- Hills- limited public transportation
- Both BART stations (x4)

Comments

- Shattuck and Haste (vacant lot?)
- 1822 San Pablo- Albatross Pub
- Pacific School of Religion- senior housing
- More housing around southside
- City-owned lot, might be Ashby and College
- More housing in historically green-lined areas, areas with restrictive covenants. Redevelop a gas station, add Missing Middle. Density that makes sense in the area.
- North Berkeley BART

Group 3:

General Notes

- near the bart stations
- close to campus
- north side

Group 4:

General Notes

- More housing around major transit corridors
- Real opportunity to make parallel corridors like 6th street more bike friendly
- Let's think of pedestrian/ transit friendly examples locally and abroad
- Reinvest in ferry/ rail/ light rail/ bus, etc.
- New housing development should be made at different levels of affordability
- More density around Ohlone Greenway
- Difficult to meet moderate income housing or "middle housing"
- Build housing for all income level housing even those at 120 AMI
- Opportunity: Funding for housing for educators and qualified staff at the Berkeley adult school. Workforce housing!
- Challenge: built out nature of the City limits the ability to place additional affordable housing
- Descriptions of different neighborhoods and their characteristics --> should we preserve? how doe we feel about this in the context of new dev
- Preserve community in connection with expansion of housing (i.e. black community)
- Think about the impact of development on traditionally marginalized communities/ neighborhoods which experienced disinvestment
- Need more funding -- Fed gov can help with constructing for affordable housing
- Protection of tenants/ low income homeowners; production of housing --> we need to be creative / pass TOPA
- Invest in community land trust to protect tenants/ as a protection against gentrification
- Land value recapture --- for historically marginalized communities HOw are they doing public housing right in berkeley ?
- Having more density along not just the Ohlone greenway, but also other bike corridors like California and Virgina. And of course much greater density around the North Berkeley Bart station. More multifamily housing

Comments

- Greater density at the North Berkeley BART - more multifam housing
- More development along SP corridor x 3
- Lots of new apartments along San Pablo, but not sure if they are being filled -- are they affordable?
- Areas around university can be developed/ redeveloped for affordable housing/ added density

Group 5:

General Notes

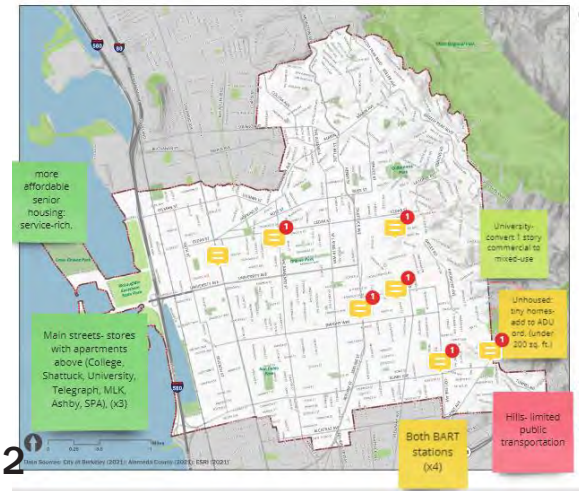
- UC should permit housing in the Campus Park
- Dense housing should be concentrated on major arteries (Sac, Univ, Shattuck, ie).
- Density should step down from corridors to more closely match existing neighborhood pattern Inventory all city land; what can the City

do?

- Mix of uses -- not just 100% residential--commerce, recreation included
- All residential areas have some potential to accept more housing
- Single family homes are not affordable for all Berkeley residents
- "Cottage cluster" as a housing type (see Sonoma County ord). 2700 sf total to build--how that's built (1-2-3 homes) is up to the owner
- increasing density in southside
- We should upzone Durant, college, and telegraph ave
- Opportunity sites for new housing: 1. 2226 Fulton Street, west of UC Berkeley campus, cleared by demolition. 2. Site cleared by the demolition of Tolman Hall, north edge of UC Berkeley campus. 3. Site occupied by temporary 1-story buildings, south of Barrows Hall, south edge of UC Berkeley campus. On-campus housing!

Comments

- UC should permit housing in the Campus Park
- Bus parking lot on 6th and Gilman. Move buses to a more appropriate spot
- Housing here. Housing should be on the campus park
- Higher density in downtown for students
- Higher density for students in Southside



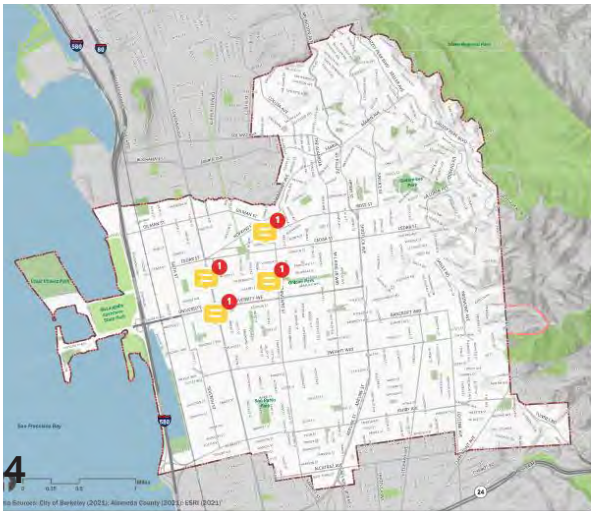
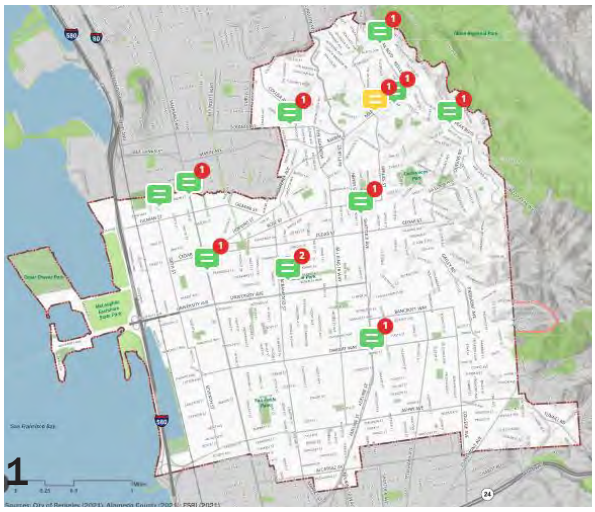


Figure F-3 Groups 1, 2, 4, and 5 Housing Location & Types Map



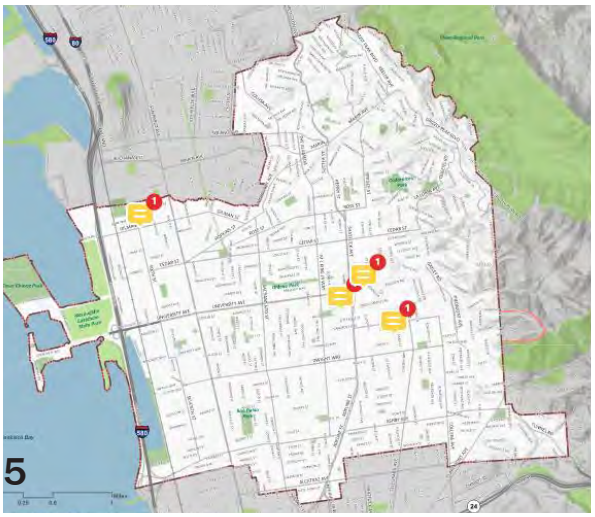
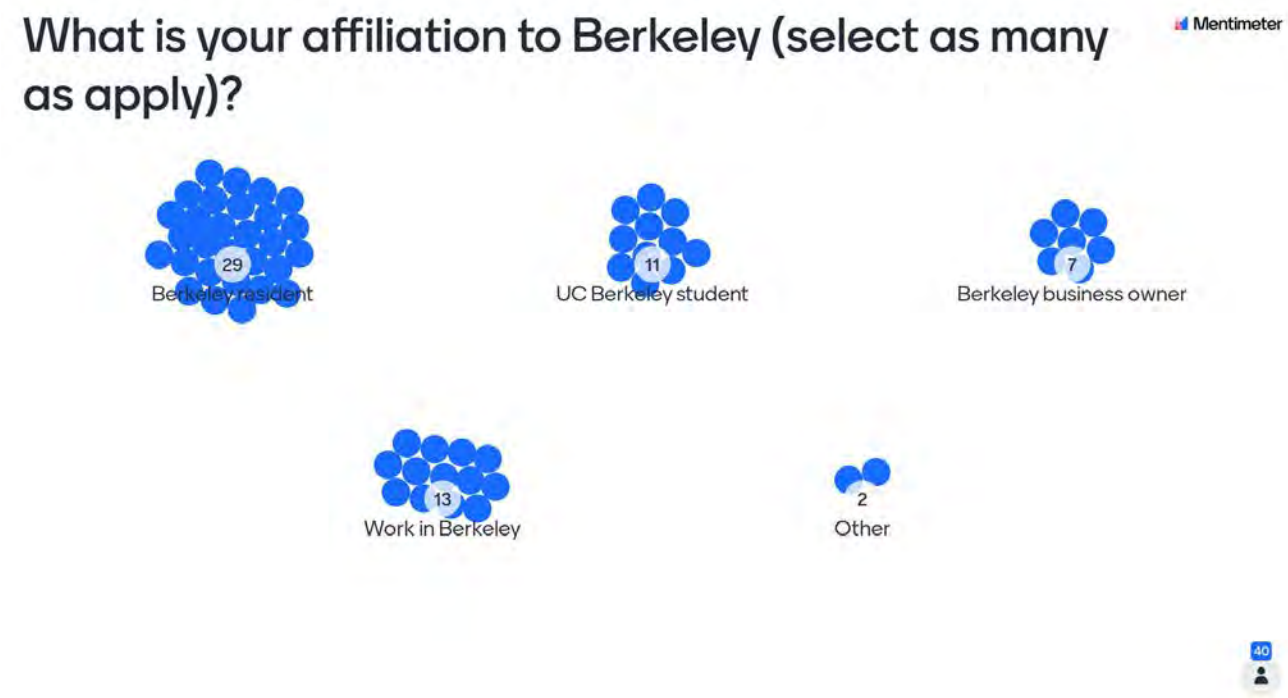
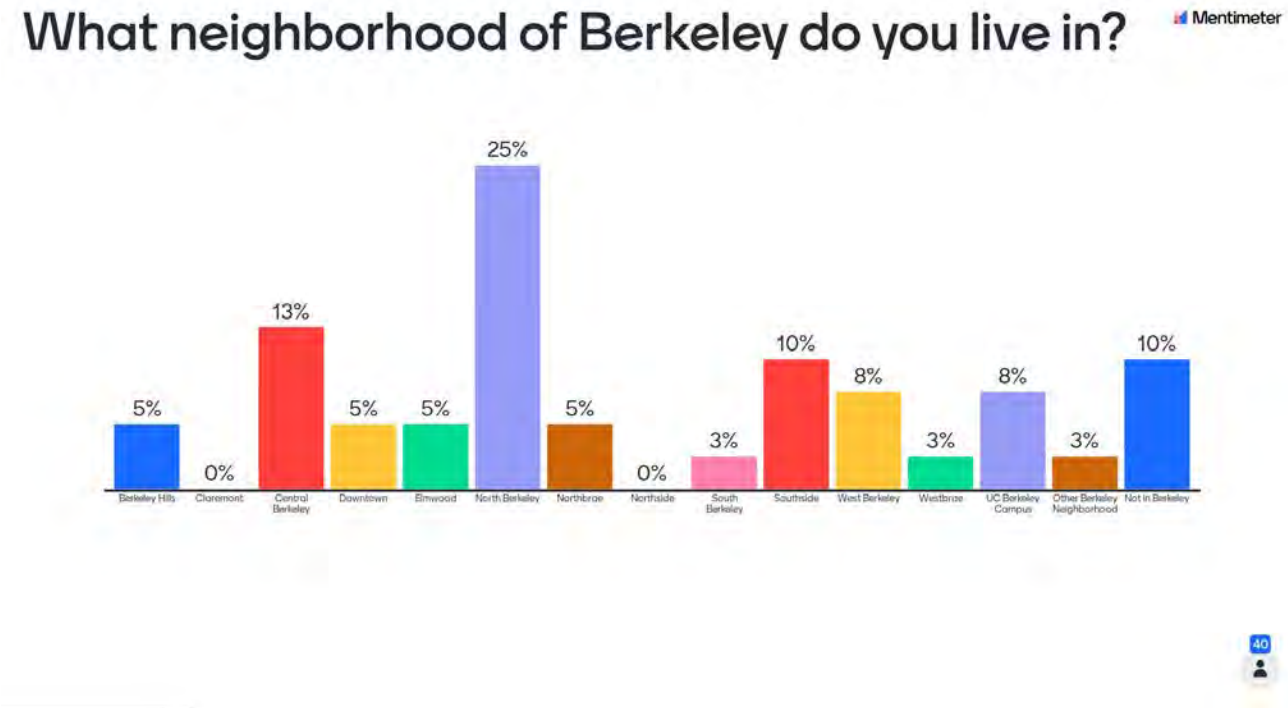


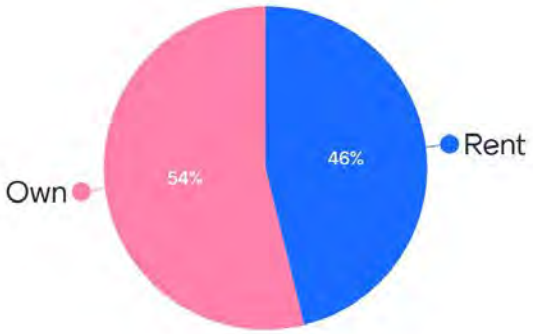
Figure F-4 Community Workshop #1 Participation Polling Results





Do you rent or own your home?

Mentimeter



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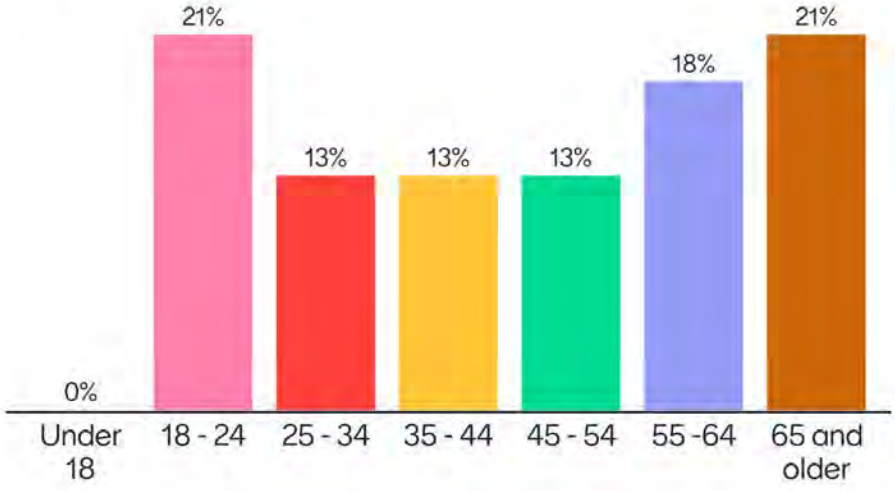
What is your age?

Mentimeter



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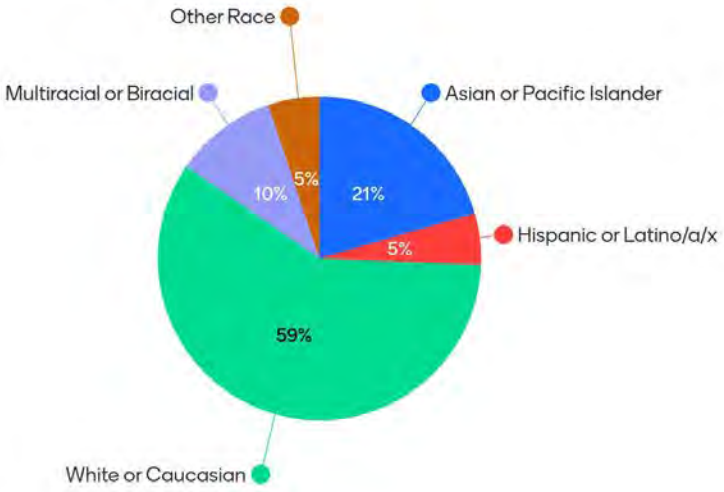
How do you identify?

Mentimeter



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What was your total income during the past 12 months?

Mentimeter

37

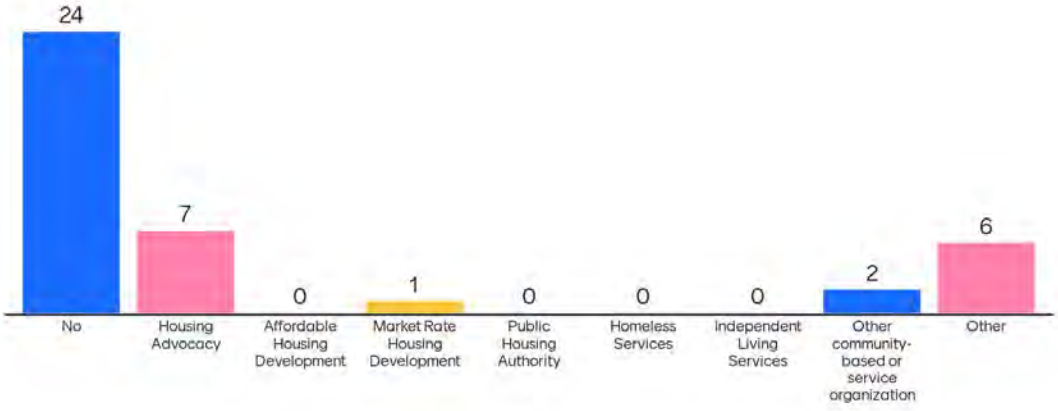
Do you have a disability (e.g., hearing, sight, physical, mental)?

Mentimeter

37

Do you work in a housing related field? If so, in which area?

Mentimeter



37

F1.2 COMMUNITY WORKSHOP #2 - JANUARY 27, 2022

OVERVIEW

On Thursday, January 27, 2022 from 6:00-8:00 pm, the City of Berkeley hosted its second community workshop for the 2023-2031 Housing Element Update. The primary objectives of the meeting were to:

- Update participants on:
  - Insights from Housing Element community engagement
  - City of Berkeley housing programs
  - Sites inventory methodology and status
  - Residential objective standards project
- Get input from participants to inform:
  - Where the City should change zoning or zoning standards to facilitate housing production
  - How the City refines residential development standards.

The workshop was held virtually on Zoom. An invitation and registration link for the public workshop was sent to over 340 subscribers of the Housing Element email list and attended by approximately 60 participants, comparable to the first public workshop in September 2021.

Staff presented an overview of the housing element process and described Berkeley housing programs, the housing site inventory approach, the residential objective standards project, and previous community input. Spanish interpretation was provided. The slides and video recordings were made available on the project website.

Following the presentation, participants completed an optional demographic poll to develop a profile of workshop attendees and to inform engagement efforts.

In the second part of the workshop, participants were randomly placed into one of five Zoom breakout groups. Each group had a facilitator and a note-taker tasked with leading and recording a two-part discussion.

The discussion questions were:

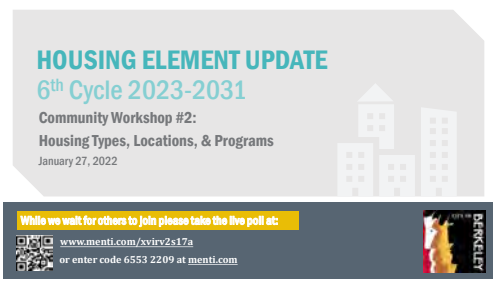
Part A: Zoning & Criteria

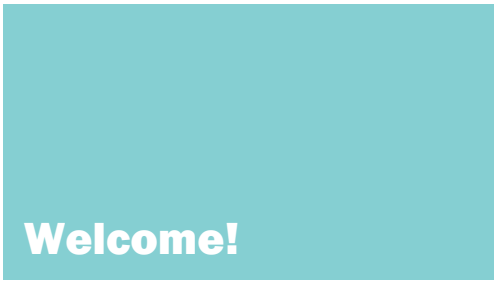
- Where should the City facilitate housing production through changes in zoning, particularly height and density?
- What are the most important criteria for selecting areas to rezone?

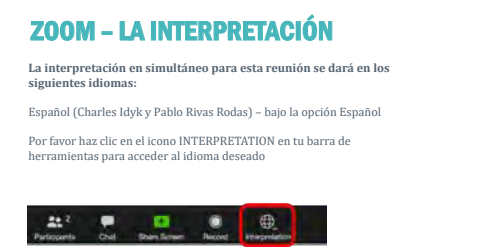
Part B: Residential Types and Locations

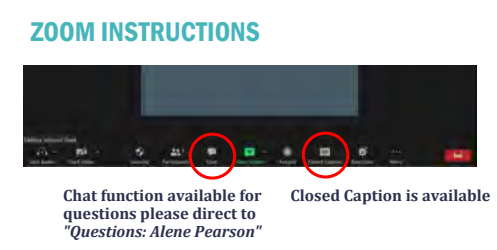
- What building features are most appropriate in each neighborhood?
- Where would it be appropriate to see more multi-family and mixed-use buildings in Berkeley?

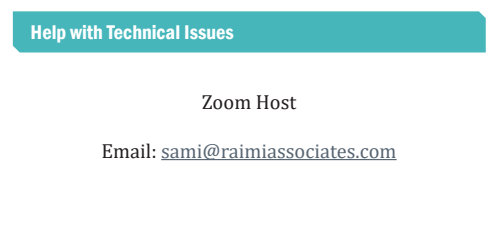
Figure F-5 Community Workshop #2 Presentation

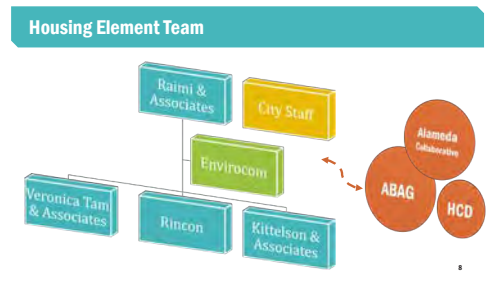


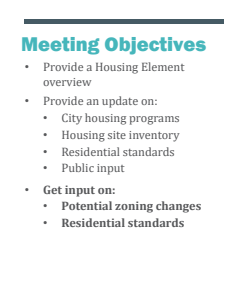


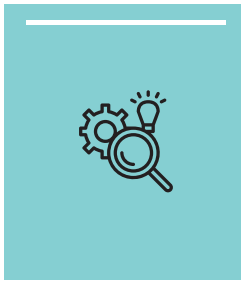


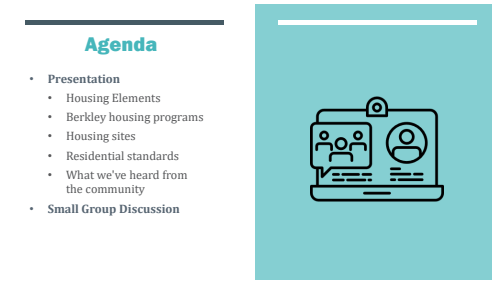


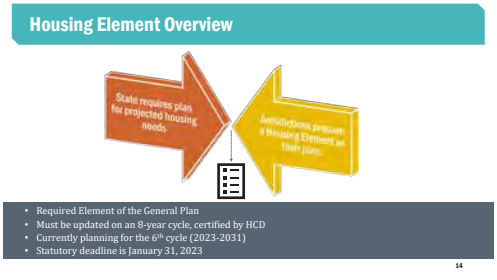


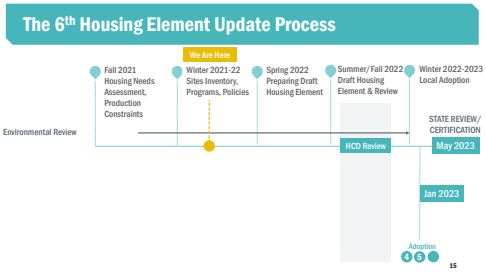


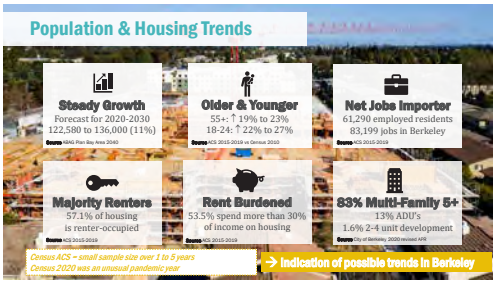












Housing and Community Services (HCS)

- Affordable Housing
  - Below Market Rate Housing (BMR) Program — 530 units
  - Housing Trust Fund Program — 1,376 units
- Upcoming — 750 Units in the Pipeline

22

HCS – Resources for New Construction

- Affordable Housing, Linkage, and In Lieu Fees → Average Annual = $4.5 million
- Ballot Bond Measures → Measure O = $135 million
- State and Federal → HOME, CDBG, HCD Programs

23

HCS Programs

Foreclosure, Mortgage, and Rental Assistance	Rehabilitation Programs	Homeless Programs
• Mortgage Credit Certificate Program • Emergency Rental Assistance	• Senior and Disabled Loan Program • Public Facility Rehab Program • Residential Rehab Program	• Emergency Shelter (264 Units) • Transitional Housing (11 units) • Shelter Plus Care (300+)

24

City of Berkeley Policies

Tenant Protections
- Rent Stabilization
- Just Cause for Eviction
- Rent Review Board
- Relocation Assistance
- Landlord/Tenant Mediation

Affordable Housing Production/Preservation
- Affordable Housing Mitigation Fee (revision upcoming)
- Condo Conversion Regulations
- Commercial Linkage Fee
- Density Bonus

Equity
- Fair Chance to Housing
- TOPA (upcoming)
- Preference Policy (upcoming)

25

HOUSING SITE INVENTORY

26

6th Cycle RHNA

- 1,408 Low (50%-80% AMI)
- 1,416 Moderate (80%-120% AMI)
- 2,446 Very Low (>50% AMI)
- 3,664 Above Moderate (<120% AMI)
- **8,943 Total Units**

Notes:
- The RHNA process is a "capacity" analysis; changes in programs and zoning are needed to produce housing!
- HCD uses density (over 30 units per acre) as a proxy for lower-income (very low and low) units.

27

Sites Inventory

Publicly-owned or leased sites	Vacant sites that could be developed with residential	Nonvacant sites that could be developed with housing units or more housing units	Nonvacant sites that could be rezoned for residential or more housing units

- City is not required to *build* or *finance* the housing, but must *plan and accommodate* for it
- Does not automatically authorize the construction of residential developments
- Private Property - No obligation by property owner or tenant to take action
- Reliant on the development industry (market rate & affordable) to construct housing units

28

SITE INVENTORY METHODOLOGY

STEP 1. Identify Likely Sites

STEP 2. Calculate "Deficit" (Remaining RHNA)

STEP 3. Identify Potential New Sites

STEP 4. Evaluate and Analyze

STEP 5. Calculate Buildout

29

1 – Identify Likely Sites

- Pipeline projects (entitled between 2018 and present)
- Accessory Dwelling Unit Trends (annual average of 2018-2020 x 8)
- BART properties

30

2 – Calculate Remaining RHNA and Buffer

RHNA	8,934
Likely Sites	
ADU Trend	796
BART Properties	1,200
Entitled projects (after 2018)	2,941
Subtotal	**4,937**
Remaining RHNA (RHNA – Likely Sites)	3,997
Buffer (15% of remaining RHNA for VL, L and M)	567
Remaining RHNA	**4,564**

CONCLUSION. The City must identify **potential new sites** to accommodate a significant amount of new housing through existing and/or new zoning.

31

3- Identify Potential New Sites

INCLUDE
- Project applications submitted or pending
- Vacant
- Large enough for development *(ideally greater than .5 acres)*
- Underutilized (significantly below maximum density)
- Old structures

EXCLUDE
- ~~Condos~~
- ~~Large apartment buildings~~
- ~~Historic buildings~~
- ~~Rent controlled units~~
- ~~Most supermarkets~~

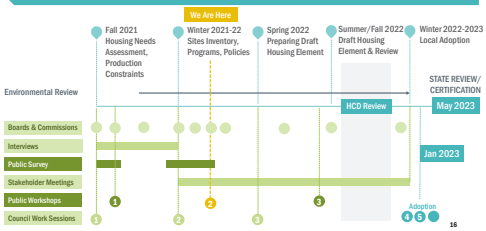
32

3 – Identify Potential New Sites – Capacity Analysis

"Heat Map" showing capacity analysis of potential additional housing sites (2+ units)

33

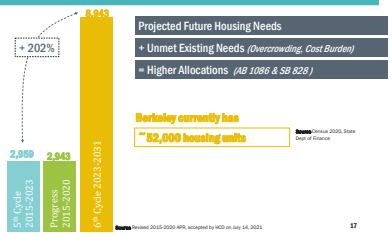
The 6th Housing Element Update Process



16

Regional Housing Needs Allocation (RHNA)

5th & 6th cycle



17

Housing Element x Residential Objective Standards

CONCURRENT WITH HOUSING ELEMENT

R-1, R-1A, R-2, and R-2A
Up to 2-3-4 units per parcel (including ADUs, JADUs), and division of units.

Variety and flexibility of housing types and tenure

Priority Development Areas (PDAs)
Downtown, University, San Pablo, Shattuck, Telegraph
Adeline (not included)

Transit + Commercial Corridors
Min. 15-minute peak headways

18

4 – Evaluate and Analyze - Environment

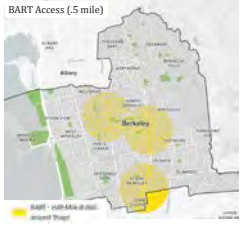
Fire Zones
Source: City of Berkeley Fire Zones

Projected Inundation from 5' Sea Level Rise
Source: NOAA

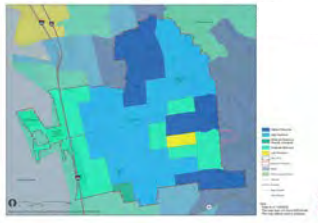
4 – Evaluate and Analyze – Transit Access

Bus Access (.15 mile)

BART Access (.5 mile)



4 – Evaluate and Analyze – Resource-Rich Areas



36

4 - Evaluate and Analyze

- Aerial photos and field visits
- Remove inappropriate sites

37

Next Step – Complete Site Inventory

1. **Identify potential sites** to meet RHNA capacity requirements using the technical analysis accepted by the State Department of Housing and Community Development (HCD)
2. Evaluate to determine the **best sites for housing**
3. **Calculate buildout** using existing zoning and potential new zoning
4. **Complete inventory process**

38

MULTI-UNIT RESIDENTIAL OBJECTIVE STANDARDS

1. Project Purpose and Overview
2. 2-4 Unit Projects
3. 5+ and Mixed-Use Projects

MORE INFORMATION AT
www.cityofberkeley.info/objectivestandards

39

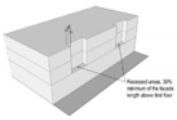
Residential Objective Standards – Project Purpose

Prepare objective standards for multi-unit residential development.

40

What is an Objective Standard?

- **No personal or subjective judgement**
- **Uniformly verifiable**
- **Knowable in advance**



41

Why are we doing this?

CALIFORNIA & BERKELEY HAVE A SHORTAGE OF AFFORDABLE HOUSING.

ALSO

RECENT STATE LAW	CITY COUNCIL REFERRALS	HOUSING ELEMENT
• SB 35 • HAA • HCA – SB 330 • 2021 Housing Bills	• HAA • Missing Middle • Eliminate Exclusionary Zoning	• Plan for 8,934 new units • AB 1397 • Adopt by January 2023

42

New Objective Standards

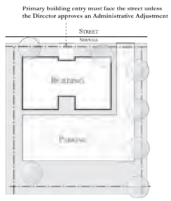
- **Two categories ("buckets")**
  - 2-4 units multifamily
  - 5+ units multifamily and mixed use
- **Focus first on objective development standards**
- **Prepare objective design standards in second phase**

43

Standards for 2-4 Units

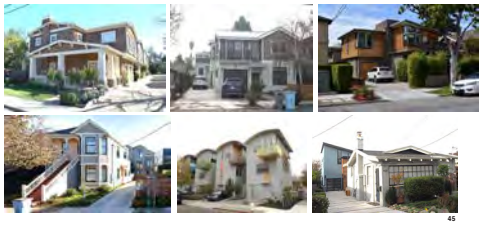
Impetus:
- City Council referrals
- SB 9

Expected Standards:
- Where Allowed
- Permits Required
- Site Layout and Massing
- Building Design



44

Example 2-4 Unit Projects



45

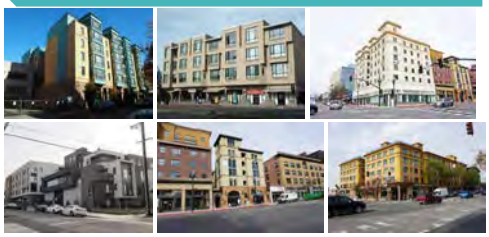
Standards for 5+

Impetus:
- City Council referrals
- State law (HAA, SB 35)

Expected Standards:
- Site Layout
- Building Massing

46

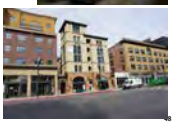
Example 5+ Projects



Requested Input Tonight

Example Multi-Unit Residential Projects:
- 2-4 Units Multi-family
- 5+ Multi-family and Mixed Use

Discussion Questions:
- Why or why not appropriate with surroundings?
- Where do you want to see more?



48

WHAT WE'VE HEARD

1. Public Workshop #1
2. Stakeholder Interviews
3. Survey

- Presented to 10 Berkeley Boards & Commissions[1]
- Interviewed Stakeholder Interest Groups[2]
- Received 745 responses from the citywide online survey
- Held an online public workshop with approx. 70 participants
- Focus Group Meetings
- City Council Work Sessions
- Web site
- Email list

[1] Planning Commission (9/1/2021); Homeless Services Panel of Experts (9/1/2021); Commission on Disability (9/1/2021); Landmarks Preservation Commission (9/2/2021); Zoning Adjustments Board (9/9/2021); Commission on Aging (9/15/2021); Energy Commission (9/22/2021); Children, Youth, and Recreation Commission (9/27/2021); Housing Advisory Commission (9/30/2021); Rent Stabilization Board (11/18/2021); Civic Arts Commission (1/28/22)

[2] Black/African American Faith Institution, Market Rate Developers, Affordable Developers, Senior Center, Real Estate Professional, Property Managers, Homeless Services, Housing Advocacy, Disabilities Services

49

Public Workshop & Online Survey

Challenges

Homelessness	60%
High cost of homeownership	55%
High rental costs	48%
Lack of Housing Options	
Unequal distribution of new housing	
Gentrification & displacement	
Opposition to new development	
Public safety & environmental concerns	

Successes

Tenant Protections	36%
Building more ADUs	30%
Building new multi-unit housing	26%
Incentives for energy efficient, climate adaptation	26%
Access to services, jobs, transit	
Programs/policies for housing production	
Programs to support housing & residents	

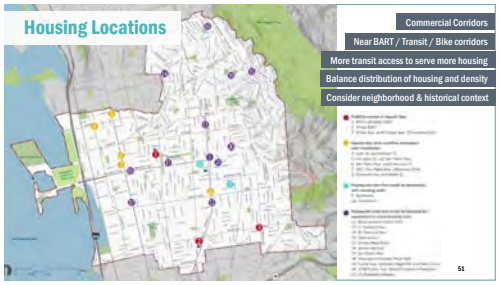
Workshop – Approx. 70 participants
Mostly residents, some business owners, students
58% owners / 46% renters
21% Asian / 5% Latinx / 5% Other / 58% White / 10% Biracial
Representation from each adult age bracket and income group

Survey – 745 participants
60% residents, 29% work in Berkeley, 9% business owners
64% owners / 31% renters
9% Asian / 4% Latinx / 8% Other / 74% White / 8% Biracial
Representation from each adult age bracket (22%-65+) and largest proportion earn between $100-$150k

50

Housing Locations

- Commercial Corridors
- Near BART / Transit / Bike corridors
- More transit access to serve more housing
- Balance distribution of housing and density
- Consider neighborhood & historical context



51

Preliminary Stakeholder Interviews

- Need more funding for affordable housing, disabled, and homeless
- Gentrification from high housing costs and student population
- Racial inequity in housing and displacement
- High land costs & unpredictable entitlement process
- Flexibility on ground floor retail requirements
- Avoid replacing existing residential & displacement
- Consider construction efficiency (85' heights)
- Consider pre-1970s height/densities

Black/African-American Faith Institution
Affordable + Market Rate Developers
Senior Center
Realtors + Property Managers
Homeless Services
Housing Advocates
Disabilities Services

52

Demographic Poll Results

Breakout Room Discussion

Breakout Process

- **Zoom Host** will randomly distribute participants
- **Facilitator** will manage time & participation
- **Participants** can share comments verbally and/or in the Zoom Chat
- **Notetaker** will take notes on screen
- **Video recorded** for backup
- 60 minutes

55

Breakout Discussion Topics

Zoning & Criteria

- **Where** should the City facilitate housing production through changes in zoning, particularly height and density?
- What are the most important **criteria** for selecting areas to rezone?

Residential Types and Locations

- What building **features** are most appropriate in each neighborhood?
- **Where** would it be appropriate to see more multi-family and mixed-use buildings in Berkeley?

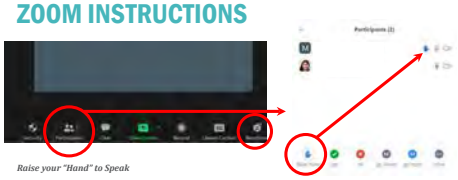
56

Ground Rules

- Video on (not mandatory)
- Conversational courtesy
  - One speaker at a time
  - Be mindful of the time and your use of it
  - Listen
- Differences of opinion are OK
- No personal attacks
- Please mute yourself unless speaking
  - Facilitator will invite people to unmute themselves

57

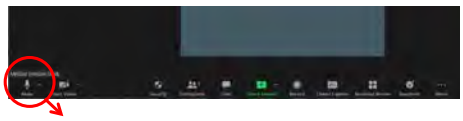
ZOOM INSTRUCTIONS



Raise your "Hand" to Speak

- Please use the "Raise Hand" feature if you want to speak. On a phone, press *9.
- You can also use the CHAT function to share input during the small group exercise.

ZOOM INSTRUCTIONS



- You may unmute yourself when called on.
- To un-mute, press the Mute button. On a phone, press *6.

Help with Technical Issues

Zoom Host

Email: sami@raimiassociates.com

60

Breakout Room Reports

THANK YOU

FOR MORE INFORMATION / SUBSCRIBE TO THE EMAIL LIST

www.cityofberkeley.info/HousingElement

CONTACT US

HousingElement@cityofberkeley.info

62

SUMMARY OF INPUT

Location

Participants were asked to identify where the City should facilitate housing production with changes in zoning, particularly height and density. The following areas were identified as appropriate:

Neighborhoods:

- Southside
- Downtown
- West Berkeley
- North Berkeley
- South Berkeley
- Thousand Oaks

Specific Streets:

- Solano Ave.
- Telegraph Ave.
- 6th Street
- Martin Luther King Jr. Ave.
- Addison St.

Zoning Districts:

- R-1
- R-2
- R-3
- C-T (specifically to the north and south of Dwight Way)

Other comments related to where housing production should be facilitated included:

- Build housing in areas that have been historically exclusive, such as Claremont or Elmwood.
- Increase density throughout all of Berkeley.
- Allow for diverse housing types, including student housing, throughout the city.
- Build more student housing on campus.
- Restrict new student housing to campus.
- Avoid clustering high density and low-income residents on high traffic corridors.
- Corridors may merit more stringent building requirements, but the requirements could be more flexible further from busy streets.
- Add more residential density in industrial areas.
- Incentivize development on lots with abandoned homes.

The following general comments were also shared:

- In addition to location, consider policies to keep homes healthy.
- Protect rent-controlled units.
- Consider re-housing rent-controlled residents while existing rent-controlled properties are being redeveloped.
- Any area zoned for medium or higher density should allow for commercial uses, specifically on the ground floor.
- Increase flexibility in development standards to allow for commercial uses in residential zones.
- There should be some caution while deciding what businesses are added adjacent to residential uses. Business should complement residential uses and should be reviewed with some discretion

Criteria

Participants were asked to identify the most important criteria for selecting areas to rezone. A list of potential criteria to rezone was provided, and many participants expressed support for the following:

- Corridors and Priority Development Areas
- Proximity to BART and public transit
- Proximity to schools
- Proximity to parks and open spaces, and other recreation facilities
- Proximity to grocery stores
- Proximity to other retail
- Limiting proximity to hazards
- Reducing displacement
- Reducing poverty concentration
- Increasing racial and ethnic diversity

Residential Types and Features

Participants were asked what features of various sample building types are appropriate (or not) with

the surrounding neighborhood. The responses are summarized below:

Multi-unit 2-4 units per lot

Design

- A variety in housing design should continue to be preserved and developed in Berkeley.
- Multi-family housing should be built with design features that aid in creating a community.
- It is important to consider not being too subjective in developing objective design standards.
- Thoughtful objective standards are needed to ensure that buildings don't intrude in the surrounding area.
- "Detriment" needs to be defined clearly in the zoning code, especially if buildings shown in examples will be placed in R-1 or hillside districts.
- The City should be prepared for pushback that the development examples shown will affect privacy/views.

Height & Density

- Height limitations greater than two stories is positive.
- Buildings should maintain a reasonable height.
- Missing middle housing sizes are ideal for families.

Public Space / Green Space

- Small setbacks allow for the potential of better-managed landscaping.
- When high-density housing results in reduced yard space, more intention needs to be paid to creating public spaces outdoors.
- Neighborhoods need to have green spaces, which can be achieved with reduced lot coverage.
- The pandemic has made people more appreciative of air and open space.
- Ensure that there are trees with new development and thatexisting trees are protected

Neighborhood Character and Context

- Zoning should aid in developing and maintaining a sense of place.
- Context is critical, but it is challenging to codify subjective qualities and ambiance.
- Compatibility (height and building scale) is not as important for preserving neighborhood character.
- New housing should respect existing neighborhoods and the impacts on the existing community need to be considered.
- What's currently there is not necessarily the best model.

Solar

- Sunlight impacts must be considered when building new units not to preclude solar potential.
- When developing standards and review processes the City should consider how to protect solar panels that might be affected by neighboring taller developments.
    - If the effectiveness of solar panels is reduced, there should be monetary compensation.

Additionally, participants were asked to identify places in Berkeley where they would like to see more of this type of development. Participants identified R-1 zoning areas and 5,000 square foot lots in R-1 areas.

908 Cedar St. (Two detached single-family homes on a lot)

- Different rooflines on the four buildings provide visual variety.
- Houses show attractive design and effective use of space.
- The limited two-story height does not tower over neighbors.
- Additional setback on the second floor would minimize the wall massing.
- Houses have nice use of setbacks and gardens.

1911 Ninth St. (Three detached single-family homes on a lot)

- Building size feels disproportionate, bulky, and massive compared to lot size.
- Having three units on one lot is a good use of land.

- Additional landscaping is needed and could soften the industrial feel.
- The variety of styles and sizes present provide the possibility for different size units.

2411 Fifth St. (Duplex behind existing duplex, four units on a lot)

- Back duplexes look light and airy.
- The clean design stands out.
- The existing Victorian-style building is more attractive than the new.
- Different types of housing and unit sizes can provide for people in various stages of life.
- The development is a good example of a style that can meet family needs.
- The project needs to include more shared spaces, landscaping, and open space.
- There is good foliage and landscaping between two units.
- Buildings are spaced out enough for different styles to work, and diversity is appealing.
- The entrances should not take up as much space.

2817 Eighth St. (Four attached units on one lot)

- The three-story height of the development is positive; City should consider allowing extra height if the building has angled roofs.
- The density of the building makes good use of the entire lot.
- Limited driveway space and off-street parking provides space for more housing.
- Housing looks seamlessly built-in and matches the surrounding industrial neighborhood.
- Building looks unfriendly but might be appropriate with the surrounding manufacturing neighborhood.

Multi-unit 5+ & mixed use

1080 Jones St.

- Second- and third-floor setbacks would allow more light in; possibility for balconies and tenants wouldn't get immediate sound impacts with setbacks.
- The building feels very dark.
- Parking on the first floor is negative.
- There is an opportunity to put solar panels on the roof.
- Larger setbacks and more landscaping are needed.
- Deep shadows on San Pablo Ave. create a problem for some pedestrians; for others, shade provides benefits on hot days.
- Setbacks and design of townhomes on 10th St. side is creative and appealing and fits in well with the community, while massing on San Pablo Ave. is jarring and does not fit.
- Green space provided is positive.

1885 University Ave.

- The building offers a beautiful design that fits in the neighborhood.
- Development could be more creative in design.
- The color and overall aesthetic feel lighter and more attractive than 1080 Jones St.
- The retail provided is an asset for residents; great example of residential above retail.
- The building needs more consistent design elements between new and existing units to appear less stark and jarring.
- One can walk easily as a pedestrian; there is good lighting provided in the neighborhood.
- The building is livable, works for people.

2119 University Ave.

- Building is a good example of a mixed-use project.

2711 Shattuck Ave.

- Vacant ground floor should be repurposed for housing.
- Developments don't always need ground floor commercial; can be residential..
- Project should work with existing tenants to keep ground-level commercial functional.

Overall comments on multi-unit 5+ & mixed use

<u>Design</u>

- Developers and architects need to find ways to create a community in multi-family housing through design.

- What is an appropriate vs. less appropriate style is subjective, not objective.
- Many of the buildings currently and recently built look the same. There should be some latitude in design.

Green Space

- There should be the opportunity for a density bonus for offering green space.
- High-density residential should provide more shared green space.
- Attached housing is more efficient but detached provides desirable green space.

Height and Density

- Put higher heights in areas where it is less noticeable and utilize setbacks.
- The student areas in town can be denser as the housing units are smaller.
- Many of the examples shown still seem low-density.
- Appropriate heights should blend in with the neighborhood.
- Be careful when designing buildings to replicate existing structures that may unintentionally perpetuate inappropriate heights; new developments should not always replicate what's already there.

Parking

- Don't waste space on parking.
- Long driveways are a waste of space and better suited for green space.

Solar

- Be cognizant to make sure commercial abutting residential does not block solar on residential units.

Additionally, participants were asked to identify places in Berkeley they would like to see more of this type of development. The responses included:

- Residential (R1) zoning areas
- South Berkeley
- West Berkeley
- Abandoned homes on Cedar St.
- 1425 Oregon St.

BREAKOUT ROOM COMMENTS

Below are the unedited comments as recorded during the small group discussions. They have not been modified or reformatted.

Part A: Where should the City facilitate housing production through changes in zoning, particularly height and density?

What are the most important criteria for selecting areas to rezone?

Group 1:

Where should the City facilitate housing production through changes in zoning, particularly height and density?

- Higher density desired everywhere.
- Expand housing in the R-2.
- Keep new student housing on campus.

What are the most important criteria for selecting areas to rezone?

- Prioritize housing in locations close to public transit and vital services - grocery stores, places of employment, etc.
- Areas with greenspace and parks facilities.
- Don't necessarily put highest density on highest traffic corridors. (x2)
- Berkeley is a unique city – geologic/seismic, fire hazards, sea level rise -- those areas should not be considered for more housing
- Cost is high everywhere, so need housing lots of places (including student housing).
- In addition to "where" consider what can be done in housing design to keep homes healthy -- sometimes site specific.
- Near BART, other resources.
- Spread density.
- Consider economic limits to building different building types and densities.
- Make sure areas outside hazard areas can

accommodate housing units needed.

Additional Notes:

- Let's develop/upzone everywhere, Berkeley can be more dense in general.
- Prioritize areas near transit or services.
- The low-density area on Sacramento, where it's low.
- Maybe re-house rent-controlled residents while existing rent-controlled properties are being re-developed -- so, don't ignore completely.
- Look at places where price per square foot is highest.
- Develop near green spaces/parks/recreation facilities -- not sure if the high/low resource index captures green spaces.
- We develop right on busy traffic corridors today, where there's also most noise and air pollution, but then it drops off dramatically a block or so away -- should limit to just on busy corridors.
- We should count student housing as units in Berkeley, only build more student housing on the campus, and prohibit additional enrollment at Berkeley unless the university provides adequate housing.
- Most areas in the Bay Area share Berkeley's "unique" traits as per previous comment, we should build more housing regardless of student housing.
- Maybe being on traffic corridors means more stringent requirements on how the building is built, but the requirements could be more relaxed further from busy streets.
- Add more volume on development near BART, and also on spreading density throughout Berkeley.
- More density in the flats helps to build our way away from fire corridors.

Group 2

- More student housing to support increase in student population.
- Rethink where we place higher density, lower-income residences -- don't always concentrate along the main, highly traveled arterial roads.
- Support for more student housing, particularly on the Southside, particularly affordable housing. Permit 12 story buildings.
- Continue to upzone Southside; would like to see 2000 new units.
- Larger units along University Ave. Need for mixed use, as well as housing. Incentives for ground floor retail.
- Very low income and low-income housing: Sites evaluated based on competitiveness with regard to ability to obtain funding. Would like more formal reports regarding affordable housing made available to residents. Would like a scoring of site inventory.

Group 3:

- How is the City calculating the feasibility of developments being built?
- Alene - Requirement of the housing Element for City to assess. Permit review is used as part of process to assess.
- Would like to see that districts that have been historically exclusive (ex: Claremont Elm) contribute to provide low-income housing
- Shocking to look at R-1, R-2 maps (given exclusivity). Would like to see higher density in these districts in a way that is considerate to existing residents and keeping the neighborhood character in mind.
- Should consider/focus large-scale developments in single family zoning districts.
- Reducing poverty concentration is important. MLK (North of university) feels like should be zoned higher. It is currently zoned R-2A.
- Addison and MLK area should be zoned higher. C-T area north and south of Dwight should be zoned with greater density. No noticeable difference between north and south areas and doesn't feel like there should be different types of zoning between areas.
- Any area zoned for medium or higher density should allow for commercial uses (specifically on the ground floor). This kind of allowance is seen in other cities.
- Would like to see additional flexibility in development standards to allow for commercial uses.

- Other cities are developing with lots of retail uses within residential buildings. This reduces the necessity for cars.
- There should be some caution while deciding what businesses are added next to (incidental/ within) residential uses. Business should be in support of the community and should be reviewed with some discretion.
- If necessity for cars is reduced (through easy access to places we all need/want to go), BART should be part of the solution to facilitate the community's use of transportation and proximity to uses people often frequent).

Group 4:

- R1-R1A (upzone); north berkeley
- allow for more housing in west berkeley/ near industrial area
- R1-R1A (upzone); north berkeley - lots of room for more density and more dwelling units
- Concerned for the displacement/ demolition of existing rent controlled units; protect rent controlled units
- R2-R3H, along telegraph upzone for student/ dense/ mixed use housing
- Southside/ downtown (upzone);
- interested in local shuttle system

Additional Notes from Surlene

Locations

- The Industrial Are and Downtown can be denser.
- Would like to see more mixed use, like on Telegraph, in the taller building where it is not parking but a place to walk in and shop.
- Cedar and 4th Street has some abandoned homes. Would like to see similar in other locations.
- 6th Street has room for more homes that wouldn't offend the surrounding home owners.
- North Berkeley -- R1 determination ... has a single family feel but could accommodate more housing. More density like the photos on the left side (the multi-story units) (from a N.B resident)
- North Berkeley - Lots of room for more people and more density.
- South Berkeley - increase the density of R2 zoning off of Telegraph -- offered in context of student housing. (from a student)

Concerns

- Lots of comments about housing and displacement and how will we preserve it. Concerned about it.
- Likewise, the express need for a shuttle and transportation services, and need for toxic remediation.

Question - that may need to be defined in future

- When we say "surrounding neighborhoods" how far way is that? For some of the locations on the boards if you go a couple of blocks in a certain direction you are in a different kind of neighborhood or on a transit corridor etc.

Pulled from the chat

- I had said Virginia at Fourth Street but, the abandoned homes I was thinking about are actually on Cedar Street at Fourth Street.

Group 5:

- more development around campus
- rezoning in southside, affordable and easy walk to campus
- great place for housing that supports anti gentrification without going into neighborhoods historically used by others
- +1 better utilize space there
- access to transit important
- lack of grocery stores and other amenities (lots of barbershops) Southside. housing on MLK style is appreciated and could be seen here
- more in hills near campus
- develop around solano ave and thousand oaks. have all types of income here including low income and very low income
- access to bikeways in west berkeley and upzoning here (Sacramento and West)

Part B: What are the features of each building that make in appropriate (or not) with the surrounding

neighborhood?

Are there places in Berkeley where you would like to see more of this type of development?

Group 1:

2 -4 Units Per Lot

- Shared driveways between lots Fifth St.: Usable green space vs. concrete Lots and mulit-units for intergenerational family dwellings
- Don't foreclose solar development on residential
- 5th street good example of style that met family needs
- Build community into MF housing design (x3)
- Like integration of architectural features of hood
- Transition from backside of corridors to R
- Be careful of being too subjective
- What's currently there is not necessarily the best model
- eight st. example is most dense and looks very seamlessly built-in
- Are there places in Berkeley you would like to see more of this type of development?
- 5000 sf R-1 are great candidates
- Look hard at R-1 zone -- don't see any examples

5+ and Mixed Use

- Like Jones because of green space
- Ground floor retail often vacant -- what would be better use?
- Density bonus for green space
- Love the windows -- can that be part of standards?
- Repurpose vacant ground floor for housing
- Provide allowance for aesthetic -- function of resources available
- Don't always need ground floor commercial -- can be R in some contexts
- All elegant -- like articulation on the facade
- Jones a bit jarring but ok
- Happy with all -- build more MF in general; favorite are U and Shattuck
- Keep ground level commercial functional -- work with existing tenants (x2)
- Additional Notes:
- likes all types of these examples, still seem pretty low-density, want more shared driveway space
- want more shared green space with more high-density residential
- typical for residential to abut commercial -- commercial should not block solar on residential
- building community in multi-family housing
- architectural styles that use height, but the height is set back so it's not imposing on the street
- attached is more efficient, but detached provides desirable green space
- appropriate vs. less appropriate styles -- subjective, not very objective
- perpetuates existing structure even in situations where it's not working. someone might be the first on their block to be higher-density, don't always replicate what's already there
- r1 neighborhoods have the biggest lots/lowest density, those are possibly the best places to develop for multi-generational households
- some r1 houses have the most overconsumption

Group 2:

2 -4 Units Per Lot

- Small setbacks (potential for better managed landscaping). Suggestion to allow four story buildings in the rear. Height limitations being greater than 2 stories is good. Missing middle housing sizes are ideal for families.
- Pandemic brought us to the point where we're appreciating air, green space, open space, etc. Context of where to put units is critical. Thinking about sunlight impacts. Jones on Cedar -- good job of tall in the back to protect sunlight of neighbors. Consider: what are we impacting in the community?
- There does not appear to be any zoning continuity that provides a sense of place. Main corridors are very underutilized. Consideration of where students should be, families should be, etc. Would like to see single-family housing remain that way. Missing quality (amenities - such as sunlight); not a density issue. Maintain a reasonable height. Context is key, but it is

challenging to codify context.

- Echoing prevalence of underutilized lots, support for new housing respecting existing neighborhoods. Concern with upzoning is that it increases the cost of land, limiting affordability of future development.
- Would like to see something built at 2119 University. In general, would like to see faster construction.
- Context varies. Dependent on how well the development is done. Challenging to determine. Sunlight is key. Character is subjective.

Group 3:

2 -4 Units Per Lot

- Compatibility (height/building character-wise) is not as important for preserving neighborhood character. It is more important for neighborhood to green spaces. Willing to see less lot coverage to allow for these kinds of spaces.
- Likely there will be pushback that the development shown examples will affect privacy/views. City should be prepared for this pushback.
- Examples seem to work within their districts. Important to take the context of the surrounding area. If projects were administered ministerially, there should be care in developing objective standards so that buildings don't intrude in surrounding area. Detriment is not clearly defined in BMC. Definition should be clarified, especially if buildings shown in examples are going to be placed in R-1/hillside like districts.
- Not much concern about preserving lot coverage to help combat housing crisis.
- Southern part of City feels lacking of parks. City needs more even distribution of park/ community use resources/spaces.
- From brief glance looks unfriendly, but might be in character with surrounding manufacturing neighborhood.
- For building height, consider allowing extra height if building has pointed roofs.
- Would like to see focus on ensuring that there are trees with development and protection of trees with development. Important to preserve setbacks to keep trees (MLK).
- Does City have any efforts/information on how City will develop standards/review that will protect solar panels that might be affected by neighboring higher (height) development? -City acknowledges this may be an issue/ resident concern and will be considering while developing standards.
- Additional concern for City: if solar panel effectivity reduced, if there will be some kind of monetary compensation/shared costs.

5+ and Mixed Use

- High density in Berkeley. Currently we tend to like lower height buildings (to protect existing views), but would be nice to see higher buildings to allow residents to have views as well.
- Important to consider transition for larger developments. There are always residential areas adjacent to commercial corridors. Important to not block solar panels (on residential development). Important to have objective standard to protect llower density) residential uses. Finds protecting detriment important, but not necessarily with neighborhood preservation (form).

Group 4:

2 -4 Units Per Lot

- General comment: all projects blend in well with the surrounding area --> projects could potentially be even greater in height/ additional floor
- consider that not all residents have cars - consider parking permits/ RPP - consider first/ last mile issues

2817 Eighth St

- height of development positive: high density - makes use of entire lot
- no driveway space/ off-street parking = more housing
- reduce off street parking as part of project

5+ and Mixed Use

- flexibility in design; don't impose prescriptive design standards - allow for greater height
- existing buildings fit in well with the existing geo context (southside/downtown)

2119 University Ave

- good example of a mixed use project
- Are there places in Berkeley where you would like to see more of this type of development?
- Cedar: demo/ redevelopment of abandoned homes could allow for more density
- South Berkeley - build up/ increase density
- 1425 Oregon
- West Berkeley
- vacancy tax

Additional Notes

Design Consideration

- Many of the buildings currently / recently being bult look the same. There should be some latitude in design. There should be an "appreciation" for height, blend in with the neighborhood.
- Don't waste space on parking.
- The long driveways are a waste of space. Could be used for green space.
- Need to have some green space.

Density

- The student areas in town can be dense. Student areas the housing units are smaller thus they can be more dense.
- Keep with character of the neighborhood but there are places that can go higher and not be so noticeable with one more story.
- More buildings like 1885 University and 1080 Jones
- There is an upside to up zoning

Group 5:

2 -4 Units Per Lot

908 Cedar St

- different rooflines provide visual variety
- like limited height- how does it impact neighbors shade and light?
- thumbs up - attractive
- doesn't tower over
- would like more setback on 2nd floor to not feel like wall on setback
- nice setbacks and garden
- effective use of space
- how fireproof is exterior ?
- should continue to preserve variety in design in Berkeley

1911 Nineth St

- disproportionate: feels bulky and massive compared to lot
- not as attractive as 908 Cedar
- loosing yards with high density housing like this - more intention to public spaces outdoors
- great 3 units on one lot: maximizing land
- limited garden space looks, industrial - could be softened with landscaping
- appreciate variety of styles. could have possibility for different size units

2411 Fifth St

- back duplexes look light and airy
- appreciate mixed use for walkability and efficiency
- clean design stands out
- different types of housing allow for different types of people in various stages of life
- need to do better job at common spaces and landscaping
- good foliage and landscaping between 2 units
- historic building more attractive than new
- aesthetic diversity: buildings spaced out enough and diversity is appealing
- entrances should not take up as much space

5+ and Mixed Use

1080 Jones St

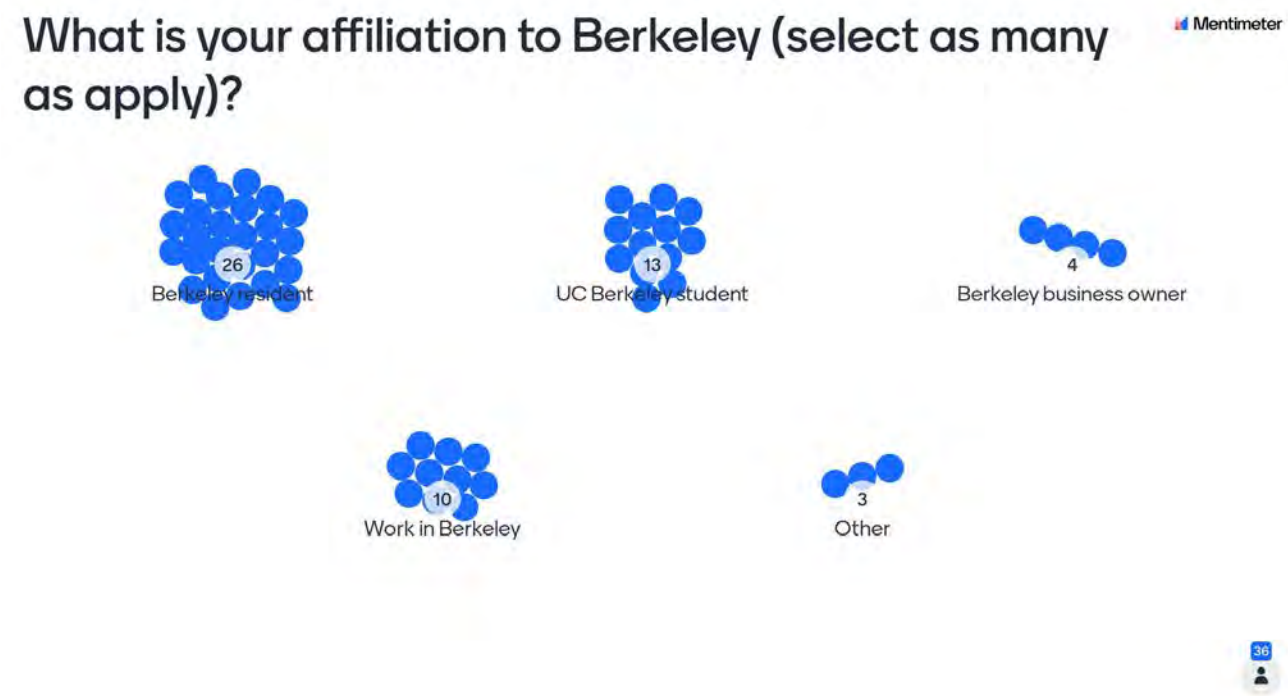
- no solar panels on roof
- 2nd and 3rd floor setbacks would allow more light in, possibility for balconies and tenants wouldnt get immediate sound impacts with setbacks
- very dark

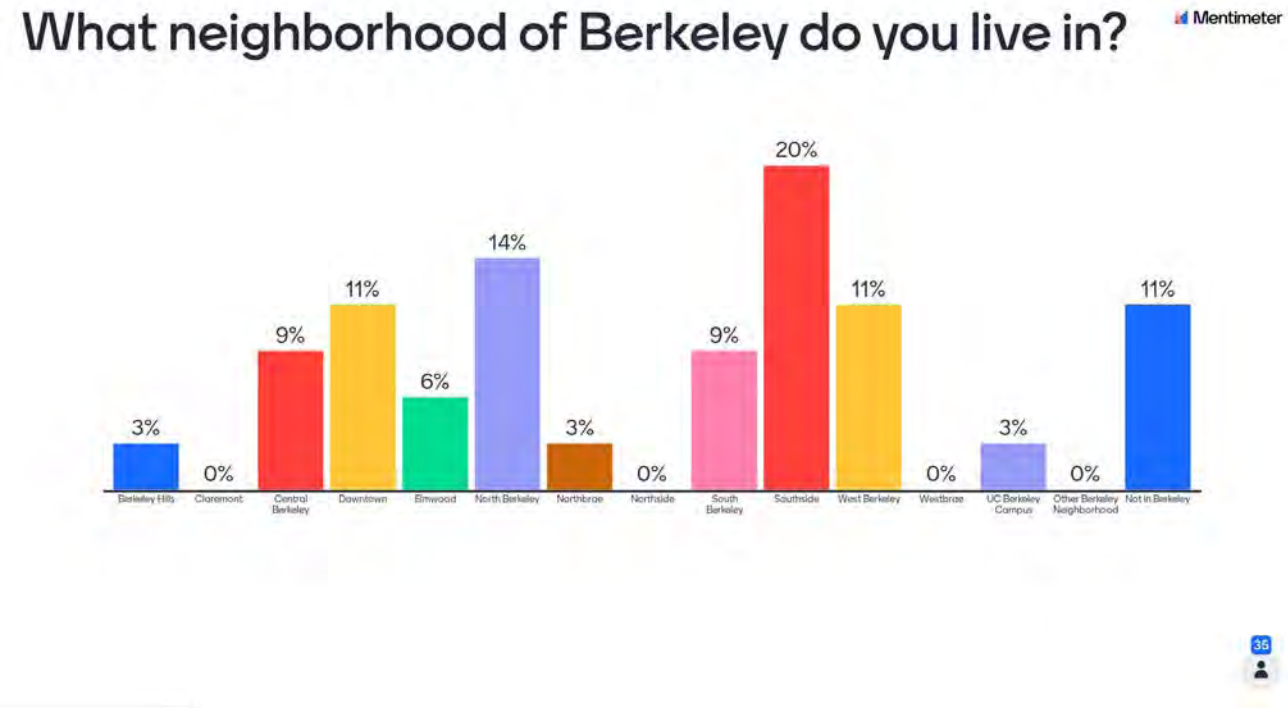
- dislike parking on first floor
- larger setbacks and more landscaping needed!
- big shade creator and large wall
- deep shadows on SP, problem for pedestrians
- shade has benefits like hot days, reasonable for busier street to have height
- building levels: townhomes fit in nicely with community on 10thstreet- concern with massing on SP
- set back and designs on 10th is creative and appealing - whole building should be more like that

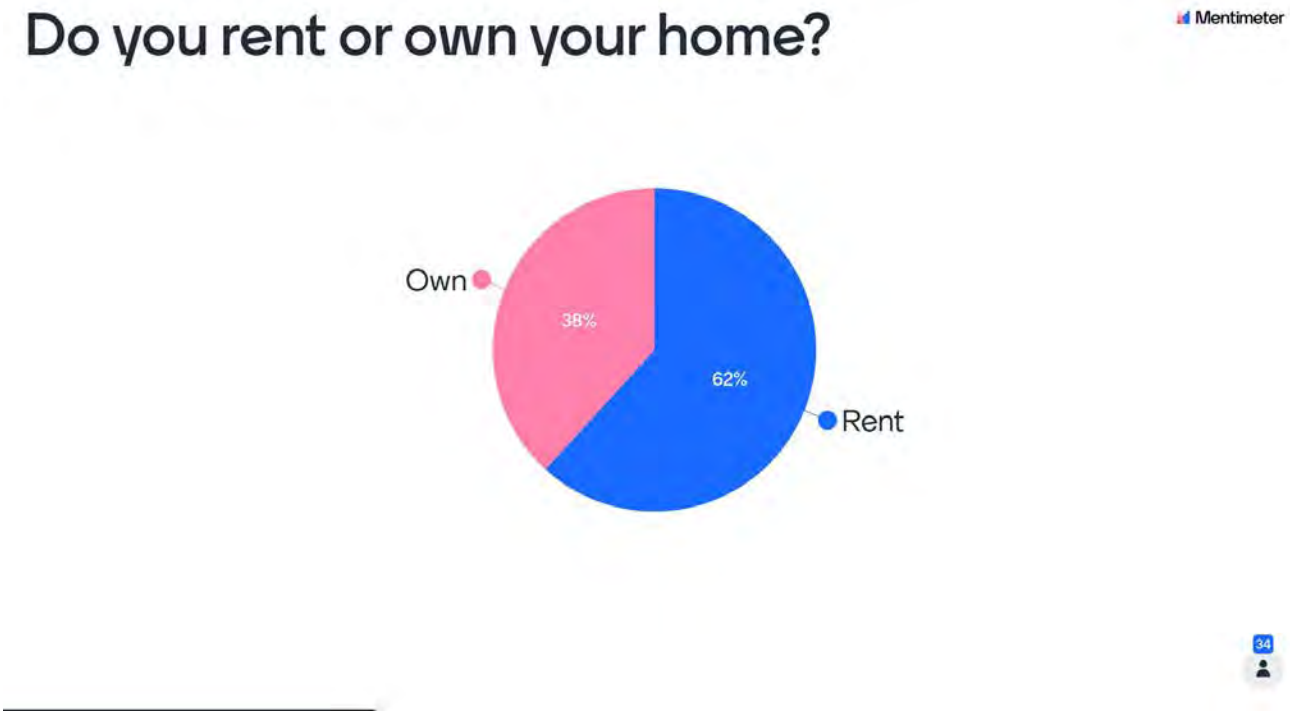
1185 University Ave

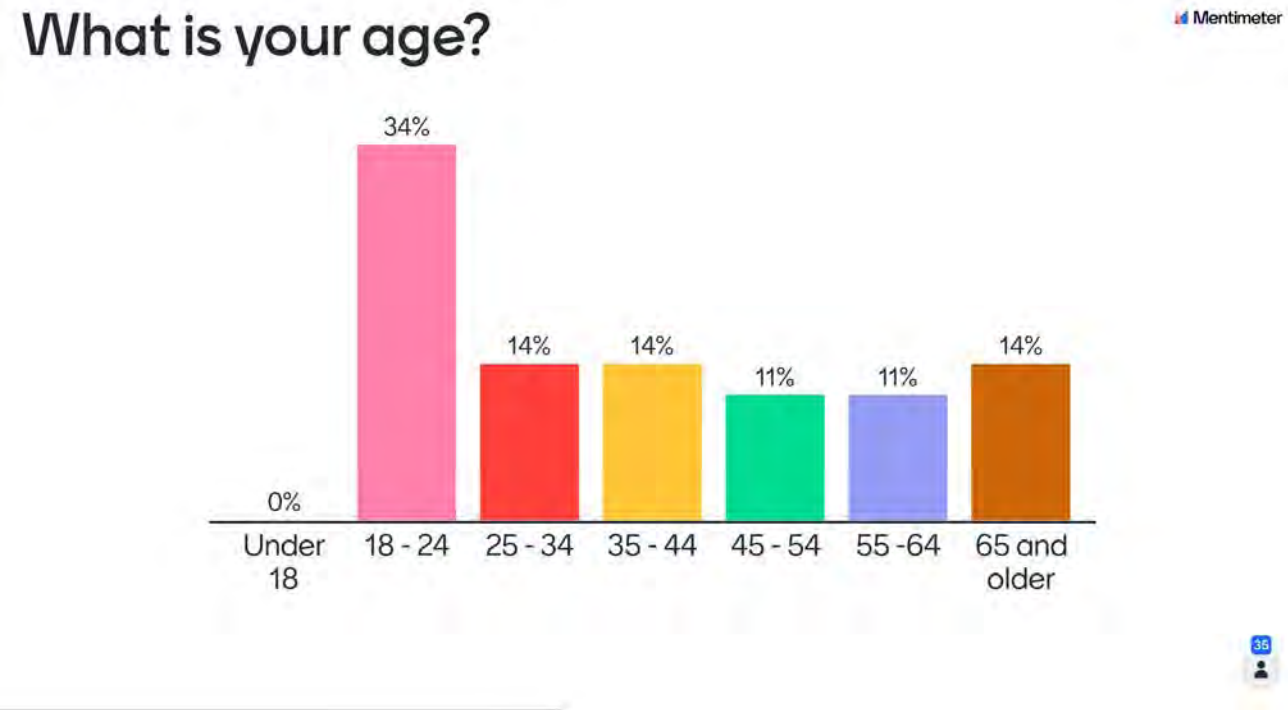
- appreciate consistency of design aesthetic
- color and overall aestetic feels lighter than jones
- like the retail (TJs)
- shopping is asset for residents
- appearance and detailing around roof more appealing than jones
- needs more consistent design elements between new and existing units to appear less stark and jarring
- more integrated design would be more appealing
- great example of residential above retail
- beautiful design - fits in neighborhood
- can walk around easily - good lighting in neighborhood
- could be more creative in design
- building is livable, works for people

Figure F-6 Community Workshop #2 Participation Polling Results



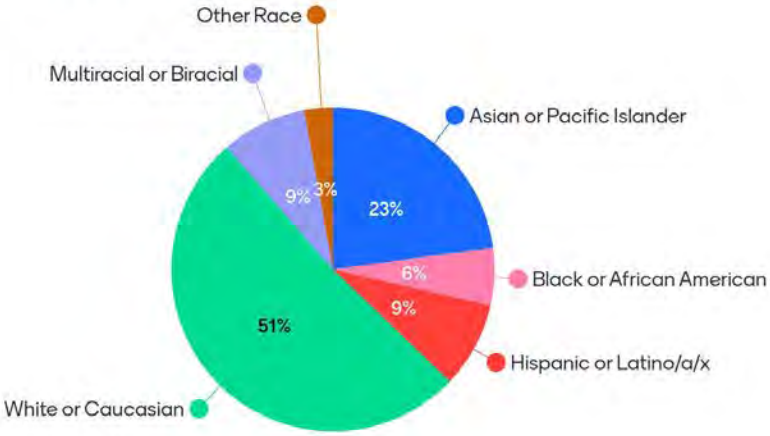



Do you rent or own your home?
Mentimeter
Own
38%
62%
Rent
34


What is your age?
Mentimeter
34%
14%
14%
11%
11%
14%
0%
Under 18
18 - 24
25 - 34
35 - 44
45 - 54
55 -64
65 and older
38

How do you identify?

Mentimeter



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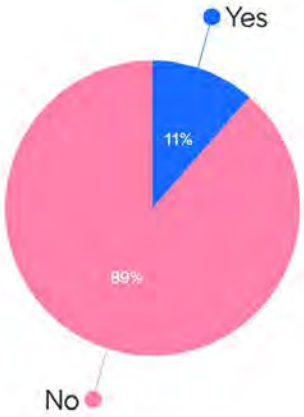
What was your total household income during the past 12 months?

Mentimeter

33

Do you have a disability (e.g., hearing, sight, physical, mental)?

Mentimeter



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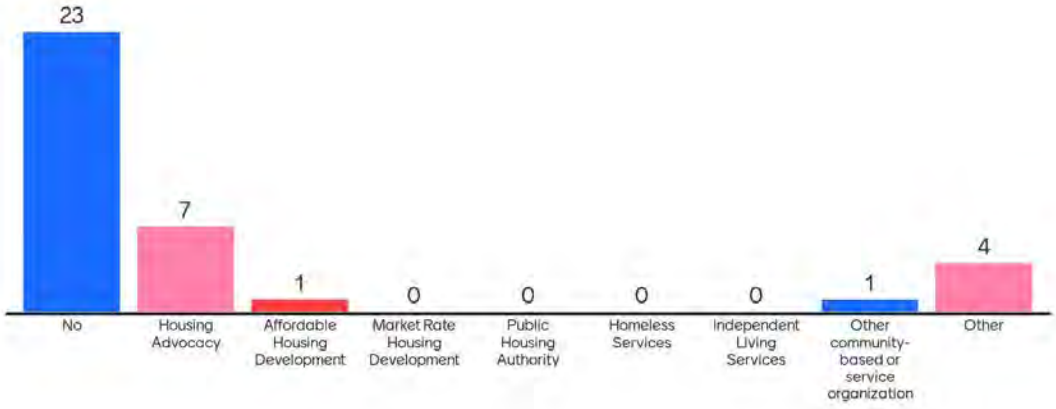
Do you work in a housing related field? If so, in which area?

Mentimeter



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F1.3 COMMUNITY WORKSHOP #3 - JUNE 29, 2022

OVERVIEW

On Wednesday, June 29, 2022 from 6:00-8:00pm, the City of Berkeley hosted its third community workshop for the 2023-2031 Housing Element Update. The primary objective of the meeting was to allow for community members to provide feedback on the public draft of the Housing Element Update, which was made available to the public on June 14, 2022.

The workshop was held virtually on Zoom. An invitation and registration link for the public workshop was sent to approximately 400 subscribers of the Housing Element email list, and attended by approximately 50 participants.

The workshop began with participants filling out an optional demographic poll, followed by a staff presentation on the public draft of the Housing Element, focusing specifically on the sites inventory and middle housing. The slides and video recordings were made available on the project website.

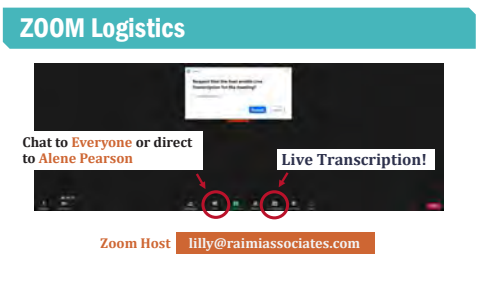
After the presentation, staff opened seven Zoom breakout rooms, each assigned a different topic:

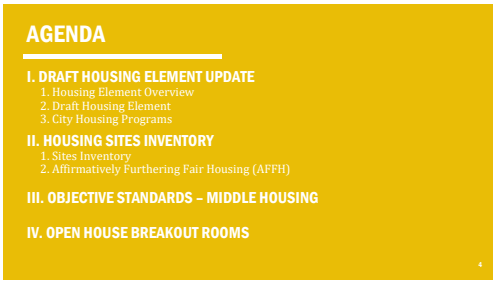
- Room 1 - General Comments
- Room 2 - Sites Inventory: North of University
- Room 3 - Sites Inventory: South of University
- Room 4 - Housing Programs: Health, Housing, & Community Services
- Room 5 - Housing Programs: Rent Stabilization Board and Berkeley Housing Authority
- Room 6 - Housing Programs: Planning, Office of Energy & Sustainable Development, and Building & Safety
- Room 7 - Middle Housing Standards

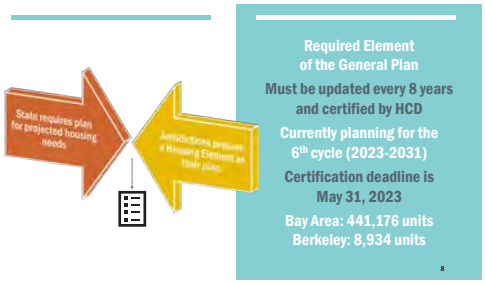
Participants were then able to move between the rooms of their own accord. Each room had a facilitator and a notetaker, answering and recording questions and comments.

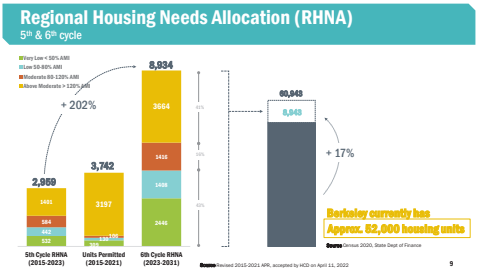
Figure F-7 Workshop #3 Break-out Room Boards

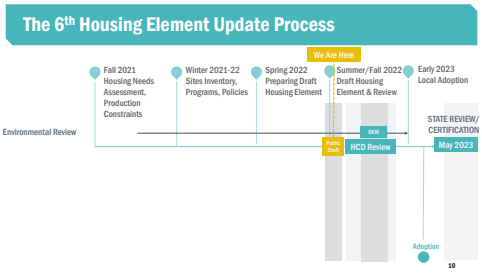
Figure F-8 Community Workshop #3 Presentation

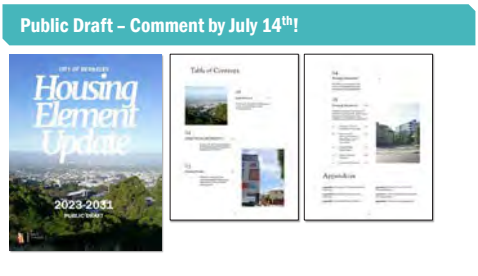


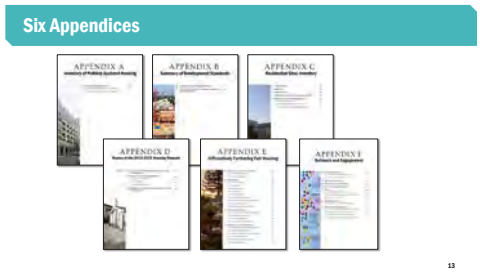


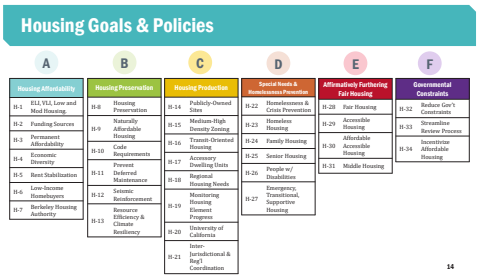


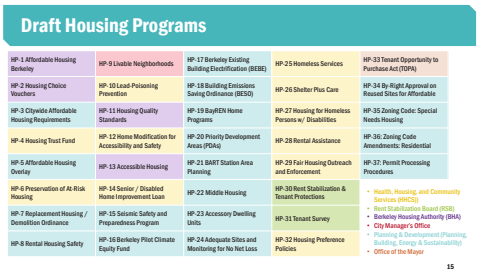










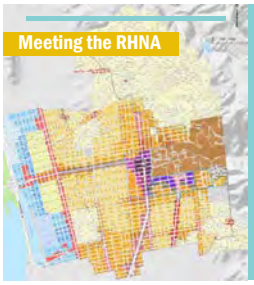


HOUSING SITES INVENTORY

1. Sites Inventory
2. Affirmatively Furthering Fair Housing

16

Meeting the RHNA



- Adequate Sites
- Zoned Appropriately
- Available for residential use
- Capacity to provide units, by income level, required by RHNA
- Meet HCD's criteria (physical characteristics, density)
- Meet new affirmatively furthering fair housing objectives

Likely Sites

ADU Trends

N Berkeley & Ashby BART

Approved Projects since 2018

Very Low	Low	Mod	Above Mod	Total
622	628	249	3,186	4,685

Pipeline Sites

Projects under Review

Anticipated

Very Low	Low	Mod	Above Mod	Total
204	180	68	1,962	2,414

RHNA

Very Low	Low	Mod	Above Mod	Total
2,446	1,408	1,416	3,664	8,934

18

Opportunity Sites: HCD Affordability Methodology

Density Assumption: Average density achieved for 116 recently approved, under construction, or completed mixed-use and residential projects per zoning district.

	< 80% AMI Lower Income	80 – 120% AMI Moderate Income	> 120% AMI Above Moderate Income
Size of Site	Between 0.35 to 10 acres	Between 0.1 and 0.35 acres	
Density Assumption	At least 30 du/ac*		Less than 30 du/ac
Site Capacity	At least 50 units	Between 30 to 50 units	Less than 30 units

***30 du/ac is the "default density"** - considered suitable to encourage and facilitate the development of affordable housing [GOV 65583.2]

19

Affirmatively Furthering Fair Housing

- Fair Housing Outreach and Education
- **Housing Mobility**
  - A variety of housing choices
  - Ability to age in community
  - Access to services and amenities
- **New Opportunities in High Resource Areas**
  - Distribution of lower income units
- Place-Based Strategies for Neighborhood Improvements
- **Tenant Protection and Anti-Displacement**
  - Replacement of demolished units

20

Opportunity Sites

Vacant or Underutilized

Improvement to Assessed Land Value ≤ 0.75

Non-residential Building > 30 yrs old

Federal, State, County-owned

Condo or Large Apartment Bldg

Historically-sensitive

Rent-Controlled Units

Most Supermarkets

Very Low	Low	Mod	Above Mod	Total
1649	1649	2886	2845	9028

RHNA

Very Low	Low	Mod	Above Mod	Total
2,446	1,408	1,416	3,664	8,934

21

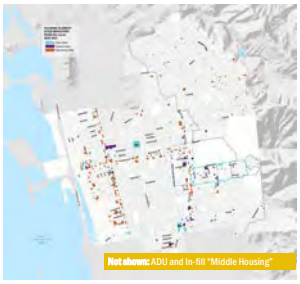
Likely Sites

Pipeline Sites

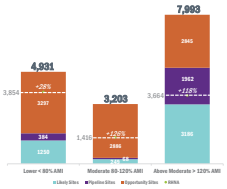
Opportunity Sites

Affirmatively Furthering Fair Housing
Racial Diversity
Concentration of Poverty
Environmental Equity
Community Benefits

Ensure affordable housing is distributed and balanced in "high opportunity" neighborhoods.



Meeting the RHNA



NOT ACTUAL DEVELOPMENT PROPOSALS

- City is not required to build or finance the housing
- Does not automatically authorize the construction of housing units
- No obligation by property owner to take action
- Reliant on the development industry (market rate/affordable) to construct

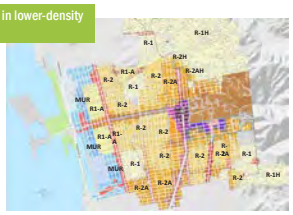
OBJECTIVE STANDARDS – MIDDLE HOUSING

1. Housing Element Program
2. Public Input
3. Preliminary Development Standards

24

What is "Middle Housing"?

Smaller-scale multi-unit housing in lower-density residential neighborhoods



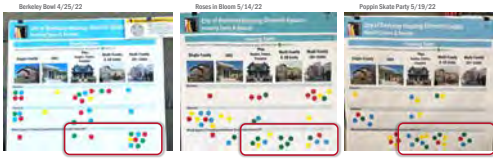
Program HP – 22: Middle Housing

- "Amend Zoning Ordinance to encourage and promote a **mix of dwelling types and sizes**, particularly infill housing in high resource neighborhoods."
- "Allow for **by-right multi-unit development** on one lot to encourage housing for middle- and moderate-income households and increase the availability of affordable housing in a range of sizes to reduce displacement risk for residents living in overcrowded units or experiencing high housing cost burden."

Program HP – 22: Middle Housing

- The Housing Element assumes **770 additional units** distributed throughout the lower density residential districts for the 2023-2031 period.
- To facilitate middle housing while balancing the need for affordable units, the City will also introduce a **reduced inclusionary housing** fee for middle housing projects with less than 12,000 gross square feet (GSF), with a sliding scale increase for projects with floor areas between 0 and 12,000 GSF.

Public Input



Desire for a mix of housing types and higher density living

28

City Council, Planning Commission, and ZORP Input

ZORP Subcommittees (12/15 & 2/16)

- Encourage smaller units that are "affordable by design"
- Permitting more density while discouraging financial speculation
- Balance protecting solar access and allowing higher densities

City Council (3/15)

- Permit higher density equitably throughout the city
- Incentivize adaptive reuse and smaller, more affordable units
- Allow more than four units on an individual lot
- Embrace climate adaption while accommodating additional units

Planning Commission (6/1)

- Allow more density in R-1
- Reconsider need for floor area ratio standard
- Discourage financial speculation
- Do more to incentivize smaller units
- Relax open space dimension requirements

29

PRELIMINARY DEVELOPMENT STANDARDS

1. Where Allowed
2. Allowed Uses & Permits Required
3. Building Size and Placement
4. Min and Max Density (Units per Acre)

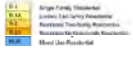
NOT A BLANK SLATE

- Existing Standards
- Development Patterns
- City Council Referrals
- State Laws
- Environmental/Social/ Economic/Demographic Factors

30

Where Standards Will Apply

Standards will apply in the R-1, R-1A, R-2, R-2A and MU-R districts, including in the Hillside overlay district.



31

Allowed Uses & Permits Required

	R-1	R-1H	R-1A	R-2	R-2H	R-2A	R-2AH	MU-R
Multi-Unit Residential	ZC	ZC	ZC	ZC	ZC	ZC	ZC	ZC

ZC = Zoning Certificate

Include consideration of the Hillside Overlay

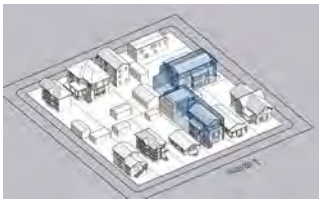
Discretionary permit still required for -

- *Structures of Historic Merit → Structural Alteration Permit*
- *Sites requiring environmental remediation*

32

Building Size and Placement on Lot

Standards
Floor Area Ratio
Height
Setbacks
Lot Coverage
Open Space



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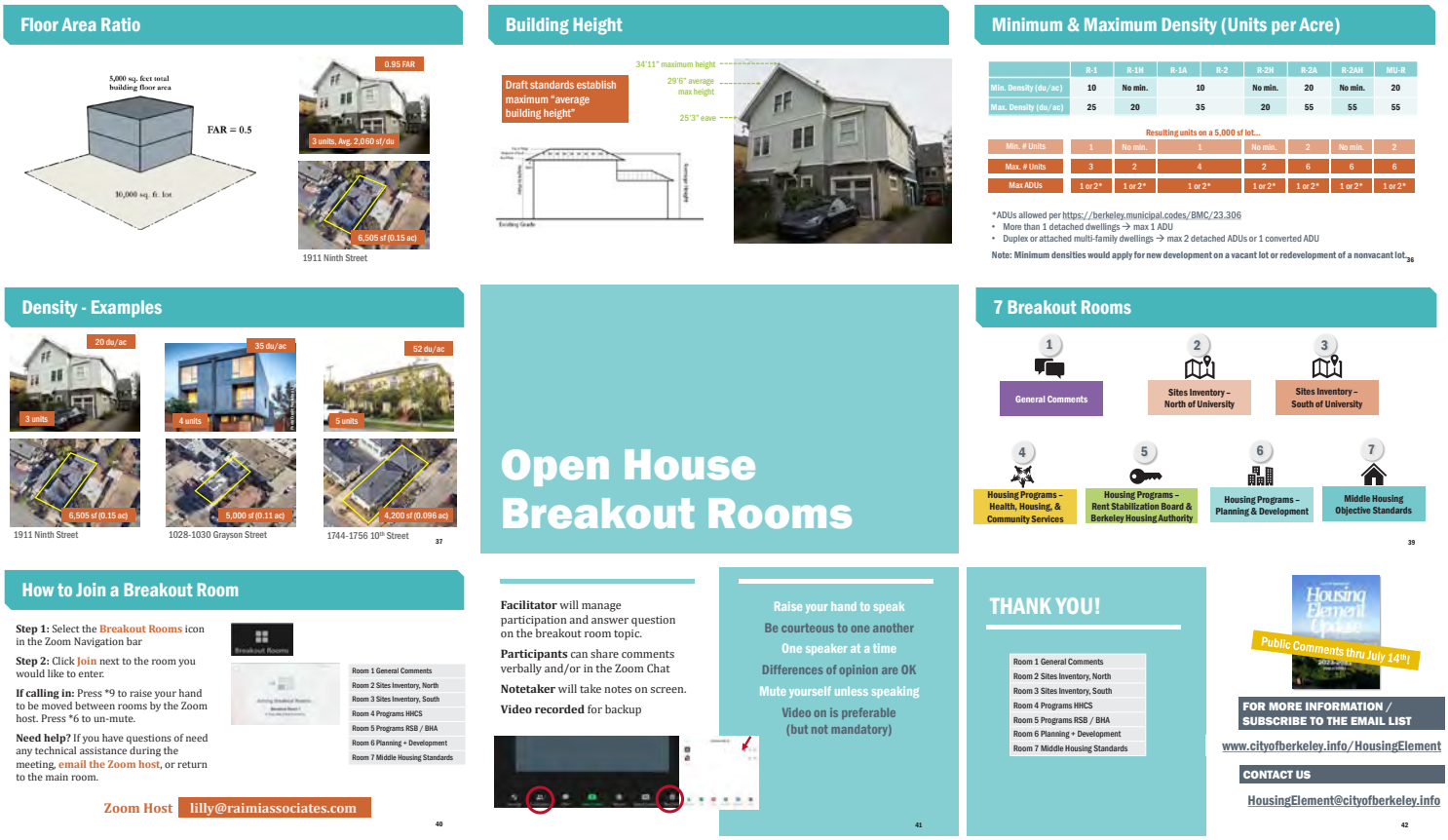


SUMMARY OF INPUT

Breakout Room Comments

Below are the unedited comments as recorded during the small group discussions. They have not been modified or reformatted.

Room 2- Sites Inventory, North of University

Should include parking lots and potentially faith-based institutions

Need high enough zoning to accommodate affordable housing

Edge of the city – unclear why this is on the list – Fire Hazard Zone. If we area serious about affirmatively furthering fair housing, housing needs to be developed in North Berkeley – seeing less of it in higher resource N. Berkeley

Make sure that the development of the sites are feasible. Berryman and Henry opportunity for housing on parking lots

1601 Oxford should not be on the site inventory list

Look into Cedar and Shattuck site that was once a drugstore – now going to be a climbing gym

Monterey Market should not be on the list. Andronicos as well. They are community resources and it is very unlikely they will be developed.

Room 3 - Sites Inventory, South of University

Methodology for TCAC zones can be better explained within the context of the HE and selected site inventory

Sites to include/ consider: Include center street

parking lots included as an inventory site (2445 allston way and directly across from berkeley city college) Fulton -between grant and bancroft: underutilized parking lot space

Friends of adeline: housing for south berkeley should be 100% affordable housing --> so that the historically marginalized can have opportunities in that area South Berkeley: lots of displacement POC bc of gentrification; populations traumatized

Room 4 - Housing Programs, HHCS

Need more 50% or less BMR units and ELI units

Allow people to access funds for renovation of vacant units

City should consider allowing community members be able to access HTF similar to land trusts

Better accessibility for low-income people with disabilities

AMI is too high for working class people, there is not enough and what we are building is rnot reflective of people's incomes; BMR rents especially are rapidly increasing and out of reach

The City should dedicate General Fund to HTF like SF

Need ownership downpayment support especially for POC, what federal rants are we applying for?

Should reference potential new funding sources such as a potential housing bond

Outreach should mirror public health immunization outreach

City should put housing bond measure or commitments to further expand funding; should have fund dedicated to preservation and expanding small sites

Need better outreach for people to know about services, especially for AA/POC

There should be a massive PR campaign who are not active in government; reach out to churches and other AA institutions

When are they going to open up golden bear in? City should explore additional motels

New homekey rounds are flexible; City should consider using City-owned sites for homeless housing

Homeless services are difficult to access for lots of people; would someone from COB join AC County Healthcare for Homeless

When are they going to open up golden bear in? City should explore additional motels for homeless housing as well

How long will People's Park residents be at the Roadway Inn and will they be supported with the transition to permanent homes

TOPA should support single-family homes

If the tenant has insufficient funding, then the tenant should have the right to go to a land trust or nonprofit with the understanding that the rents will remain stable

The City needs to provide funding for people to purchase their buildings when they are sold

Need to set a date for TOPA adoption by Council

Need to show more specificity around an adoption and implementation timeline

There are services for people but people, especially black people and people of color, are not aware of them

AMI is now too high to effectively serve most low-income people in the community

What data do we have on equitable outreach to Black/POC people? We need to have thresholds for seniors, disabilities, and income. We need to increase targeted outreach to improve outcomes

Homeless Services are targeted towards addiction, seniors, disabilities, etc. and services/service

providers can not meet needs when people don't fit into these boxes

Need support for people who are made homeless when their buildings are sold and rents are raised substantially

Need more support for homeowners and property owners of rental property with low-income/resources

Room 5 - Housing Programs, Rent Stabilization Board and Berkeley Housing Authority

1500 vouchers in Berkeley

Project based vouchers to developers.

Room 6 - Housing Programs, Planning, Building, OESD

Oakland Berkeley Hills are likely to catch fire again and does have a history of fire and emergency evacuations.

The City could take a stronger role in building a park/ school/houses.

How much of new building units are vacant and are people actually living in those units? What about vacant ground floor retail commercial? The City of Berkeley has a very low vacancy rate of housing units and especially for rental units, between 2-4% depending on the year. Potentially need to look at what active uses are and what is considered as active retail commercial and the standards that require those.

In the current housing element zoning, we have a history of having small shops that have been converted and some exist. In the updated housing element is there allowances for new ones to come back in a residential area? In the past two years, the City has relaxed regulations on home occupations. The home occupation permit is nod, to many people working from home, and recognizes to allow more variety of uses in those neighborhoods.

Are we speaking about homeless housing and other special needs populations? It is part of the Housing Element to include policies and standards for special needs housing. There are also regulations for various types of housing and living arrangements but there may additional programs where this could be incorporated.

HE has requirements for furthering fair housing - 100% of housing would be concentrated on San Pablo, Shattuck, and concentrating density near transit as opposed to narrow streets. Believe there is a misunderstanding about the inventory map. The map is showing where housing can be accommodated however more analysis on specific sites would be conducted in the future to facilitate housing throughout the city not just on the corridor but in High Resource Areas.

How would this be possible without rezoning the single-family neighborhoods. Residential Objective standards would be changing some of the regulations that would allow additional densities in those areas, based on the existing zoning standards. Triplexes/ Duplexes...

Open space was not specifically noted and is an important topic including climate resilience. 5-6 stories may be more environmentally positive? More trees and more open space is also important. The community has expressed a desire for more open space and desire for more flexible open space. Flexibility and Open space is being looked at and Residential Objective Standards are still being developed and is still open for additional comments and feedback.

Nature occurring affordable housing? What are we talking about? Housing units that are low cased based on their size or when they were built. Naturally occurring affordable housing may be apartments built in the 70's ~ sometimes may hear more affordable

housing.

New Housing today may be affordable in the future, how much emphasis is on the quantity of housing as opposed to lower income housing, how feasible is this? 60% of the City's RHNA is below market rate housing, consistent with all cities in the state. These are targets are the City of Berkeley has policies that promote affordable housing like the Inclusionary Housing Policy. The State also provides incentives for affordable housing including Density Bonus and waivers and concessions to promote affordable housing to meeting RHNA targets.

Berkeley has exceeded RHNA targets for market rate, but not affordable, and it seems likely that this would occur again...If in the future this occurs again what are the implications of that? Many jurisdictions in the State are in a similar situation and for years there were no repercussions, but since 2017 the State has passed new legislation where jurisdictions are penalized ~ or may be required to streamline projects if they do not meet RHNA requirements. The State may take away discretionary review for housing projects and may take away local control to further housing. State may levy fines or withhold housing. It may depend on the State and progress.

Majority of residents are making over 75K a year and may be a vary wealthy community in the future. The whole system should be thought about in the future to be more inclusive of all types of incomes and people.

There should be some transition and buffer between really tall apartment buildings and existing housing. Specifically concerned about Parker St. neighborhood (R-4 on south side of Blake, near Milvia). Not sure of the history of the site but we'll be discussing when we're planning to update the land use element update in the future.

A couple of things the state may look at closely, the opportunity sites that are non-vacant, and HE must discuss why the existing use would go away.

The Hills may all be R-1 and seem to be excluded from more density - understand that there is concern about traffic during an emergency. Has anyone studied this? The City is required to look at hazard mitigation plans, and the Safety Element needs to be updated. We will be looking at those types of metrics. PW and the fire department has conducted most of the analysis with regards to access and accessibility issues. These are some of the issues we've grabbled with increased densities through the state ADU laws and SB9.

Most of the development project are not well thought out. If the City took charge and would become the developer there may be some unexplored potential. Because the City does not own the land, we cannot proposed development on the lands.

Oakland spoke about anchoring the neighborhood but it would be great if one entity could have control over development. Does the Berkeley Planning Commission take into account the the entire neighborhood. The City of Berkeley has a Zoning Adjust Board (ZAB) and when subjective review is allowed then modifications of projects may happen to allow step backs/ step downs/ architectural details like windows and entrances. Take note that how can incorporate neighborhood context and how can we objective look into those standards.

Room 7 - Middle Housing

- Standards need to consider water quality, groundwater recharge, heat island effect, and ecosystem services , particularly WRT climate.

- In addition to zoning, are there any other efforts to encourage/incentivize Middle Housing?

- Increased height standards could effect solar access. Fall and winter are the most important seasons to assess any effects, so analysis of these times should be considered.

- An average maximum height of 35 feet could result

in a building as tall as 50 feet. If a density bonus were used on a 5 unit project, you could also have a taller building, as well.

- Objective standards should be developed to determine when shadowing of a solar panel should require mediation, arbitration or other consideration.

- Could there be an effort to survey Berkeley property owners to see whether there is any interest in building housing consistent with these recommended changes?

- Almost all of Berkeley residential power is 100% clean. Solar power on a roof may not necessarily provide more renewable energy. Opposed to any shadow measures because energy is already clean trough the grid.

- What about larger housing, and social housing (including design elements that encourage sociability (courtyard, for example), even with smaller individual units (Redwood Gardens, as an example)

- Can standards be developed on an area-wide basis,, as opposed to just building by building? Concerns about sufficient open/green space.

- Concerns: parking and shadows."

Need to make sure there are housing opportunities that include back yards not surrounded by dense buildings. Also, there need to be places that people enjoy and can build families. Some approaches to housing seem driven by developers.

More paving can lead to water quality impacts and discourages groundwater recharge.

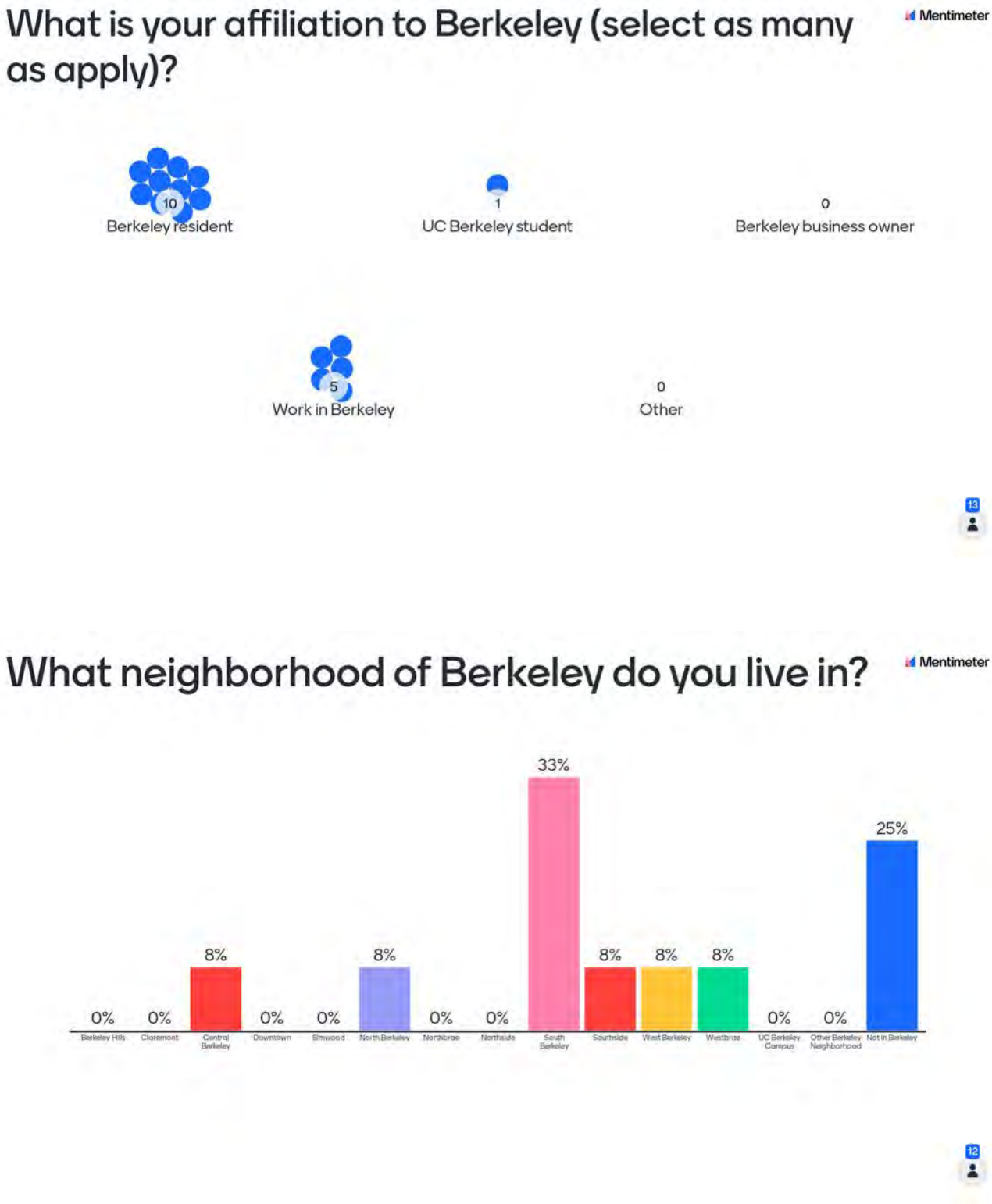
Would setbacks pertain to garages, as well, like detached garages that are up against the front property line? Could garages be used for averaging smaller front setbacks?

What is the public purpose of having setbacks in the first place? For many lots, the placement of a house is pretty arbitrary. Setback regulations are aesthetic and restrict development unnecessarily.

4 foot setbacks make sense for fire-related safety issues. 20 feet is too much

Whats the difference between street side and front? How about if the entrance is on the long side. (Gregory Lemieux, attendee -- follow up with answer)

Figure F-9 Participation Polling Results



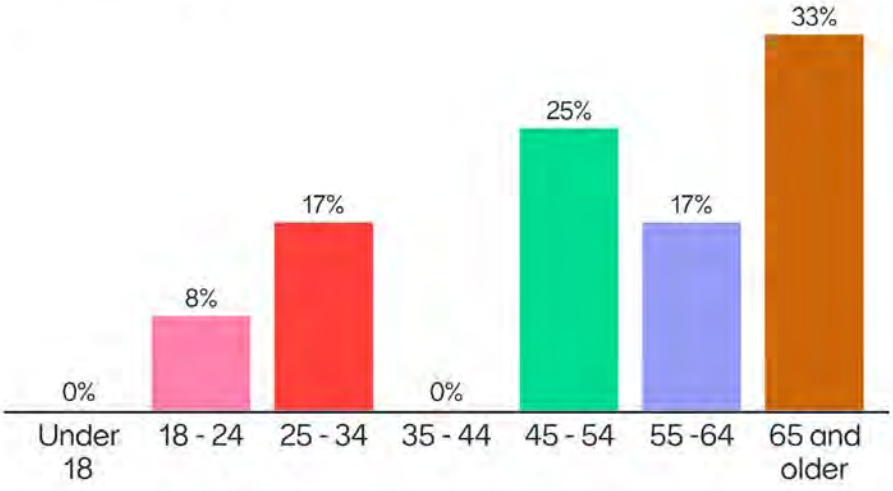
Do you rent or own your home?

Mentimeter

12

What is your age?

Mentimeter



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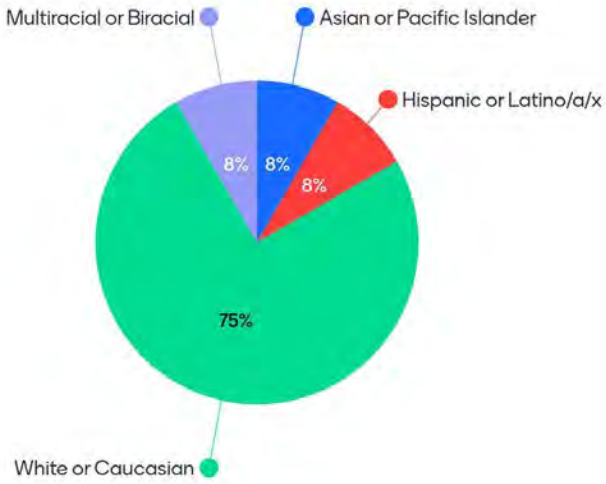
How do you identify?

Mentimeter



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What was your total household income during the past 12 months?

Mentimeter

11

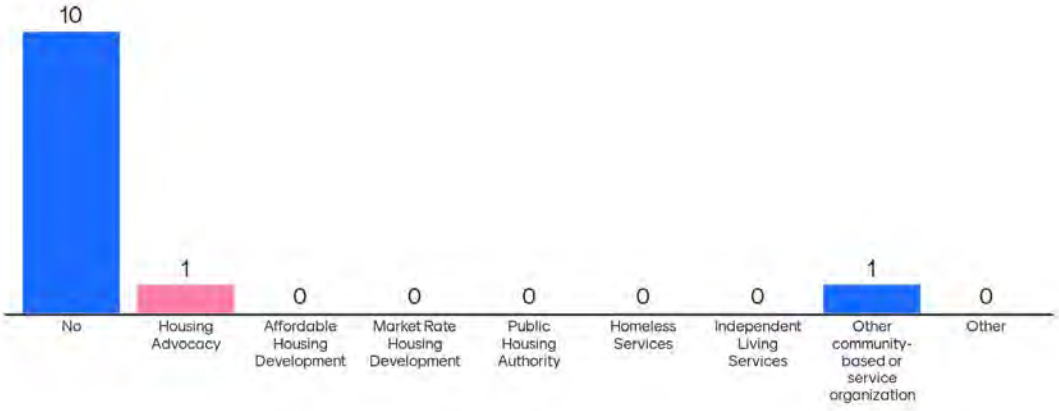
Do you have a disability (e.g., hearing, sight, physical, mental)?

Mentimeter

11

Do you work in a housing related field? If so, in which area?

Mentimeter



11

F2 CITY COUNCIL WORK SESSIONS

Between September 2021 and September 2022, the City of Berkeley hosted four City Council Work Session, during which updates on the project were presented, public comment was taken, and decision-maker feedback was obtained, providing policy direction for identifying suitable sites, housing programs, and zoning efforts. Each subsection will include the staff memo and work session presentation.

Office of the City Manager

WORKSESSION
September 21, 2021

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Jordan Klein, Director, Planning and Development Department

Subject: Housing Element Update Work Session

SUMMARY

Berkeley is engaged in an 18-month process to update the Housing Element of the General Plan. This update occurs every eight years and is mandated by State law. The 6th Cycle Housing Element Update must be adopted by the City Council, and the statutory deadline for submitting to California's Department of Housing and Community Development (HCD) is January 31, 2023. Berkeley hired a consultant team led by Raimi & Associates to provide the necessary technical expertise and wide-reaching public outreach efforts to ensure that the City delivers a State-compliant Housing Element that reflects Berkeley's diverse character and needs. This report follows the April 28, 2021 memo on the Housing Element (see Link 1), providing more detailed information on the State's Housing Element requirements as well as specifics on the City's approach.

CURRENT SITATUTION AND ITS EFFECTS

The Housing Element Update is a Strategic Plan Priority Project, advancing the City's goal to create affordable housing and housing support services for its most vulnerable community members. The Housing Element Update will serve as the City of Berkeley's housing framework for the eight-year period between 2023-2031 (herein referred to as the "6th cycle"). Each jurisdiction in California receives a target number of homes across income levels to plan for called the Regional Housing Needs Allocation (RHNA). State law does not require that jurisdictions *build* or *finance* new housing required by the State's RHNA, but the Housing Element must *plan* to accommodate the allocated units with appropriate land use policies and development regulations.

The Housing Element Update addresses a range of housing issues such as affordability, diversity of housing types, allowable density and project locations, housing for those with special needs, and fair housing for disadvantaged communities of concern. In addition, it establishes goals, policies, and programs that will guide the City's decision-making around the development of housing to address existing and projected needs with a mix of housing opportunities that will serve a range of income levels.

Recent legislation resulted in changes and new requirements for Housing Element Updates that occur in the 6th cycle:

1. Higher Allocations. State law requires that HCD update its regional housing methodology to account for unmet existing and future housing needs. This includes an analysis of overcrowding and cost burden, in addition to projected housing needs, which raised the total regional allocation for new units. Overall, the Bay Area must plan for 441,176 new housing units during the 6th cycle, compared with 187,990 for the 5th cycle (2015-2023). Berkeley's draft 6th cycle allocation is 8,934 units, a 202% increase over its 5th cycle allocation.
2. Affirmatively Furthering Fair Housing (AFFH). Using HCD's guidance and approach, Housing Elements must now affirmatively further fair housing by examining the identified policies, programs, rules, and practices to ensure that they will promote inclusive communities and prevent poverty concentration and segregation. Berkeley will access technical assistance provided by the Association of Bay Area Governments (ABAG) to ensure its Housing Element Update complies with this new requirement.
3. Site Limitations for Lower Income RHNA. New legislation (AB 1397) sets forth additional criteria for selecting sites that can accommodate the lower income RHNA category, defined as less than 80% Area Median Income (AMI)[1]. Identification of opportunity sites, which is a component of the Housing Element Update, will require consideration of:
    a. *Reusing sites from prior Housing Element cycles*. Projects with 20 percent of on-site units set aside for lower income households are subject to by-right approval without discretionary review unless rezoned for a higher density prior to the January 31, 2023 statutory deadline.
    b. *Rezoning.* Sites to be rezoned or upzoned after January 31, 2023 to accommodate the lower income RHNA are subject to by-right approval without discretionary review if projects include 20 percent lower income units. The rezone must also include a minimum density of 20 dwelling units per acre (du/ac) and a maximum density of at least 30 du/ac and be large enough to accommodate at least 16 units on site.
    c. *Mixed Use.* If more than 50% of the lower income RHNA is to be satisfied on mixed use or nonresidential zoning, then the sites must permit standalone residential and do not require more than 50% of the floor area ratio (FAR) for nonresidential uses.
    d. *Small or Large Sites.* Additional analysis is required for sites smaller than 0.5 acre and larger than 10 acres for the lower income RHNA category. In

[1] 2021 income levels by family size are available at https://www.acgov.org/cda/hcd/documents/2021IncomeandRentLimits.pdf

the 5th cycle RHNA, over 55% of the opportunity sites identified were less than 0.5 acres. To utilize small sites for lower income RHNA, the City must be able to demonstrate past trends, potential for lot consolidation, and programmatic response to facilitate lot consolidation.

e. *More than 50 Percent Nonvacant Sites*. If more than 50% of the lower income RHNA is being accommodated on nonvacant sites, the sites are subject to a higher standard of feasibility analysis. In the 5th cycle RHNA, nearly 40% of the lower income RHNA was projected to be accommodated on nonvacant sites.

4. Site Limitation for Moderate and Above Moderate Income RHNA Categories. New legislation (AB 725, effective January 1, 2022) requires that 25% of the moderate income RHNA (80-120% AMI) and 25% of the above moderate income RHNA (>120% AMI) be provided on sites that can accommodate at least four units, including accessory dwelling units (ADUs). In Berkeley, this would be applicable on conforming lots in every district except R-1 and ES-R. The State is working on bills to clarify AB 725.
5. No Net Loss. (AB 166) As development occurs, the City must continually monitor its residential sites capacity in accommodating its remaining RHNA throughout the entire eight-year planning period. If development on a specific site results in fewer units (total number and by income category) than assumed in the Housing Element, the City must demonstrate remaining capacity is available for the remaining RHNA. For this reason, HCD recommends utilizing a buffer for the lower and moderate sites inventory that exceeds the RHNA. The project team will analyze past trends of opportunity sites to determine an appropriate buffer.

Housing Element Update Scope of Work

The City Council directed staff to take into consideration seven key principles for the Housing Element Update:

- Robust Community Engagement
- Equity – geographic equity, equity in housing types and access
- Affordability and Community Benefits
- Public Safety
- Transit Proximity and Reducing Vehicle Miles Traveled
- Design, Neighborhood Context, and Historic Preservation
- Tenant Protections, Anti-Displacement, and Anti-Speculation Provisions

City staff and the consultant team will be incorporating these principles, amongst others which may be proposed during the public engagement process, in the analysis and development of the Housing Element. Raimi and Associates' project scope comprises four major tasks and the key principles will be integrated into Tasks 2 through 4.

- Task 1: Project Management
- Task 2: Community Outreach and Engagement
- Task 3: Update the Housing Element of the General Plan
    - Housing Needs Assessment
    - Housing Production Constraints
    - Sites Assessment and Inventory
    - Goals, Policies, and Programs
- Task 4: Environmental Review

Council also directed staff to consider specific rezoning strategies, which will be integrated with the Housing Element's site assessments strategy. Rezoning considerations include:

- Location. Focus on Priority Development Areas (PDAs) and locations near transit and commercial corridors.
- Zoning District. Focus in R-1, R-1A, R-2, and R-2A districts to allow for greater flexibility and variety of housing types beyond single-family residential.
- Residential Use Type. Focus on incentivizing the development of accessory dwelling units (ADUs) and junior ADUs on lots containing single-family residential.

This scope of work will integrate with concurrent land use planning efforts, such as planning at the Ashby and North Berkeley BART stations, Southside Zoning Ordinance amendments, Phase 2 of Zoning Ordinance Revision Project (ZORP) and development of objective development standards.

Housing Element Update Schedule

Due to strict deadlines imposed by the State and severe penalties for missed deadlines, it is extremely important that this project stay on schedule. The Housing Element Update timeline is well-defined and finite: the City must adopt the 6th cycle Housing Element and the statutory deadline is January 31, 2023. The majority of the housing needs analysis and assessment and sites inventory must be completed by early 2022 in order to allow for sufficient time to conduct a thorough and legally defensible environmental review (see Figure 1: Housing Element Update Project Timeline).

In addition, Zoning Ordinance and General Plan amendments will be identified in early 2022 and reviewed by Planning Commission in Summer 2022 in order to be adopted by City Council in Fall 2022 prior to the adoption of the Housing Element Update in January 2023. Missing the adoption deadline for the Housing Element would require the City to conduct four-year updates to the Housing Element. Rezoning of sites after the January 31, 2023 deadline would subject the sites that are identified for rezoning to by-right approval. However, reused sites from previous cycles are subject to by-right approval regardless of the adoption date of the Housing Element.

Figure 1: Housing Element Update Project Timeline

Housing Element Update

The key deliverables for the Housing Element Update project include administrative, public, and final HCD-certified drafts of the Housing Element Update, associated environmental review as required by the California Environmental Quality Act (CEQA) and a summary of the outreach and engagement.

The content of the Housing Element and the methodologies used for analyzing constraints and sites inventory are dictated by State law. The Housing Element of the General Plan must include the following:

1. Housing Needs Assessment. Examine demographic, employment and housing trends and conditions and identify existing and projected housing needs of the community, with attention paid to special housing needs (e.g., workforce housing, persons with disabilities). The data package provided by ABAG will form the basis of this section, supplemented by other available data on market conditions, etc.
2. Evaluation of Past Performance. Review the prior Housing Element to measure progress in implementing policies and programs. The City's Housing Element Annual Progress Reports (APRs) to HCD will form the basis of this evaluation.
3. Housing Sites Inventory. Identify available sites for housing development to ensure there is enough land zoned to meet the future need at all income levels, with consideration of affirmatively furthering fair housing.

4. Community Engagement. Conduct and summarize a robust community engagement program, reaching out to all economic segments of the community, and especially underrepresented groups.
5. Constraints Analysis. Analyze and recommend remedies for existing and potential governmental and nongovernmental barriers to housing development.
6. Policies and Programs. Establish policies and programs to be carried out during the 2023-2031 planning period to fulfill the identified housing needs.

Environmental Review

A thorough and legally defensible CEQA environmental review is critical for adopting and certifying the Housing Element Update and will serve to avoid or minimize future environmental review of specific housing developments. The environmental review process requires an analysis of the Housing Element Update's potential effects on the environment to ensure that required rezones and associated General Plan updates to accommodate the increased housing allocation will generate the lowest possible environmental impacts. The environmental review includes identifying significant impacts associated with the Housing Element Update, identifying and considering alternatives to the proposed Zoning Ordinance or General Plan amendments, and identifying mitigation measures to avoid or reduce potential environmental impacts. The CEQA process also provides the general public and any interested parties with an opportunity to review and comment on the draft Environmental Impact Report (EIR).

Outreach and Engagement

Outreach and engagement are an integral part of this project from initiation to adoption. As prioritized by City Council's March 25, 2021 recommendations, the project will be informed through a robust public participatory process. The consultant team (Raimi and Associates in conjunction with Surlene Grant of Envirocom Communications) will work with staff to provide expansive and inclusive methods of outreach that are tailored to both inform Berkeley's community members and stakeholders on the Housing Element Update as well as encourage productive feedback that will guide the development of the City's housing framework.

Based on the Council's recommendations, the plan for outreach and engagement is framed by 10 community engagement goals listed in Table 2 below.

Table 1: Community Engagement Goals and associated Participation Strategies

Community Engagement Goals	Interviews	Survey	Stakeholder Meetings	Public Workshops	City Council Work Sessions
Tailor engagement strategies and approaches to the local context (equity, needs, history)	X	X	X	X	
Open and transparent process	X	X	X	X	X
Promote and advertise public participation opportunities		X		X	X
Leverage input at various points in the process	X	X	X	X	X
Provide a variety of opportunities for convenience (low tech/high touch and high tech/low touch)	X	X	X	X	
Flexibility, in-person and remote engagement	X	X	X	X	
Communicate clearly and visually, simplify complex concepts	X	X	X	X	
Space for participants to be their authentic selves, speak native language	X	X	X	X	
Specific attention to equity and typically underrepresented	X	X	X		
Maintain positive discourse and dialogue	X	X	X	X	X

The consultant team is conducting a thorough stakeholder analysis. For each vulnerable population and key stakeholder group, the team is identifying interests, contributions, and best practices for outreach and engagement. That analysis is used to confirm how specific engagement strategies are applied to inform each phase of the Housing Element planning process. The strategies include 20 interviews, a communitywide survey, 20 small format meetings, three work sessions with the City Council, and three public workshops.

The workflow of the engagement strategy is as follows:

- Interviews. The Consultant team will begin by conducting 20 interviews with housing stakeholders in the Berkeley community. The information will be used to inform engagement strategies, identify housing needs and production constraints, identify opportunity sites, and solicit ideas for housing strategies to include in the Housing Element.
- Survey. A survey will also be distributed at the start of the outreach process to solicit general community input housing needs, constraints, and opportunities.
- Boards & Commissions. In September 2021, City staff will meet with 10 boards and commissions to provide an overview of the Housing Element, identify stakeholders, and invite members to participate in the planning process.
- Small Format Meetings. Throughout the planning process, the Housing Element team will conduct focus groups, meetings, "pop-ups", and listening sessions with disadvantaged communities, neighborhood groups, advocacy organizations, industry organizations, and others to ensure inclusive and representative participation.
- Public Workshops. Three public workshops will be conducted at key points during the project: The first workshop will inform the housing needs assessment and production constraints. The second workshop is to inform the site assessment and inventory. The third and final workshop is to invite public review and feedback on the draft Housing Element.

The interviews, meetings, and workshops will adhere to State and local public health guidance in effect at the time of the event. The team anticipates that for Fall 2021 and Winter 2022, the activities will include a mix of online synchronous and asynchronous opportunities (using zoom and other technology platforms for interactive participation) and in-person outdoor events.

The team will rely on use of the city's website, email lists (City's GovDelivery account), and flyers and mailings for communication. Other distribution channels include: Community Based Organizations (CBOs), Homeowner Associations (HOAs), schools, community/senior centers, and community hubs such as grocery stores and farmers markets.

BACKGROUND

Berkeley's draft 6th cycle RHNA is 8,934 residential units[2]. The final target RHNA will be issued by ABAG in December 2021. The City is not required to build housing, but it is required to identify and zone sufficient sites to accommodate the anticipated growth

[2] May 20, 2021. Final Regional Housing Needs Allocation (RHNA) Methodology and Draft Allocations. ABAG. https://abag.ca.gov/sites/default/files/documents/2021-05/ABAG_2023-2031_Draft_RHNA_Plan.pdf

over the next eight-year period. If actual housing production is less than the RHNA, certain affordable housing projects are subject to a streamlined approvals process (SB 35).

Table 2: Berkeley RHNA Allocation, 5th & 6th Cycles

Income Level	5th Cycle RHNA Units	Units Permitted 2015-2020[3]	6th Cycle DRAFT RHNA Units
Very Low (< 50% AMI)	532	232	2,446
Low (50 – 80% AMI)	442	41	1,408
Moderate (80 – 120% AMI)	584	91	1,416
Above Moderate (> 120% AMI)	1,401	2,579	3,664
Total	**2,959**	**2,943**	**8,934**

Housing Elements are subject to regulatory oversight by HCD. If the City does not adopt its 6th Cycle Housing Element prior to January 31, 2023, it faces a number of penalties and consequences. In addition to facing significant fines of up to $100,000 per month, the City can be sued by individuals, developers, third parties, or the State. The City would lose the right to deny certain affordable projects and a court may limit local land use decision-making authority until the City brings its Housing Element into compliance.

Failure to comply would also impact Berkeley's eligibility and competitiveness for federal, state, and regional affordable housing and infrastructure funding sources. Many state and regional grant and loan programs require a compliant Housing Element, including the Affordable Housing and Sustainable Communities Program (AHSC), the Local Housing Trust Fund Program (LHTF), and Metropolitan Transportation Commission's (MTC) One Bay Area Grant (OBAG) transportation funding.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

The Housing Element Update is expected to result in greater infill housing development potential near transit and in employment-rich areas. Prioritizing density and affordable housing in these areas will incentivize community members to use alternative modes of transportation and reduce vehicle miles traveled (VMT), which are critical for reducing greenhouse gas emissions, and will bring the City closer to meeting its Climate Action Plan and Climate Emergency goals.

POSSIBLE FUTURE ACTION

In addition to this first work session, the team will make presentations to City Council at two additional work sessions in 2022. The purpose of the work sessions is to inform the Council of the Housing Element Update's progress, share findings from community and stakeholder input, and receive project direction and recommendations from the Council on the immediate tasks ahead.

[3] Based on revised 2015-2020 APR unit counts, accepted by HCD on July 14, 2021

FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

The total budget allocated for the Housing Element Update is $540,000. Berkeley has secured $325,000 in Local Early Action Planning (LEAP) grant funds, $83,506 in non-competitive Regional Early Action Planning (REAP) grant funds, $75,000 in competitive REAP grant funds, and $56,494 in Community Planning Fees.

CONTACT PERSON

Grace Wu, Senior Planner, Land Use Planning Division, (510) 981-7484
Alene Pearson, Principal Planner, Land Use Planning Division, (510) 981-7489

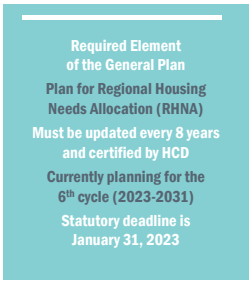
LINKS:

1. April 28, 2021. *Housing Element Update and Annual Progress Report,* Off-Agenda Memo from City Manager to Berkeley City Council. https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Housing%20Element%20Update%20042821.pdf

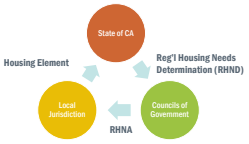
2. March 25, 2021, *Initiation of Public Process and Zoning Concepts for 2023-2031 Housing Element Update*. Report to Berkeley City Council, Councilmember Droste et al. https://www.cityofberkeley.info/uploadedFiles/Clerk/City_Council/2021/03_Mar/Documents/Initiation%20of%20Public%20Process%20and%20Zoning%20Concepts%20-%20Mayor%203-25-21.pdf

3. March 25, 2021, *Initiation of Participatory Planning for Berkeley's Regional Housing Needs Allocation (RHNA).* Supplemental report to Berkeley City Council, Councilmember Hahn et al. https://www.cityofberkeley.info/Clerk/City_Council/2021/03_Mar/Documents/2021-03-25_(Special)_Supp_2_Reports_Item_2_Supp_Hahn_pdf.aspx

Figure F-10 Work Session #1 Presentation



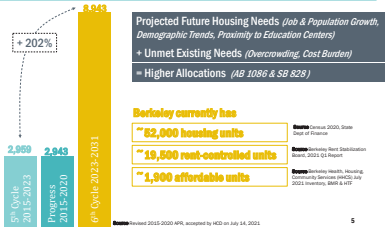
Regional Housing Needs Allocation (RHNA)



- The methodology for distributing the RHNA was approved in January 2021
- The Bay Area must plan for 441,176 new housing units during the 6th cycle (vs. 187,990 in 5th cycle)
- Berkeley's draft 6th cycle RHNA is 8,934 units
- The final RHNA will be issued by ABAG in December 2021

4

Regional Housing Needs Allocation (RHNA)
5th & 6th cycle



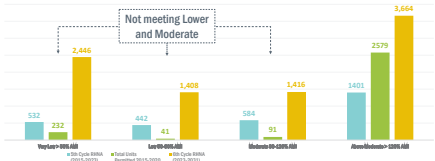
Projected Future Housing Needs *(Job & Population Growth, Demographic Trends, Proximity to Education Centers)*
+ Unmet Existing Needs *(Overcrowding, Cost Burden)*
= Higher Allocations *(AB 1086 & SB 828)*

Berkeley currently has
- ~82,000 housing units
- ~19,500 rent-controlled units
- ~1,900 affordable units

Census 2020, State Dept of Finance
Berkeley Rent Stabilization Board, 2021 Q1 Report
Berkeley Health, Housing, Community Services (HHCS) July 2021 Inventory, BMR & HTF
Revised 2015-2020 APR, accepted by HCD on July 14, 2021.

5

Regional Housing Needs Allocation (RHNA)
5th & 6th cycle

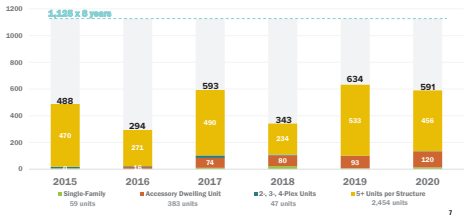


Streamlined Ministerial Approval for eligible 50% affordable projects *(SB 35)*

Revised 2015-2020 APR, accepted by HCD on July 14, 2021.

6

Permitted Units by Category 2015-2020



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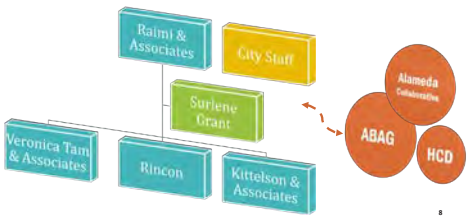
Housing Element Team



8

CITY COUNCIL KEY PRINCIPLES

HOUSING ELEMENT UPDATE SCOPE

- Task 1 – Project Management
- Task 2 – Community Outreach and Engagement
- Task 3 – Updating the Housing Element
  - Housing Needs Assessment
  - Constraints Analysis
  - Sites Assessment & Inventory
  - Goals, Policies & Programs
- Task 4 – Environmental Review

March 29, 2021, Initiation of Public Process and Zoning Concepts for 2023-2031 Housing Element Update. Report to Berkeley City Council, Councilmember Droste et al.

9

City Council Rezoning Strategies

Prioritize in PDAs
Adeline, Downtown, San Pablo, Shattuck, Telegraph, University

Transit + Commercial Corridors
Min. 15-minute peak headways

R-1, R-1A, R-2, and R-2A
Up to 2-3-4 units per parcel (including ADUs, JADUs), and division of units.

Variety and flexibility of housing types and tenure

- Equitable Neighborhood Scale Housing
- Ensure similar scale and form as existing residential.
- Maintain historic fabric and character

New Rules for Moderate & Above Moderate Income Sites *(AB 725)*

By-Right for Duplexes, Lot Split in Single-Family Zones *(SB 9)*

April 30, 2020, Missing Middle Housing Report, Berkeley City Council. https://www.cityofberkeley.info/Clerk/City_Council/2020/04_Apr/Documents/2020-04-23_Supp_2_Reports_Item_32_Rev_Droste_pdf.aspx

February 16, 2021, Resolution to Not Prohibit Single-Family Dwellings, Berkeley City Council. https://www.cityofberkeley.info/Clerk/City_Council/2021/02_Feb/Documents/2021-02-23_Item_29_Resolution_to_End_Exclusionary.aspx

10

Integrate with Concurrent Planning Efforts

11

Rezoning Timing for Lower Income RHNA

Rezoning Needed for Lower-Income RHNA — Jan 2023 — **If Needed Rezoning is Adopted After Deadline**

Reused sites → new site 20% lower-income

Additional sites to accommodate for lower-income RHNA

REUSED SITES
By-right approval for projects with 20%+ affordable to lower income households

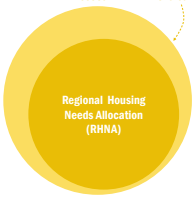
REZONED / UPZONED SITES
By-right approval for 20%+ affordable, with a density of 30 du/acre and minimum 16 units on site.

New Rules for Lower Income Sites *(AB 1397)*

12

RHNA & Sites Inventory

Demonstrate that enough land is zoned to meet our RHNA...with a buffer



EXAMPLE:

No Net Loss, by income level *(AB 166)*

13

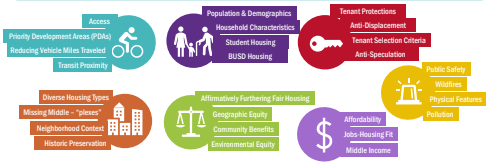
Sites Inventory

Additional HCD scrutiny on....

- City is not required to *build* or *finance* the housing, but must *plan and zone* for it
- Does not automatically authorize the construction of residential developments
- Private Property - No obligation by property owner or tenant to take action
- Reliant on the development industry (nonprofit & for profit) to construct housing units

14

Housing Considerations



Affirmatively Furthering Fair Housing *(AB 686)*

15

COMMUNITY ENGAGEMENT GOALS

- ❑ Tailor engagement strategies and approaches to the local context
- ❑ Open and transparent process
- ❑ Promote and advertise public participation and opportunities
- ❑ Leverage input at various points in the process
- ❑ Provide a variety of opportunities for convenience
- ❑ Flexibility, in-person and remote engagement
- ❑ Communicate clearly and visually, simplify complex concepts
- ❑ Space for participants to be their authentic selves, speak native language
- ❑ Specific attention to equity and typically underrepresented
- ❑ Maintain positive discourse and dialogue

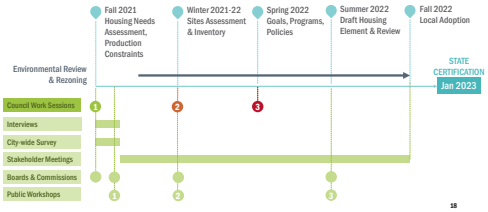
OUTREACH & ENGAGEMENT STRATEGIES

16

The 6th Housing Element Update Process

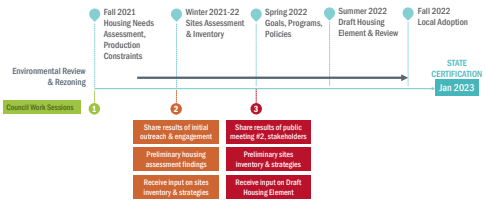
17

The 6th Housing Element Update Process



18

The 6th Housing Element Update Process



19

Thank You

www.cityofberkeley.info/HousingElement

HousingElement@cityofberkeley.info

20

Office of the City Manager

WORKSESSION
December 9, 2021

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Steven Buckley, Land Use Planning Manager, on behalf of Jordan Klein, Director, Planning and Development Department

Subject: Housing Element Update Work Session

SUMMARY
The City of Berkeley's Housing Element Update for the Statewide "6th Cycle" is underway. This report follows up on the September 21, 2021 Council worksession on the Housing Element and provides an update on progress to date. The purpose of this report and worksession is to:

1. Provide updates to the project timeline based on State law.
2. Present the preliminary findings of the housing needs assessment.
3. Describe the sites inventory methodology.
4. Introduce the multi-unit residential objective standards scope of work.
5. Share the results of the initial public outreach and engagement efforts.
6. Receive direction from the City Council on priority housing programs, site selection criteria, and suitable locations for increased residential density.

CURRENT SITATUTION AND ITS EFFECTS

Project Timeline

Assembly Bill 215, signed by Governor Newsom on September 28, 2021, effectively shortens the Housing Element Update timeline by 74 days. The new law requires that cities make the draft Housing Element publicly available for a minimum of 30 days, and take a minimum of 10 business days to consider and incorporate public comments, prior to sending a revised draft to the California Housing and Community Development Department (HCD) for review. Previously, the public review period could run currently with Planning Commission, City Council, and CEQA meetings on the Housing Element, but AB 215 requires a separate public comment period prior to HCD's first review of the draft. The law also increased HCD's review period for the draft Housing Element from 60 to 90 days. However, the statutory deadline of January 31, 2023 remains unchanged.

This results in significant impacts to the proposed draft Housing Element timeline and likely necessitates that the City of Berkeley utilize the allotted grace period in order to be able to thoroughly complete the housing plan and provide adequate review and responses. Table 1 details the proposed project timeline in light of AB 215.

Table 1: Housing Element Update Project Timeline

Analysis & Assessment	June 2021 – December 2021
Sites & Opportunities	August 2021 – February 2022
Goals & Policies	November 2021 – May 2022
Draft Housing Element & Review	June 2021 – November 2022
Environmental Review	December 2021 – December 2022
Minimum 30-day review & 14-day response	May 2022 – July 2022
90-day review by HCD	July 2022 – October 2022
Response to HCD and Finalize Draft	October 2022 – December 2022
Local Adoption of Final Draft	January 2023 – March 2023
Final Review and Certification by HCD	March 2023 – May 31, 2023

All cities have the option of a 120-day grace period, which includes a 60-day final review and certification by HCD. Therefore, the City effectively has a 60-day grace period and must adopt a Housing Element no later than March 31, 2023.

Preliminary Housing Needs Assessment

The Housing Element illustrates the trends and characteristics of Berkeley's population, housing stock, and demographics to provide context for the City's housing needs. The housing needs assessment includes the unmet needs of existing residents and the future housing demand resulting from anticipated changes in population and demographics. Key preliminary findings provided by the Association of Bay Area Governments (ABAG)[1] are:

1. Steady Population Growth. The California Department of Finance estimates that the City's population in 2020 was 122,580. According to Association of Bay Area Governments (ABAG) Plan Bay Area 2040 projections, Berkeley's population is anticipated to reach approximately 136,000 by 2030 (11%) and approximately 141,000 by 2040. Since 2000, the City's population has increased approximately 9% each decade, comparable to the State overall (average 8.4%) and slightly less than neighboring jurisdictions such as Oakland (11%) and San Francisco (11.5%).
2. Younger and Older Population. According to the Census American Community Survey (ACS) (2015-2019), residents ages 15 to 24 comprise the largest age

[1] ABAG Housing Needs Packet, April 2021

group in Berkeley (27%), followed by people ages 25 to 34 (18%). The median age in Berkeley is 31 years old and the high proportion of younger residents is due to the presence of UC Berkeley within the City. Between 2010 and 2019, the proportion of population aged 25 to 34 increased by 25%, suggesting that students may be choosing to stay in Berkeley after their degree is complete. Berkeley also experienced a significant 40% increase in population aged 65 to 84 between 2010 and 2019, which suggests an increasing need for housing appropriate for seniors in the community. The largest decrease was in the 45 to 54 age group (-9%).

3. Changing Racial and Ethnic Composition. The City is slightly less diverse when compared to Alameda County as a whole, which has greater proportions of Black or African-American, Asian and Pacific Islander, and Latinx populations. Conversely, the proportion of White residents is greater in Berkeley (53%) compared to the County (31%). According to the ACS, the most significant change to Berkeley's ethnic diversity is a 2% decrease in the overall proportion of the Black/African-American population, which is a continuation of a trend in the City and in the region as a whole since 2000. Over this time period, the proportion of Asian and Pacific Islander residents has increased steadily from 19% to approximately 21% of the Berkeley population and the Latinx residents also increased slightly by 0.6% to approximately 11% of the overall population.
4. Rising Household Income. According to the ACS, the median household income in Berkeley increased by 68% between 2010 and 2019, which is comparable with Alameda County as a whole. For 2021, HCD determined the Area Median Income (AMI) for Alameda County is $125,600 for a family of four. According to the US Department of Housing and Urban Development (HUD) and Comprehensive Housing Affordability Strategy (CHAS), which used 2013-2017 ACS data, half of Berkeley's households earn below the median income which is comparable to Alameda County as a whole. However, a greater proportion of Berkeley households fall within the Very Low-Income category, earning less than 50% AMI (32% compared to 27% in Alameda County as a whole).
5. Rent Burdened. According to the ACS, a majority of Berkeley residents are renters (57%) and more than half of those are rent-burdened, i.e. they spend more than 30% of their income on housing. In 2019, only 3.5% of Berkeley's rental housing stock was vacant, where a typical rental vacancy rate in California was 5.5%.

Sites Inventory Methodology

The City is required by the Regional Housing Needs Allocation (RHNA) to identify and zone sufficient sites to accommodate 8,934 residential units to meet the anticipated population growth between 2023 to 2031. In addition, HCD recommends that cities identify a "buffer" of 15% to 30% above RHNA for lower- and moderate-income categories to account for No Net Loss (AB 166). AB 166 requires cities to demonstrate

capacity is available for affordable units in the case that development on a specific site results in fewer units (total number and by income category) than assumed in the Housing Element. Thus, the overall sites inventory must accommodate between approximately 9,750 and 10,500 units. The following is a summary of the overall methodology for Berkeley's sites inventory analysis[2].

1. Identify Likely Housing Sites and Production. The initial efforts will identify known projects, sites, and ADU trends that can be credited towards the 6th Cycle.
    a. *Pipeline Projects and Sites of Interest*. These parcels are those where applications have already been submitted or there is demonstrated interest in building housing. Pipeline projects for the 6th Cycle can include any residential project that is not expected to receive a Certificate of Occupancy until after July 1, 2022.
    b. *Reused 5th Cycle Housing Element sites*. Generally, available sites can be reused from the 5th cycle Housing Element. These sites should be included in the preliminary sites inventory and evaluated for continued feasibility. New legislation (AB 1397) requires that projects with 20% of on-site units designated for lower income households (80% AMI or less) on these sites are subject to by-right approval unless the sites are rezoned for a higher density prior to the January 31, 2023 statutory deadline.
    c. *Calculate ADU Trend.* ADUs can count toward the RHNA if the projected number of ADU units aligns with an established local trend. The project team will identify a trend using the annual average of ADU permit approvals between 2018 and 2021 (the time period when the most recent ADU bills were adopted). HCD recommends this methodology.
2. Screening for Vacant and Underutilized Parcels. Using existing land use and County Assessor data, the project team will conduct an analysis to identify vacant and underutilized parcels that could be included in the sites inventory. This process involves screening the most achievable parcels based on their existing characteristics. The following characteristics will form the starting point for the analysis, based on state and regional guidance:
    a. Land is vacant as identified in the existing land use data.
    b. Parcel does not have condos or large apartment buildings.
    c. Parcels are not State- or county-owned.
    d. Parcels have an improvement-to-land assessed value ratio of 0.75 or less.

[2] More detailed guidance for Housing Element site inventories and analysis is available here: ABAG Site Inventory Memo. https://abag.ca.gov/sites/default/files/documents/2021-08/sites_inventory_memo_final06102020.pdf

e. Buildings on the parcel are “older”. As a starting point, the team will use a threshold of 40 years old for residential buildings and 30 years old for non-residential buildings.

f. Parcels are underutilized (built at less than maximum capacity). As a starting point, the team will use parcels that are identified as built at 35% or less of their assumed maximum density or intensity (physical indicators such as height and coverage).

g. Parcel sizes are between 0.5 and 10 acres (for lower income categories) or less than 0.5 acre for moderate and above-moderate income categories. Note that parcels may be consolidated to achieve the 0.5 acre minimum threshold.

Parcels identified in this screening will be reviewed to ensure an adequate assemblage for consideration, and will be combined and cross referenced with the parcels identified in Step 1 to create a comprehensive list of potential Housing Element sites.

3. Screening of Parcels. Using the UrbanFootprint scenario analysis tool[3], the project team will evaluate the suitability of each parcel for new housing and inclusion in the Housing Element sites inventory. The screening will identify locations where housing should be located (such as near transit, schools, and parks) and locations to avoid if possible (such as areas subject to wildfires). The screening tool will also help with the evaluation of sites in the Affirmatively Furthering Fair Housing (AFFH) requirement[4]. Criteria used in this analysis includes racial diversity, concentrations of poverty, and vulnerability to displacement. These criteria are divided into four categories and each parcel will be given a “score” to evaluate its appropriateness as a Housing Element parcel based on HCD-provided methodology. The categories and specific criteria are:

   a. *Socioeconomic criteria*, including racial diversity of census tracts, concentrations of low-income households, areas with high social vulnerabilities[5], and a combination of low incomes and high pollution vulnerability as measured by the CalEnviroScreen 4.0 tool[6].

   b. *Access criteria*, including the proximity to transit, parks, and retail/amenities.

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[3] More information on the UrbanFootprint scenario analysis tool: https://urbanfootprint.com/platform/scenario-planning/

[4] More detailed information on the AFFH process and requirements: https://www.hcd.ca.gov/community-development/affh/index.shtml

[5] Social vulnerabilities are measured by the Social Vulnerability Index, an index prepared by CDC and Agency for Toxic Substances and Disease Registry (ATSDR)

[6] CalEnviroScreen 4.0 Report and Mapping tool: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

c. *Presence of environmental conditions,* including parcels near freeways, located in a floodplain or areas subject to sea level rise and fire hazards.

d. *Housing characteristics of the area,* including cost burdened households, the potential for displacement, and a concentration of overcrowded households.

4. Evaluate and Analyze Sites. The project team will study each potential parcel in the sites inventory using aerial photos or field visits, using professional judgment to identify the accuracy of the screening and assess the viability of the parcel for development. Sites that are not appropriate for housing will be removed, while others that are suitable for housing but were not included in the initial quantitative analysis will be added, such as parcels less than 0.5 acres that are able to be consolidated.

5. Calculate Buildout Potential. Using existing zoning, calculate the potential buildout of each parcel to a maximum of 70% of maximum capacity. This number can be modified for individual zoning districts by demonstrating a pattern of achieving higher densities through built or approved projects. Each parcel will also be categorized by its "income category" with parcels that allow 30 dwelling units per acre or more categorized in the "lower income" category (Very Low or Low Income households) and parcels less than 30 units per acre in the Moderate and Above Moderate Income categories.

The project team will review and revise the above steps until all of the appropriate Housing Element sites are identified under the current zoning. If the City cannot meet its RHNA and buffer under current zoning, City Council will be asked to consider locations where additional new housing can be built. This can occur by:

1. Up-zoning areas that already allow residential uses to increase the number of housing units that can be built on those parcels.

2. Allowing residential uses in commercial or industrial areas where residential uses are currently prohibited.

AB 1397 requires that sites rezoned after January 31, 2023 to accommodate lower income RHNA are subject to by-right approval without discretionary review if projects include 20% affordable units for lower income households. The rezone must also include a minimum density of 20 dwelling units per acre (du/ac) and a maximum density of at least 30 du/ac, and be large enough to accommodate at least 16 units.

The final sites inventory will include a detailed data table (template provided by HCD) of all sites with the characteristics of each (including existing use, zoning, address), calculating the buildout by income category, documenting the viability of each parcel to build housing (with photos and descriptions) and conducing the AFFH analysis.

Multi-Unit Residential Objective Standards

On September 28, 2021, City Council approved a contract amendment that supports development of objective standards for residential and mixed-use projects. This project originated in response to numerous City Council referrals, as well as recent state housing legislation that requires by-right and ministerial processes for certain eligible residential projects. The objective standards effort is linked directly with the Housing Element scope and timeline to ensure that there is sufficient capacity to accommodate approximately 9,000 units and a buffer.

The objective standards project will be undertaken in a two-part process. The focus of this effort (Part 1) will be on establishing objective densities (dwelling units per acre) and building massing standards for housing projects with two or more units. Development regulations relating to the project placement on a lot and allowable building envelope correlate directly with construction efficiency and the total square footage of housing that can be built. Objective standards for building form and densities will be crafted to ensure consistency with State housing laws and assumptions for the sites inventory and assessment of unit capacities. Part 1 is underway and tracks directly with the Housing Element and environmental review timeline.

The focus of Part 2 will be on objective standards for design, which includes architectural details such as roofline articulation, the orientation of entries, window patterns, and façade treatment. Objective design details will not have a meaningful effect on the number of units that can be built but provides further assurances and predictability for a building's aesthetic character and harmony within a neighborhood context. Part 2 would begin after the Housing Element is complete; its full scope has not been finalized.

Initial Public Outreach Feedback

At of the time of the writing of this report, the Housing Element team had made presentations to nine Berkeley boards and commissions[7], conducted nine stakeholder interviews, held a public workshop with over 70 participants, and released a citywide online survey.

1. Public Workshop. The first public workshop occurred over Zoom on October 27, 2021. The goal for the workshop was to introduce Berkeley community members to the Housing Element goals and processes, to get input on successes and challenges in Berkeley's housing development and programs, and to begin

[7] Planning Commission (9/1/2021); Homeless Services Panel of Experts (9/1/2021); Commission on Disability (9/1/2021); Landmarks Preservation Commission (9/2/2021); Zoning Adjustments Board (9/9/2021); Commission on Aging (9/15/2021); Energy Commission (9/22/2021); Children, Youth, and Recreation Commission (9/27/2021), and Housing Advisory Commission (9/30/2021).

identifying potential residential types and sites that are appropriate for development.

An invitation and log-in information for the public workshop were sent to more than 200 subscribers of the Housing Element email list and flyers for the event were posted at 15 sites throughout Berkeley during the month of October, including public libraries, senior and community centers, grocery stores, local retailers, and on utility poles near public parks.

During the public workshop, several key themes were identified:

a. *High quality of life.* As a city, Berkeley has many assets that make it an attractive place to live, including unique neighborhoods, easy access to Downtown, walkability, public transportation, and access to nature and parks.

b. *Diverse housing stock.* The city has a diverse housing stock with different architectural styles, neighborhood types and unit sizes (i.e., ADUs, single-family, duplex, triplex, mixed-use, apartments).

c. *Public Safety*. Access is a concern in neighborhoods with narrow roadways and high wildfire risks. Additional development in the hills should be located near major thoroughfares for vehicular, emergency vehicles and transit access.

d. *Affordable Housing*. Displacement and gentrification trends and the high cost of housing for ownership and rental units indicates a need for more low and moderate-income units.

e. *Inclusionary Housing*. The current inclusionary requirements and mitigation fees should be revised to support the building of more affordable housing. However, there is also concern that a higher inclusionary requirement will increase housing costs.

f. *Geographic Equity*. The increased housing needed to meet RHNA should not be focused solely in a few neighborhoods, but be distributed equitably throughout the city.

g. *Onerous Entitlement Process*. Residential permit approvals are frequently slowed by neighborhood opposition which can make the process long, cumbersome, expensive and easy to obstruct.

h. *Opportunity Sites*. Housing, particularly affordable and senior housing, should be in transit-rich locations. There should be more diversity in lower density zones to achieve “missing middle” housing. Permit residential and mixed-use projects to build above existing single-story retail buildings.

2. Stakeholder Interviews. Stakeholder interviews are used to identify housing needs and constraints, identify opportunity sites, and inform engagement

strategies. To date, the outreach team has interviewed nine stakeholders, including representatives from Berkeley's faith-based institutions and community organizations, affordable and market-rate housing developers, real estate and property management professionals, housing advocates, business owners, and advocacy organizations representing what HCD terms "special needs," meaning a target population. The interview effort is ongoing and has raised the following issues thus far:

a. *Affordable Housing.* The current requirements for inclusionary housing and funding resources are insufficient to meeting the demands for affordable housing in Berkeley. There is also a need to provide subsidies for those who live in market-rate housing, particularly those with special needs including the disabled and transitional homeless.

b. *Neighborhood Character.* The architectural character for lower density neighborhoods should be preserved and not interrupted, though consideration should be given to blocks where there are existing taller or denser buildings constructed prior to the Neighborhood Preservation Ordinance in the 1970s.

c. *Gentrification.* High housing costs and a large student population are driving increased rents throughout the city.

d. *Height Limits.* The current height constraints in many zoning districts do not take into consideration construction efficiency and the increased costs due to changes in construction type.

e. *Streamlined Approvals.* The housing entitlement process is frequently prolonged and unpredictable due to discretionary procedures, contentious neighborhood opposition, and resistance to higher density, regardless of zoning compliance.

f. *Opportunity Sites.* Higher densities should be developed around BART stations and near transit stops, as well as near or above existing community resources, such as child care facilities, senior centers and retail corridors. Residential should be allowed in more ground floor locations, given a decline in retail activity and increase in ground floor vacancies.

The interviews were conducted virtually, in groups of one to three, with one hour allotted for each session.

3. Online Survey. The Housing Element Online Survey was made available from October 28 through November 14, 2021 and includes the same three questions discussed at the October 27th public workshop: Housing successes, housing issues, and locations for new housing. Respondents need not have attended the workshop in order to respond to the survey. As of early November, the survey has received 460 responses.

BACKGROUND

Berkeley's 6th cycle RHNA is 8,934 residential units[8]. The City is not required to build housing, but it is required to identify and zone sufficient sites to accommodate the anticipated growth over the next eight-year period. If actual housing production is less than the RHNA, eligible affordable housing projects are subject to a streamlined approvals process (SB 35).

Table 2: Berkeley RHNA Allocation, 5th & 6th Cycles

Income Level	5th Cycle RHNA Units	Units Permitted 2015-2020[9]	6th Cycle DRAFT RHNA Units
Very Low (< 50% AMI)	532	232	2,446
Low (50 – 80% AMI)	442	41	1,408
Moderate (80 – 120% AMI)	584	91	1,416
Above Moderate (> 120% AMI)	1,401	2,579	3,664
Total	**2,959**	**2,943**	**8,934**

Housing Elements are subject to regulatory oversight by HCD. If the City does not meet the January 31, 2023 statutory deadline for adopting new zoning, eligible affordable projects on rezoned sites from the 5th Cycle would be approved ministerially. If the City does not adopt its 6th Cycle Housing Element prior to March 31, 2023, it faces a number of penalties and consequences. In addition to significant fines of up to $100,000 per month, the City can be sued by individuals, developers, third parties, or the State. A court may limit local land use decision-making authority until the City brings its Housing Element into compliance. Failure to comply would also impact Berkeley's eligibility and competitiveness for federal, state, and regional affordable housing and infrastructure funding sources.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

The Housing Element Update is expected to result in greater infill housing development potential near transit and in employment-rich areas. Prioritizing density and affordable housing in these areas will incentivize community members to use alternative modes of transportation and reduce vehicle miles traveled (VMT), which are critical for reducing

[8] May 20, 2021. Final Regional Housing Needs Allocation (RHNA) Methodology and Draft Allocations. ABAG. https://abag.ca.gov/sites/default/files/documents/2021-05/ABAG_2023-2031_Draft_RHNA_Plan.pdf

[9] Based on revised 2015-2020 APR unit counts, accepted by HCD on July 14, 2021

greenhouse gas emissions, and will bring the City closer to meeting its Climate Action Plan and Climate Emergency goals.

POSSIBLE FUTURE ACTION
The Housing Element team will make another presentation to the City Council at a worksession in 2022, to inform the Council of the Housing Element Update's progress, share findings from community and stakeholder input, and receive project direction and recommendations from the Council on the immediate tasks ahead.

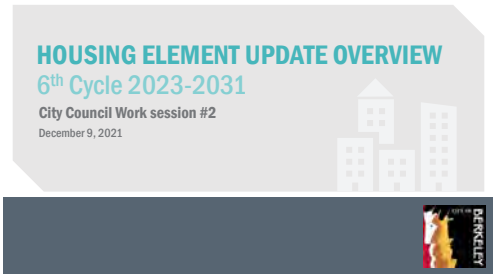
FISCAL IMPACTS OF POSSIBLE FUTURE ACTION
The total budget allocated for the Housing Element Update is $540,000. Berkeley has secured $325,000 in Local Early Action Planning (LEAP) grant funds, $83,506 in non-competitive Regional Early Action Planning (REAP) grant funds, $75,000 in competitive REAP grant funds, and $56,494 in Community Planning Fees.

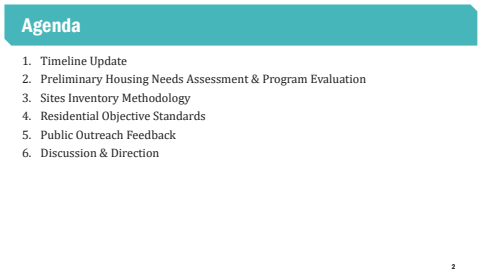
CONTACT PERSON
Grace Wu, Senior Planner, Land Use Planning Division, (510) 981-7484
Alene Pearson, Principal Planner, Land Use Planning Division, (510) 981-7489

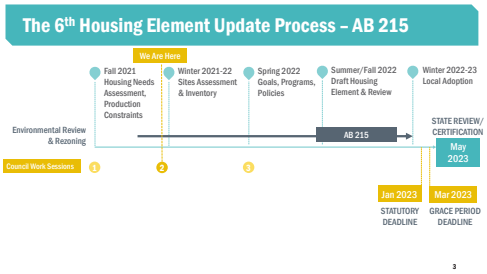
LINKS:

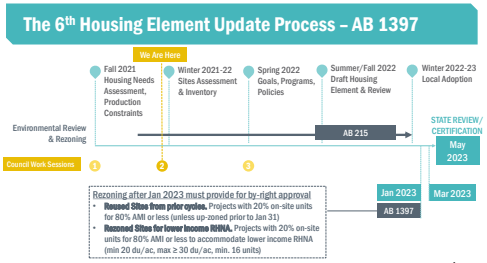
1. September 21, 2021. *Housing Element Update Work Session 1*. Report from City Manager to Berkeley City Council. https://www.cityofberkeley.info/Clerk/City_Council/2021/09_Sep/City_Council__09-21-2021_-_Special_(WS)_Meeting_Agenda.aspx
2. April 28, 2021. *Housing Element Update and Annual Progress Report,* Off-Agenda Memo from City Manager to Berkeley City Council. https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Housing%20Element%20Update%20042821.pdf
3. March 25, 2021, *Initiation of Public Process and Zoning Concepts for 2023-2031 Housing Element Update*. Report to Berkeley City Council, Councilmember Droste et al. https://www.cityofberkeley.info/uploadedFiles/Clerk/City_Council/2021/03_Mar/Documents/Initiation%20of%20Public%20Process%20and%20Zoning%20Concepts%20-%20Mayor%203-25-21.pdf
4. March 25, 2021, *Initiation of Participatory Planning for Berkeley's Regional Housing Needs Allocation (RHNA).* Supplemental report to Berkeley City Council, Councilmember Hahn et al. https://www.cityofberkeley.info/Clerk/City_Council/2021/03_Mar/Documents/2021-03-25_(Special)_Supp_2_Reports_Item_2_Supp_Hahn_pdf.aspx

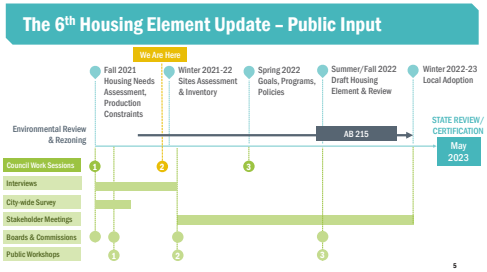
Figure F-11 Work Session #2 Presentation

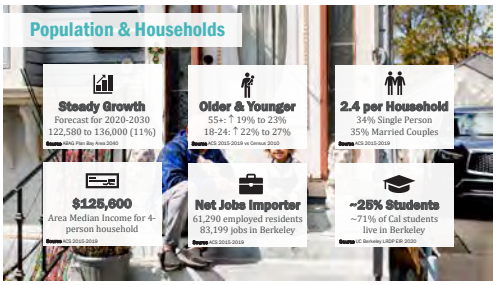


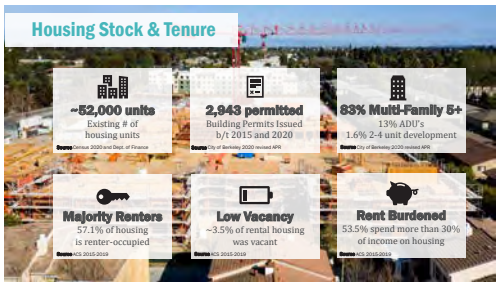


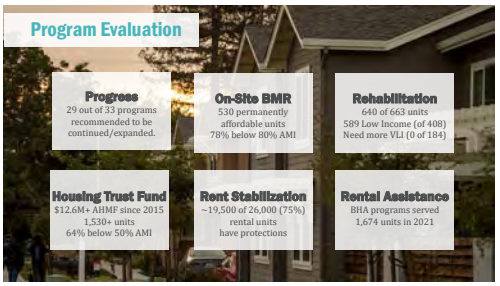


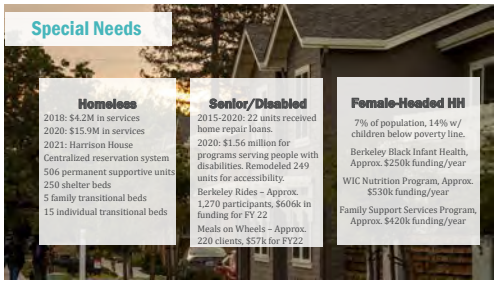


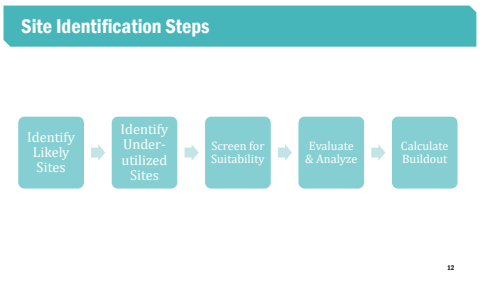


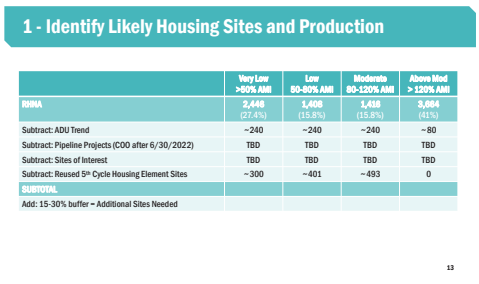


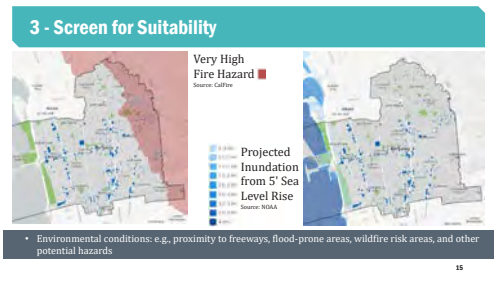




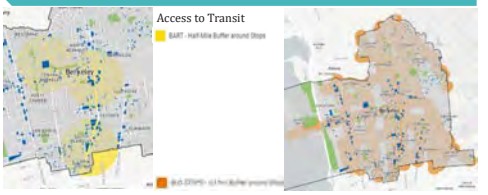








3 - Screen for Suitability



- Access to transit, parks, retail, food and other amenities

16

3 - Screen for Suitability

- Socioeconomic
- Housing characteristics of the area
- Affirmatively Furthering Fair Housing (AFFH) requirements

4 - Evaluate and Analyze

- Aerial photos and field visits
- Remove inappropriate sites

18

5 - Calculate Buildout

	Very Low >60% AMI	Low 50-80% AMI	Moderate 80-120% AMI	Above Mod > 120% AMI
RHNA	2,446 (27.4%)	1,408 (15.8%)	1,416 (15.8%)	3,684 (41%)
Subtract: ADU Trend	~240	~240	~240	~80
Subtract: Pipeline Projects (COO after 6/30/2022)	TBD	TBD	TBD	TBD
Subtract: Sites of Interest	TBD	TBD	TBD	TBD
Subtract: Reused 5th Cycle Housing Element Sites	~300	~401	~493	0
SUBTOTAL				
Add: 15-30% buffer = Additional Sites Needed				
Subtract: Vacant and Underutilized Sites				
Screen for Suitability				
Evaluate and Analyze				
TOTAL				
Potential Buildout (70%)				
Shortfall → Rezone				

19

Housing Element Sites Inventory

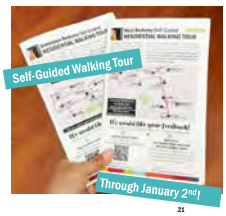
General Plan Designation (Current)	Zoning Designation (Current)	Minimum Density Allowed (units/acre)	Max Density Allowed (units/acre)	Parcel Size (Acres)

20

MULTI-UNIT RESIDENTIAL OBJECTIVE STANDARDS

1. Why objective standards?
2. Project Goal
3. Part 1 & Part 2 Overview
4. Part 1 Framework

MORE INFORMATION AT
www.cityofberkeley.info/objectivestandards



21

Why are we creating Residential Objective Standards?

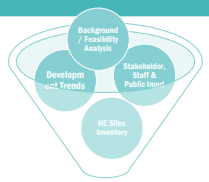
CALIFORNIA & BERKELEY HAVE A SHORTAGE OF AFFORDABLE HOUSING.

ALSO

RECENT STATE LAW	CITY COUNCIL REFERRALS	HOUSING ELEMENT
• SB 35 Streamlining for Affordable Development • Housing Accountability Act • SB 330 Housing Crisis Act • 2021 Housing Bills, including SB 9, SB 478	• Housing Accountability Act • Missing Middle Housing • Eliminate Exclusionary Zoning • Affordable Housing Overlay	• Plan for 8,934 new units + Buffer • AB 1397 By-Right Affordable Development at default density for re-used Housing Element sites • Spring 2023 deadline

22

Project Goal



PREDICTABILITY
CLEAR MULTI-UNIT DEVELOPMENT CRITERIA

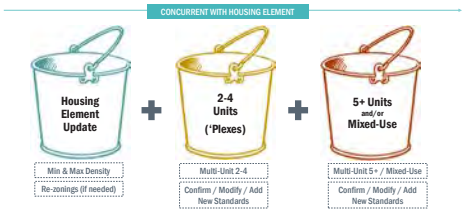
STREAMLINED
SHORTENED ENTITLEMENT PROCESS

23

A Two-Part Process

24

Part 1 Framework – Three Buckets



25

PUBLIC OUTREACH

1. Public Workshop #1 & Survey
2. Stakeholder Interviews

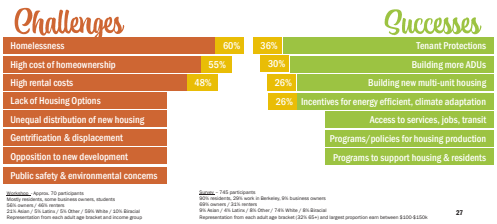
- Presented to 10 Berkeley Boards & Commissions[1]
- Interviewed Stakeholder Interest Groups[2]
- Received 745 responses from the citywide online survey
- Held an online public workshop with approx. 70 participants

[1] Planning Commission (9/1/2021); Homeless Services Panel of Experts (9/1/2021); Commission on Disability (9/1/2021); Landmarks Preservation Commission (9/2/2021); Zoning Adjustments Board (9/9/2021); Commission on Aging (9/15/2021); Energy Commission (9/22/2021); Children, Youth, and Recreation Commission (9/27/2021); Housing Advisory Commission (9/30/2021); and Measure O Bond Oversight Committee (11/18/2021)

[2] Black/African American Faith Institution, Market Rate Developers, Affordable Developers, Senior Center, Real Estate Professional, Property Managers, Homeless Services, Housing Advocacy, Disabilities Services

26

Public Workshop & Online Survey

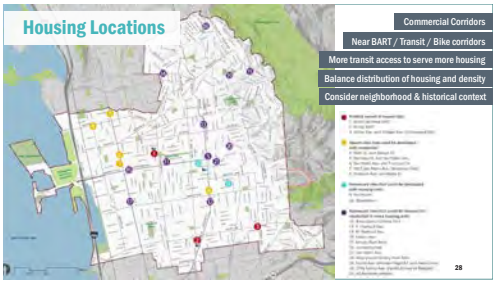


Workshop - Approx. 70 participants
Mostly residents, some business owners, students
56% owners / 46% renters
21% Asian / 5% Latinx / 5% Other / 58% White / 10% Biracial
Representation from each adult age bracket and income group

Survey - 745 participants
90% residents, 29% work in Berkeley, 9% business owners
69% owners / 31% renters
9% Asian / 4% Latinx / 8% Other / 74% White / 4% Biracial
Representation from each adult age bracket (32% 45+) and largest proportion earn between $100-$150k

27

Housing Locations



28

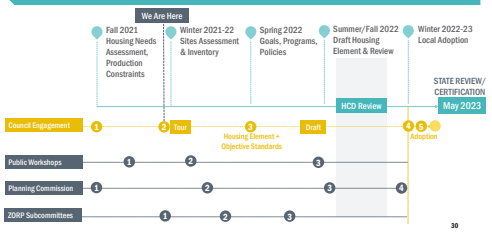
Preliminary Stakeholder Interviews

- Need more funding for affordable housing, disabled, and homeless
- Gentrification from high housing costs and student population
- Racial inequity in housing and displacement
- High land costs & unpredictable entitlement process
- Flexibility on ground floor retail requirements
- Avoid replacing existing residential & displacement
- Consider construction efficiency (85' heights)
- Consider pre-1970s height/densities

Black/African-American Faith Institution
Affordable + Market Rate Developers
Senior Center
Realtors + Property Managers
Homeless Services
Housing Advocates
Disabilities Services

29

The 6th Housing Element Update Process – Council



30

Discussion & Direction

GENERAL FEEDBACK

ALSO

1. Are there **additional site selection criteria** that should be considered?
2. **If rezoning is needed** to accommodate the RHNA, what areas of the city should be considered for allowing housing or increasing density? What areas should not be considered?
3. Is **"Missing Middle" with 2-4 units** appropriate in certain Commercial districts and in the MU-R?
   - Commercial districts: Currently, two-family and multi-family 3+ uses require a use permit.
   - MU-R: Currently, two-family requires an AUP and multi-family 3+ requires a use permit
4. What City **housing programs** do you consider most successful? What are policies or programs that should be **prioritized or created** for the 6th cycle?

31

Office of the City Manager

WORKSESSION
March 15, 2022

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Jordan Klein, Director, Planning and Development Department

Subject: Housing Element Update and Residential Objective Standards

SUMMARY

The City of Berkeley's Housing Element Update for the Statewide "6th Cycle" is underway alongside its counterpart project, Multi-Unit Residential Objective Standards ("Objective Standards"). This report follows up on the December 9, 2021 Council worksession on the Housing Element and provides an update on progress to date. The purpose of this report and worksession is to:

1. Share the feedback from recent public engagement efforts.
2. Present the preliminary sites inventory and describe the environmental review process.
3. Present on the analysis and draft development standards for two- to four-unit projects in the R-1, R-1A, R-2, R-2A, and MU-R Districts outside of the Hillside Overlay.
4. Describe the preliminary methodology for analyzing and drafting development standards for residential projects with five or more units and mixed-use projects.
5. Receive direction from the City Council on Housing Element policy, zoning standards for missing middle housing, and development criteria for residential projects with five or more units.

CURRENT SITATUTION AND ITS EFFECTS

Public Outreach Feedback

At of the time of the writing of this report, the Housing Element team had made presentations to 13 Berkeley boards, commissions, and committees[1], conducted 18

[1] Planning Commission (9/1/2021); Homeless Services Panel of Experts (9/1/2021); Commission on Disability (9/1/2021); Landmarks Preservation Commission (9/2/2021); Zoning Adjustments Board (9/9/2021); Commission on Aging (9/15/2021); Energy Commission (9/22/2021); Children, Youth, and Recreation Commission (9/27/2021);

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E-Mail: manager@CityofBerkeley.info Website: http://www.CityofBerkeley.info/Manager

stakeholder interviews, met with Housing Commission representatives from the Associated Students of the University of California (ASUC), held two public workshops with more than 60 participants each, and released two citywide online surveys.

Since the December Council Housing Element work session, the project team held a public workshop, completed a citywide online survey and held two concurrent meetings of the Planning Commission and Zoning Adjustments Board subcommittees. The following are key takeaways from these outreach efforts:

1. Public Workshop. The second public workshop occurred over Zoom on January 27, 2022. The goal for the workshop was to share insights from community engagement efforts, update the Berkeley community on Housing Element sites inventory methodology, introduce the Residential Objective Standards project, and receive input on zoning standards to facilitate housing production.

   An invitation and registration link for the public workshop was sent to over 340 subscribers of the Housing Element email list and attended by approximately 60 participants, comparable to the first public workshop in September 2021.

   During the second public workshop, several key themes were reiterated:

   a. *Locations to facilitate housing production.* Participants identified both higher density neighborhoods (Downtown, Southside) and lower density neighborhoods (West, North, and South Berkeley) as locations to consider for increasing housing capacity through added height and/or density. Several comments highlighted the desire to avoid clustering affordable housing primarily along high traffic corridors.

   b. *Housing criteria.* Proximity to community resources, including grocery stores and retail, are important criteria. Several participants commented on the need for active ground floor uses and more mixed-uses to further foster a walkable environment.

   c. *Multi-Unit 2-4*. Participants generally supported the concept of increasing allowable density in low-density residential districts, particularly if constructed with objective standards to maintain appropriate neighborhood scale and adequate planting, landscaping, and open space.

   d. *Multi-Unit 5+ and Mixed Use*. Participants shared support for encouraging innovative and creative design, as well as incentivizing community and shared open spaces, particularly for multi-family projects. Several commenters expressed that developments should minimize solar impacts on adjacent residential units.

Housing Advisory Commission (9/30/2021); Rent Stabilization Board (11/18/2021); Zoning Ordinance Revision Project Subcommittees (12/15/2021 and 2/16/2022); Civic Arts Commission (1/19/2022); City/UC/Student Relations Committee (1/28/2022).

2. Downtown and West Berkeley Tour and Online Survey. Two residential walking tours and online surveys were made available from November 24, 2021 through January 31, 2022. The goal of the tours was to inform and get feedback from community members on the diversity of housing types and building sizes in the City and to understand what makes residential development compatible with neighborhood scale.

   The walking tours and surveys were advertised at the December 9, 2021 Council work session, on the flyer for the January Housing Element workshop, and emailed to more than 330 subscribers of the Housing Element email list in November, early January, and late January. They were also announced at the December and January Planning Commission meetings, at December subcommittee meetings of the Zoning Adjustments Board and the Planning Commission and the January 4x6 meeting.

   a. *The Downtown Walking Tour* received a total of 23 survey responses and included 11 tour stops, primarily mixed-use residential projects with five or more units in addition to two smaller residential-only developments. The most common features that participants found to be compatible were building height, massing, and design features such as building articulation, color and materials, and windows. Features that would establish more compatibility included additional landscaping, planting, architectural details, and vehicular access and loading.

   b. *The West Berkeley walking tour* received a total of 26 survey responses and included 12 tour stops, with a range of “missing middle” housing types including multiple detached units on one lot, cottage court housing, and mixed-use projects. The most common features that survey participants found compatible were placement of structures (setbacks and location on lot), heights, and overall building shape, size, and form. The features that would create more compatibility included building and parking orientation, and additional landscaping and planting.

3. Subcommittee meetings of the Planning Commission and the Zoning Adjustments Board. These concurrent meetings occurred over Zoom on December 15, 2021 and February 16, 2022. The goal for the meetings was to introduce the Objective Standards project, discuss an analysis of Berkeley’s development standards for two- to four-unit residential projects and receive targeted feedback on a number of key issues. Analysis involved development of two to four-unit housing prototypes and an assessment of project feasibility based on current development standards. Over 25 members of the public attended the February meeting – many of whom were design professionals or interested residents – providing feedback on the technical nature of the material. There was general support for ministerial approval of projects that met objective standards and tiered standards that incentivized density and preservation of

existing housing stock. Commissioners and the public requested refinements or further research to:

- Create more flexible open space requirements.
- Understand shadow impacts to solar.
- Incentivize smaller units / denser projects which naturally encourage housing that is more affordable.
- Model adjacent and abutting lots for improved neighborhood context.

Preliminary Sites Inventory Capacity and Environmental Review

The City is required by the State Department of Housing and Community Development (HCD) to meet its Regional Housing Needs Allocation (RHNA) and identify sufficient sites to accommodate 8,934 residential units to meet the anticipated population growth between 2023 to 2031. In addition, HCD recommends that cities identify a "buffer" of 15% to 30% above RHNA for lower- and moderate-income categories to account for No Net Loss (AB 166)[2]. Thus, the overall sites inventory must accommodate between approximately 9,750 and 10,500 units. The sites must be zoned to allow for residential uses and the zoning standards must allow for the unit capacities assumed in the sites inventory.

The sites inventory process assessed capacity in three categories:

1. Likely Sites include projects that received their land use entitlement after 2018 but have not received their certificate of occupancy. For these projects, the affordability breakdown reflects actual project plans, including density bonus units. HCD also allows jurisdictions to include accessory dwelling units (ADUs) in the "likely sites" category based on recent development trends and assumed levels of affordability based on ABAG's Affordability of ADUs report[3]. The North Berkeley and Ashby BART stations are included under "likely sites" based on current planning efforts. The site inventory estimates 1,200 units to be developed at those sites during the 6th cycle, with 35% affordability split evenly between Very Low- and Low-Income affordability levels. *The preliminary assessment of "likely sites" to develop account for over 5,100 units towards our 8,934 RHNA goal, and 33 percent of the lower income allocation.*
2. Pipeline Sites include projects that are under review or actively engaging with the City in anticipation of submitting an application for review. Affordability levels reflect proposed project plans to the extent they are known. *The preliminary*

[2] AB 166 requires cities to demonstrate capacity is available for affordable units in the case that development on a specific site results in fewer units (total number and by income category) than assumed in the Housing Element.

[3] September 8, 2021. Draft Affordability of Accessory Dwelling Units. ABAG. http://21elements.com/documents-mainmenu-3/housing-elements/rhna-6-2022-2030/1327-draft-adu-affordability-report-sep-8-2021-1/file

assessment of "pipeline sites" account for over 2,400 units, and 10 percent of the lower income allocation.

3. Opportunity Sites are not associated with actual development proposals. These parcels are identified as "opportunity sites" or potential sites for future housing development using HCD's criteria and methodology (outlined below). Berkeley's zoning districts, with the exception of the C-AC district, do not have maximum density standards expressed in "dwelling units per acre". As a result, unit assumptions for opportunity sites were calculated using the average mean of the *base* density from recent entitlement projects within the district (or districts with similar zoning standards if there were no recent projects within the district to analyze). *The preliminary assessment of "opportunity sites" account for over 9,000 units distributed across 364 parcels, and accommodates 86 percent of the lower income RHNA goal.*

   AB 1397 requires that 5th cycle opportunity sites re-used in the 6th cycle and identified to accommodate lower income units (Very Low-Income and Low-Income) be subject to by-right approval if projects include 20% affordable units for lower income households on-site. Preliminary analysis shows that this will affect approximately 18 opportunity sites (1,419 units), located along commercial corridors.

   HCD's criteria for selecting opportunity sites includes:

   a. *Vacant.* Land is identified as vacant in the Alameda County Assessor's land use data.
   b. *Underutilized.* Parcel has an improvement-to-land assessed value ratio of 0.75 or less.
   c. *Older.* Buildings on the parcel are greater than 30 years old for non-residential buildings and greater than 40 years old for residential buildings.
   d. *Jurisdiction.* Parcel is not Federal-, State- or county-owned.
   e. *Historic or Landmarked.* Parcel does not contain historic buildings or landmarked resources.
   f. *Existing Residential.* Parcel does not contain condos, large apartment buildings, or rent-controlled units.
   g. *Supermarkets.* Unless a developer has expressed interest in a particular site, HCD typically does not accept supermarkets as potential opportunity sites due to their long-term leases and community need.

   HCD's affordability assumptions are based on the premise that affordable units are more likely to be developed on larger sites that allow for higher densities and a greater total number of units. For the purposes of affordability assumptions on opportunity sites, HCD's methodology combines the "lower income" categories,

Very Low- and Low-Income. The affordability assumptions, based on the State's guidance, are:

a. *Parcel Size.* On sites that are less than 0.35 acres, the potential unit capacity is included solely in the moderate and above-moderate categories. On sites that are greater than 0.5 acre, the affordability distribution is then dependent on the resulting density and unit capacity calculations. Note, adjacent parcels under the same ownership are included and consolidated to achieve a minimum 0.5 acre threshold.

b. *Density.* The potential unit capacity from opportunity sites where the assumed density is less than 75 units per acre are placed in the Above Moderate-Income category. On sites where the assumed density is greater than or equal to 75 units per acre, the potential units are split among the three affordability categories (Lower-, Moderate-, and Above Moderate-Income) based on the number of units that can be accommodated on the site.

c. *Unit Capacity.* If a site can accommodate up to 30 units, then the potential capacity is categorized in the Above Moderate-Income category. If a site can accommodate between 31 and 50 units, the potential capacity is categorized in the Moderate-Income category. If a site can accommodate more than 50 units, the potential units are categorized in the Lower-Income category.

Preliminary analysis of Berkeley's "Likely Sites", "Pipeline Sites", and "Opportunity Sites" using HCD's methodology yields over 16,500 units and meets RHNA requirements within each income category. This suggests that the City's existing zoning is adequate to meet HCD requirements for a compliant Housing Element.

Recent development activity, however, suggests current zoning alone does not deliver the level of deed-restricted affordable housing and economic diversity that the City aims to achieve. Density Bonus and inclusionary units have fallen short of providing the overall 20% Very-Low and Low-Income units expressed in the City's inclusionary housing ordinance in part because projects typically pay a fee in lieu of providing all or part of the inclusionary requirement.

City Council has provided direction on where and how to encourage additional housing, particularly affordable housing that supports a diversity of income levels and household types (see Attachment 1, Council Housing Referrals). Based on Council's referrals and resolutions, the City is preparing a programmatic Draft Environmental Impact Report

(DEIR) that will study potential environmental impacts that could result from up-zoning and new policies in the following areas, by traffic analysis zone (TAZ)[4]:

1. North Berkeley and Ashby BART TOD projects assumed a maximum of 2,400 units in its EIR[5] and the Housing Element EIR will match that assumption. The Sites Inventory estimate currently assumes 1,200 units will be permitted during the Housing Element 2023-2031 cycle.
2. R-1 and R-1A districts are anticipated to increase in density based on SB 9 and zoning amendments in response to Council's referral for missing middle housing[6] and resolution to end exclusionary zoning[7]. The Terner Center's SB 9 modeling indicates that the City of Berkeley could anticipate approximately 1,100 new market-feasible units through SB 9[8]. Using HCD's 70th percentile methodology, the EIR assumes 770 additional units distributed throughout the R-1 and R-1A districts for the 2023-2031 period.
3. Southside Zoning Modification Project proposed an expansion of approximately 800 units over existing Southside Plan Area zoning in its July 2020 Initial Study[9]. Given past development trends and the limited number of opportunity sites in the Southside, the Housing Element EIR assumes approximately 1,200 units total to accommodate up-zoning in the C-T, R-S and R-SMU districts.

As part of the environmental review process, the Housing Element team will be evaluating foreseeable physical impacts as well as a reasonable range of alternatives and mitigation strategies to reduce or avoid potential environmental effects. The alternatives may consider increases in allowed heights and densities or find that higher unit capacities result in greater potential impacts. Ultimately, the EIR must study a realistic development potential for the eight-year period of the Housing Element Update

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[4] July 2014. Final Traffic Analysis Zones (TAZs) Map. Alameda County Transportation Commission (ACTC) https://www.alamedactc.org/wp-content/uploads/2018/12/ModelFinalTAZ_North-1.pdf

[5] October 2021. Ashby and North Berkeley BART Station TOD EIR. https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Land_Use_Division/Ashby%20and%20North%20Berkeley%20BART%20Stations%20Zoning%20Project%20DEIR%20October%202021.pdf

[6] April 23, 2019. Missing Middle Housing Report. Berkeley City Council. https://www.cityofberkeley.info/Clerk/City_Council/2019/04_Apr/Documents/2019-04-23_Supp_2_Reports_Item_32_Rev_Droste_pdf.aspx

[7] February 23, 2021. Resolution to End Exclusionary Zoning in Berkeley. Berkeley City Council. https://www.cityofberkeley.info/Clerk/City_Council/2021/02_Feb/Documents/2021-02-23_Item_29_Resolution_to_End_Exclusionary.aspx

[8] July 21, 2021, Will Allowing Duplexes and Lot Splits on Parcels Zoned for Single-Family Create New Homes? Terner Center. https://ternercenter.berkeley.edu/wp-content/uploads/2021/08/Terner-Center-SB9-model-jurisdiction-output.xlsx

[9] July 2020. Southside Zoning Ordinance Amendments Projects Initial Study. https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Land_Use_Division/Final%20Southside%20Zoning%20Ordinance%20Amendments_Initial%20Study.pdf

to avoid overestimating impacts and unduly burdening future development projects with increased mitigation measures.

Rezoning: Two to Four Unit Residential Objective Standards

In alignment with the Housing Element Update and EIR, the Objective Standards team is studying modifications to zoning standards for residential development with two to four units in the R-1, R-1A, R-2, R-2A, and MU-R zoning districts outside of the Hillside Overlay. These standards are intended to implement the Council's direction to eliminate exclusionary zoning and allow for multifamily "missing middle" housing in Berkeley's lower-density residential districts.

To inform the development of these standards, the City a) illustrated and analyzed existing development standards in the R-1, R-1A, R-2, R-2A, and MU-R districts; and b) prepared four prototype models of example two- to four-unit development projects. These models show a range of configurations for "missing middle" projects in Berkeley and highlight potential conflicts with existing standards (Attachment 2, Illustrated Missing Middle Models).

Key observations from the analysis of existing development standards and prototype feasibility include:

1. Lot Coverage. In R-1, R-1A, R-2, R-2A, the maximum lot coverage varies between 35 percent and 50 percent depending on the location of a lot (internal or corner) and the height of the proposed development (one and two stories or three stories). Maximum lot coverage is a limiting standard, particularly for internal lots, and lot coverage standards that vary by number of stories are more complicated to apply.
2. Open Space. A minimum of 400 square feet of usable open space per dwelling unit is currently required in the R-1, R-1A, and R-2. A minimum of 300 square feet and 150 square feet of usable open space per dwelling unit is required in the R-2A and MU-R, respectively. A minimum width and length of 10 foot by 10 foot is required for ground floor open space; a minimum length of six feet is required for above-ground usable open space. Two of the four prototypes studied do not meet minimum usable open space requirements due to side yard driveways and paved on-site parking area.
3. Height and Stories. In R-1, R-2A, R-2, R-2A, the maximum average height is 28 feet and three stories. A maximum average height of 35 feet is achievable with an administrative use permit (AUP) and is commonly granted by the Zoning Adjustments Board (ZAB) with few—if any—modifications. For some buildings, it is possible to incorporate four stories into a 35-foot average building height, which would increase total habitable floor area.
4. Setbacks. In the R-1 and R-1A, a four-foot side setback is required for all floors, while setbacks in the R-2 and R-2A vary between the first two floors (four-foot side setback) and the third floor (six-foot side setback) and cannot be reduced

with an AUP. MU-R has no minimum side setback requirement. The upper floor setbacks add complexity to three-story construction. Three of the four prototypes studied do not meet the increased third-story interior side setback required in the R-2 and R-2A districts.

5. Floor Area and Floor Area Ratio (FAR). Achievable floor areas based on modeling of existing zoning standards demonstrate a range between 4,881 square feet on an internal lot in the R-2A to 7,800 square feet on a corner lot in the MU-R. There is no maximum FAR standard in the R-1, R-1A, R-2, and R-2A districts; achievable floor area is limited by other standards such as lot coverage, height, stories, and setbacks. In MU-R, the maximum FAR is 1.5, which is a limiting standard where existing standards otherwise allow for 100% lot coverage, up to 10-foot setbacks, 35-feet height and three stories.

Based on the existing standards and prototype analysis, the Objective Standards team drafted proposed standards and alternative options for residential projects with two to four units in the R-1, R-1A, R-2, R-2A, and MU-R districts outside of the Hillside Overlay (Attachment 3, Draft Proposed Multi-Unit 2-4 Development Standards). Proposed standards would apply only to two- to four-unit projects; single-family dwellings will continue to be subject to existing standards. *The standards will be further revised and refined to address ZORP Subcommittees and Council input.*

Key proposed zoning modifications for consideration include:

1. Lot Coverage. To promote housing production and allow for a range of project configurations, the draft proposed standards increase allowed lot coverage as the number of units increases.
2. Open Space. To allow for flexibility in the location and configuration of usable open space while maintaining existing minimum dimensions, the draft proposed standards modify the standards to include outdoor area on the ground within front, street side, or rear setback areas and also above ground (e.g. balconies) used for active or passive recreation use.
3. Height and Stories. To incentivize multi-unit housing production, the draft proposed standards allow maximizing height and increasing the maximum to four stories for projects with three or four units.
4. Setbacks. The draft proposed standards include applying a maximum front setback (*measured from the front property line*) to ensure consistent building placement with adjacent structures, and reducing minimum rear setbacks to be consistent with existing ADU and SB 9 requirements.
5. Step backs. To enhance the feasibility for multi-unit configurations, the proposed draft standards apply a front step back (*measured from the face of the building wall and not the property line*) and removes all other upper-story setback and step back requirements.

6. Floor Area and FAR. The City Council previously directed the City Manager to consider scaling the FAR to increase as the number of units increase on a site. The proposed draft standards increase height, number of stories, and lot coverage as the number of units on the site increases, which effectively increases achievable floor area as number of units increase without creating a new FAR standard.
7. Preservation. To incentivize preservation of existing housing units, the proposed draft standards consider an option to increase allowable floor area for sites with retained existing habitable space.
8. Permit Requirements. City Council direction calls for allowing two-to four-unit projects in R-1, R-1A, R-2, R-2A, MU-R zoning districts. The proposed draft standards would allow two- to four-unit projects with a Zoning Certificate in the R-1, R-1A, R-2, R-2A, and MU-R districts. Two- to four-unit projects are currently permitted by-right in the R-1 under SB 9. Three- and four-unit projects are currently not permitted in the R-1A zones. Where permitted, two- to four-unit projects all require a Use Permit and a public hearing.

- **Staff requests City Council's feedback on the proposed zoning modifications and development standards for two- to four-unit projects in low-density residential districts.**

Rezoning: Multi-Unit 5+ and Mixed-Use Residential Objective Standards

The City is in the preliminary stages of developing objective standards for residential projects with five or more units and mixed-use projects ("multi-unit 5+"). The intent of this effort is to add, remove, or modify objective standards as needed to provide clarity and predictability for streamlined projects (e.g. SB 35), reduce the number of use permits a project requires, and to ensure that such projects are compatible with the scale of the surrounding neighborhood.

The following is a summary of the overall methodology for developing multi-unit 5+ standards:

1. Analyze Recent Project Approval Findings. Using residential projects entitled since 2016, the Objective Standards team will compare the current Zoning Ordinance requirements to as-built dimensions and analyze the relevant non-detriment findings in the staff reports to inform potential objective standards. The initial list of development standards to review will be based on the standards currently being evaluated for two- to four-unit projects (e.g. coverage, height, setbacks).
2. Identify Trends by Zoning District and Project type. The Objective Standards team will study recent development trends by zoning district and by residential project type (e.g., mixed-use, multifamily, or group living accommodations) to determine where modifying of existing standards is necessary.

3. Tailoring Draft Standards. Using the findings and trends analysis, the Objective Standards team will develop preliminary draft zoning standards. Draft development standards will recognize the different residential types and scales of multi-unit 5+ projects. For example, a three-story, five-unit residential-only building may require different objective standards from a five-story, 100-unit mixed-use building especially when transitioning between low-density residential neighborhoods and higher density, or mixed-use areas.

   Included in this effort is consideration of how new development under revised building envelope standards may impact neighboring rooftop solar access where a Commercial or MU-R district borders a Residential district.

In the initial review of existing development standards for multi-unit 5+, the Objective Standards team has identified key early policy questions that require Council input.

1. Mixed-Use vs. Residential-Only. In all Commercial districts except the C-T, C-DMU, and C-AC, development standards vary between mixed-use residential and residential-only projects, providing significantly greater achievable floor area for mixed-use projects. These regulations were intended to encourage mixed-use development along the City's commercial corridors; however, this incentive has resulted in unintended ground floor vacancies. This was noted in a 2017 Council referral requesting flexible ground floor uses[10] to fill vacancies.

   Modifying the development standards along the commercial corridors outside the nodes would provide residential-only projects the benefits afforded to mixed-use residential projects. This change would provide flexibility of uses while continuing to support areas of commercial activity and increasing housing capacity.

- **Staff requests City Council's feedback on whether residential-only projects on commercial corridors–outside designated nodes—should have the same built envelope and maximum floor area as mixed-use residential projects.**

2. Height and Stories. In the C-DMU Core, the ZAB may issue a Use Permit to increase the height to a maximum of 180 feet for three buildings and a maximum of 120 feet for two buildings. To-date, one 180-foot building has been constructed, one 120-foot building has been issued building permits, one 180-foot building has been entitled, and one 180-foot building is awaiting entitlement. The Southside Plan's preliminary environmental analysis projected up to three 12-story buildings that would include up to 500 units.

   To provide clarity and predictability for future potential projects, and increase housing capacity in the limited number of identified opportunity sites in the Downtown and Southside areas (approximately 14 parcels in Downtown and nine

[10] April 4, 2017. Referral to allow non-commercial ground floor uses. Wengraf et al. https://www.cityofberkeley.info/Clerk/City_Council/2017/04_Apr/Documents/2017-04-04_Item_21_Referral_to_the_Planning_Commission_to_Allow_Non-commercial_Use.aspx

in Southside), rezoning provides an opportunity to increase maximum heights and/or the number of tall buildings allowed within C-DMU Core and Southside.

- **Staff requests City Council's feedback on potentially raising maximum heights and/or uncapping the number of tall buildings in Downtown and the Southside once objective standards and programmatic elements to incentivize affordable units are in place.**

Project Timeline and Implications

In order to meet the Housing Element's statutory deadline of January 31, 2023, the EIR timeline and HCD's review periods, environmental review for this project has been initiated. Berkeley is on target to meet the statutory deadline for the Housing Element with little or no leeway in the timeline due to a 74-day decrease in timeline imposed by AB 215 which came in to effect on January 1, 2022.

The schedule will remain uncertain until the project nears completion. The project team is working diligently to meet the statutory deadline for a compliant Housing Element, but recognizes that final adoption requires various parties, within and outside the City, to act under very tight timelines. The Housing Element EIR will cover rezoning and Residential Objective Standards; however, adoption of these elements can occur a few months after adoption of the Housing Element without penalty from the State if additional time or review is required.

BACKGROUND

Berkeley's 6th cycle RHNA is 8,934 residential units[11]. The City is not required to build housing, but it is required to identify and zone sufficient sites to accommodate the anticipated growth over the next eight-year period. If actual housing production is less than the RHNA, eligible affordable housing projects are subject to a streamlined approvals process (SB 35).

Table 1: Berkeley RHNA Allocation, 5th & 6th Cycles

Income Level	2015-2023 RHNA Units	2023-2031 RHNA Units
Very Low (< 50% AMI)	532	2,446
Low (50-80% AMI)	442	1,408
Moderate (80-120% AMI)	584	1,416
Above Moderate (>120% AMI)	1,401	3,664
Total	**2,959**	**8,934**

[11] December 16, 2021. Final RHNA Plan: San Francisco Bay Area, 2023-2031. ABAG. https://abag.ca.gov/tools-resources/digital-library/proposed-finalrhnaallocationreport2023-2031pdf

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

The Housing Element Update is expected to result in greater infill housing development potential near transit and in employment-rich areas. Prioritizing density and affordable housing in these areas will incentivize community members to use alternative modes of transportation and reduce vehicle miles traveled (VMT), which are critical for reducing greenhouse gas emissions, and will bring the City closer to meeting its Climate Action Plan and Climate Emergency goals.

POSSIBLE FUTURE ACTION

Based on Council direction, project findings, and stakeholder and public input to date, the Housing Element team will prepare and release a public draft Housing Element Update in early Summer 2022. The general public will have 30 days to review and submit comments, and the City must allocate a minimum of two weeks to address and respond to public comments before submitting a Draft Housing Element to HCD for a 90-day review. After incorporating HCD comments, a final Housing Element Update is anticipated to be submitted to Council in early 2023 for local adoption prior to submittal for State certification.

FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

Housing Elements are subject to regulatory oversight by HCD. If the State does not certify the 6th Cycle Housing Element prior to May 31, 2023, the City faces a number of penalties and consequences. In addition to significant fines of up to $100,000 per month, the City can be sued by individuals, developers, third parties, or the State. A court may limit local land use decision-making authority until the City brings its Housing Element into compliance. Failure to comply would also impact Berkeley's eligibility and competitiveness for federal, state, and regional affordable housing and infrastructure funding sources.

CONTACT PERSON

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Alene Pearson, Principal Planner, Land Use Planning Division, (510) 981-7489

ATTACHMENTS

1. Council Housing Referrals
2. Illustrated Missing Middle Models
3. Draft Proposed Standards for Two- to Four-Unit Residential Development in the R-1, R-1A, R-2, R-2A, and MU-R zoning districts.

LINKS:

1. December 9, 2021. *Housing Element Update Work Session 2*. Report from City Manager to Berkeley City Council. https://www.cityofberkeley.info/Clerk/City_Council/2021/12_Dec/City_Council__12-09-2021_-_Special_Meeting.aspx

2. November 9, 2021. *Objective Standards for Density, Design, and Shadows. Supplemental Packet 3*. Report to Berkeley City Council, Councilmember Hahn et al. https://www.cityofberkeley.info/Clerk/City_Council/2021/11_Nov/Documents/2021-11-09_Item_20_Objective_Standards_Recommendations_for_Density,_Design_and_Shadows.aspx

3. November 9, 2021. *Objective Standards for Density, Design, and Shadows. Supplemental Packet 2*. Report to Berkeley City Council, Councilmember Droste et al. https://www.cityofberkeley.info/Clerk/City_Council/2021/11_Nov/Documents/2021-11-09_Supp_2_Reports_Item_20_Supp_Droste_pdf.aspx

4. September 21, 2021. *Housing Element Update Work Session 1*. Report from City Manager to Berkeley City Council. https://www.cityofberkeley.info/Clerk/City_Council/2021/09_Sep/City_Council__09-21-2021_-_Special_(WS)_Meeting_Agenda.aspx

5. April 28, 2021. *Housing Element Update and Annual Progress Report,* Off-Agenda Memo from City Manager to Berkeley City Council. https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Housing%20Element%20Update%20042821.pdf

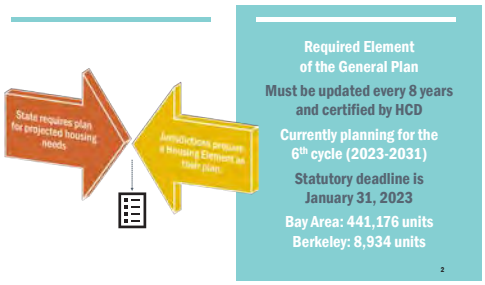
6. March 25, 2021, *Initiation of Public Process and Zoning Concepts for 2023-2031 Housing Element Update*. Report to Berkeley City Council, Councilmember Droste et al. https://www.cityofberkeley.info/uploadedFiles/Clerk/City_Council/2021/03_Mar/Documents/Initiation%20of%20Public%20Process%20and%20Zoning%20Concepts%20-%20Mayor%203-25-21.pdf

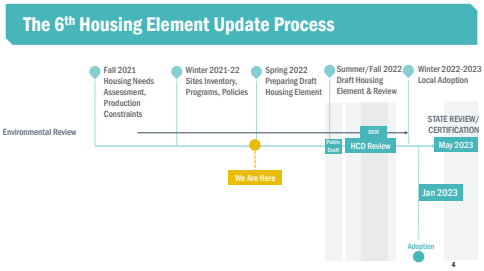
Housing Element Update

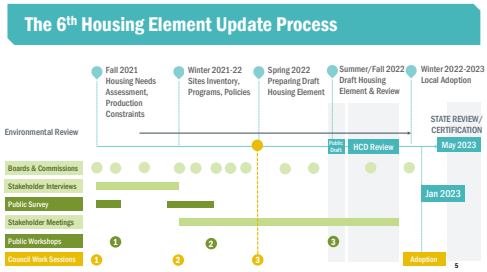
WORKSESSION
March 15, 2022

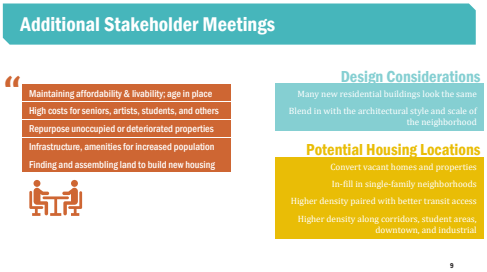
7. March 25, 2021, *Initiation of Participatory Planning for Berkeley's Regional Housing Needs Allocation (RHNA).* Supplemental report to Berkeley City Council, Councilmember Hahn et al. https://www.cityofberkeley.info/Clerk/City_Council/2021/03_Mar/Documents/2021-03-25_(Special)_Supp_2_Reports_Item_2_Supp_Hahn_pdf.aspx

Figure F-12 Work Session #3 Presentation

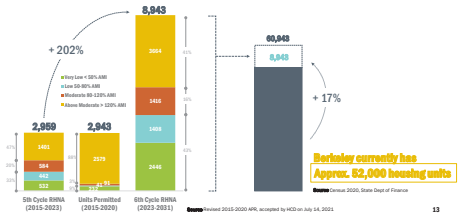








Regional Housing Needs Allocation (RHNA)
5th & 6th cycle



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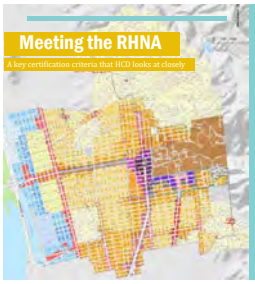
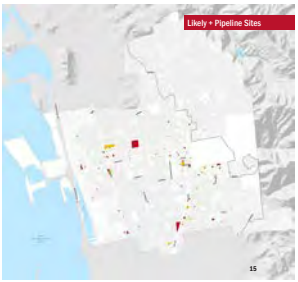
Meeting the RHNA
A key certification criteria that HCD looks at closely



- Adequate Sites
- Zoned Appropriately
- Available for residential use
- Capacity to provide units, by income level, required by RHNA
- Meet HCD's criteria (physical characteristics, density)

Likely Sites
- ADU Trend
- N Berkeley & Ashby BART
- Approved Projects since 2018

Pipeline Sites
- Projects under Review
- Anticipated



15

Opportunity Sites
- Federal, State, County-owned
- Condo or Large Apartment Bldg
- Historically-sensitive
- Rent-Controlled Units
- Most Supermarkets

16

Opportunity Sites
- Vacant Land Use
- Non-residential Building > 30 yrs old
- Built at ≤ 35% capacity (e.g. density, height)

Affirmatively Furthering Fair Housing
Racial Diversity
Concentration of Poverty
Environmental Equity
Community Benefits

Ensure affordable housing is distributed and balanced in "high opportunity" neighborhoods.

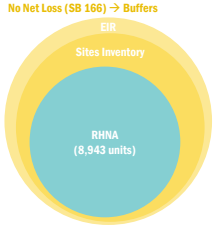
17

Opportunity Sites

AB 1397 Reused 5th Cycle Sites for Lower Income Units
- 18 opportunity sites
- Accommodates 1,419 lower income units
- Located mainly along commercial corridors

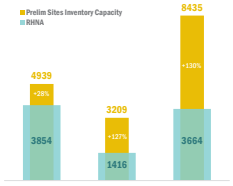
18

Meeting the RHNA
No Net Loss (SB 166) → Buffers



NOT ACTUAL DEVELOPMENT PROPOSALS
- City is not required to build or finance the housing
- Does not automatically authorize the construction of housing units
- No obligation by property owner to take action
- Reliant on the development industry (market rate/affordable) to construct

RHNA vs. Preliminary Sites Inventory Capacity



20

Potential Zoning Code Amendments

R-1, R-1A, R-2, and R-2A
Up to 2-3-4 units per parcel, allow division of units.

Variety and flexibility of housing types and tenure

Southside Plan Area
Increased height and coverage; 12 story within the original R-SMU and the C-T north of Dwight

Priority Development Areas (PDAs)
Downtown, University, San Pablo, Shattuck, Telegraph
Adeline (not included)

Transit + Commercial Corridors
Min. 15-minute peak headways

21

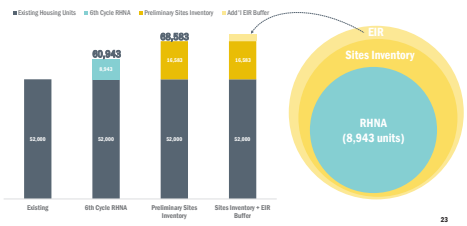
Southside Zoning Amendments

5 areas now zoned R-S and, one area zoned R-3, → R-SMU
- Increased maximum heights (from 4/5 to 6 stories)
- Increased lot coverage (from 70%/75% to 85%)

One area now zoned R-3 → R-S
- Increased maximum heights (from 4 stories to 5 stories)
- Increased lot coverage (from 70% to 75%)

22

EIR Project Description



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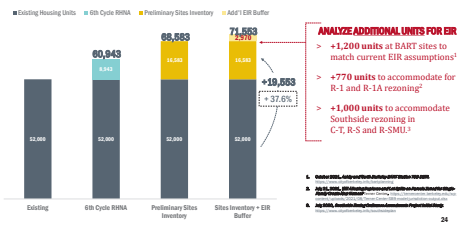
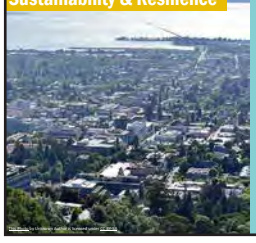
EIR Project Description



24

Sustainability & Resilience



CLIMATE BENEFITS
- Infrastructure proximity
- New construction standards

HEALTH BENEFITS
- Air quality
- Active transportation

CONNECTIVITY & COMMUNITY
- Access
- Affordability

CLARIFYING QUESTIONS?

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26

Residential Objective Standards
1. Overview
2. Two to Four Units
3. Multi-Unit 5+ and Mixed-Use
4. Residential Objective Standards & the Environment

27

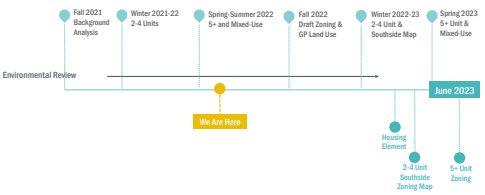
Framework – Three Buckets

28

A Two-Part Process

29

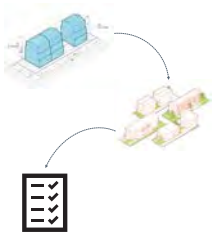
Residential Objective Standards Timeline



30

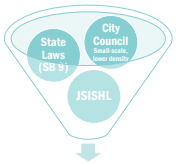
2-4 Unit Residential Objective Standards

1. 10 Existing Standards Models
2. 4 Prototype Models
3. Draft Development Standards



31

Standards for 2-4 Unit Residential



ANTICIPATED OUTCOMES

- Creates a new "Multi-Unit 2-4" land use category
- Allows this use in the R-1, R-1A, R-2, R-2A, and MU-R Districts
- Establishes development standards for this use

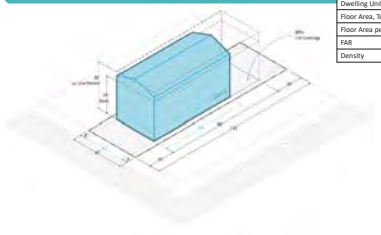
32

Existing Standards

- Illustrate and analyze existing standards in R-1, R-1A, R-2, R-2A, and MU-R districts
- Use typical 5,200 sq. ft. lot (40' by 130')
- Show developable envelope ("glass box") defined by setbacks and height
- Identify achievable floor area and building volume limited by lot coverage, step backs, FAR, and other standards

33

Existing R-1 Standards



Model Outputs	
Dwelling Units	1
Floor Area, Total	6,240 sf
Floor Area per Unit	6,240 sf
FAR	1.2
Density	8.4 du/ac

34

Summary of Existing Standards

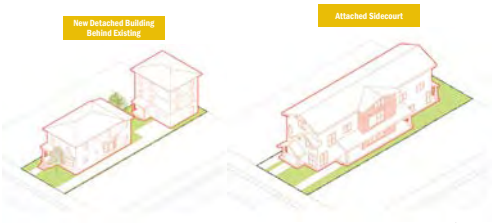
35

Prototype Models

- Show potential configurations of three- to four-unit projects based on recent development in Berkeley and surrounding jurisdictions
- Identify where the residential types and configurations may conflict with existing zoning standards
- Prepare new development standards for consideration in each low-density Residential District

36

Four Prototype Models



Four Prototype Models

38

Four Prototype Models – Context

39

Four Prototype Models – Conflicts with Current Zoning

New Detached Building Behind Existing	Attached Sidecourt	Detached Cluster	Attached Row Homes
# of Units per Lot	# of Units per Lot	# of Units per Lot	# of Units per Lot
Lot Area per Unit	Lot Area per Unit	Lot Area per Unit	Lot Area per Unit
Lot Coverage	Lot Coverage	Lot Coverage	Lot Coverage
Usable Open Space	Usable Open Space	Usable Open Space	Usable Open Space
Building Height, Avg.	Building Height, Avg.	Building Height, Avg.	Building Height, Avg.
# of Stories	# of Stories	# of Stories	# of Stories
Front Setback	Front Setback	Front Setback	Front Setback
Rear Setback	Rear Setback	Rear Setback	Rear Setback
Side Setback	Side Setback	Side Setback	Side Setback
Bldg Separation	Bldg Separation	Bldg Separation	Bldg Separation

40

Proposed Draft Standards

- Zoning districts: R-1, R-1A, R-2, R-2A, and MU-R outside of H overlay
- 2-4 unit projects only
- Summary table with existing and proposed new standards
- Options for certain standards

41

Proposed Draft Standards

- ❑ **Density**
- ❑ **Lot Area**
- ❑ **Lot Area per Unit**
- ❑ **Lot Coverage**
- ❑ **Open Space**
- ❑ **Building Height**
- ❑ **Setbacks**
- ❑ **Step Backs**
- ❑ **Building Separation**
- ❑ **Floor Area Ratio**

42

Floor Area and FAR and Preservation

R-1 District

	Standards			Achievable Floor Area	
	Height	Stories	Coverage	Total	Per Unit
Existing Standards					
1 unit	28/35 ft.	3	40%	6,240 sf	6,240 sf
Proposed Standards					
2 units	28 ft.	3	40%	6,240 sf	3,120 sf
3 units	35 ft.	3	45%	7,020 sf	2,340 sf
4 units	35 ft.	3	50%	7,800 sf	1,950 sf

Achievable floor area increases as # units increase

R districts: Height and coverage standards scale up

MU-R: FAR scales up

Option to increase floor area if existing front main residential building preserved.

43

Permits Required - Existing

Existing Permit Requirements

Dwelling Types	R-1	R-1A	R-2	R-2A	MUR
Single-Family	UP(PH)	UP(PH)	UP(PH)	UP(PH)	AUP
Two-Family	NP	UP(PH)	UP(PH)	UP(PH)	AUP
Multi-Family	NP	NP	UP(PH)	UP(PH)	UP(PH)

ZC Zoning Certificate
UP(PH) Use Permit(Public Hearing)
AUP Administrative Use Permit
NP Not Permitted

44

Permits Required - Proposed

Proposed Permit Requirements

Dwelling Types	R-1	R-1A	R-2	R-2A	MUR
Single-Family	UP(PH)	UP(PH)	UP(PH)	UP(PH)	AUP
Multi-Unit 2-4	ZC	ZC	ZC	ZC	ZC
Multi-Unit 5+	NP	NP	UP(PH)	UP(PH)	UP(PH)

ZC Zoning Certificate
UP(PH) Use Permit(Public Hearing)
AUP Administrative Use Permit
NP Not Permitted

45

ZORP Subcommittees Feedback

- **By-right approvals**
- **Unit sizes**
- **Preservation Incentive**
- **Shade and Solar Access Impacts**
  - Concern about impacts on adjacent rooftop solar (existing and potential future)
  - Concern about individual properties, as well as citywide renewable energy generation and climate resilience
  - Requests for new objective standards for shade and solar access impacts

Q: Council feedback on proposed zoning modifications and development standards for two- to four-unit projects in low-density residential districts?

46

Model for Solar Studies

Models help us answer...

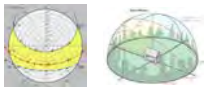
- Expected rooftop solar access impacts?
- Would these impacts constitute a detriment?
- Are new objective standards needed?
- If so, what is the best approach?

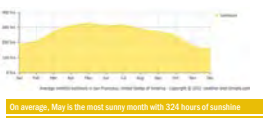
Model is Geo-located to Berkeley, CA and set on a grid aligned with true North

Solar Conditions

Solar Energy Production Months
Assuming February through October (the summer half the year), but also knowing that there are more months.

Applicable Hours of Day
8am, 10am, noon, 2pm, 4pm





On average, May is the most sunny month with 324 hours of sunshine

On average, December has the lowest amount of sunshine with 160 hours

The average annual amount of sun hours is **3072 hours**

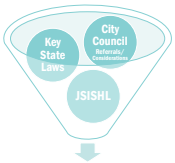
https://vimeo.com/686933499

Multi-Unit 5+ and Mixed-Use Methodology

1. Overview
2. Proposed Methodology
3. Early Policy Questions

50

Standards for Multi-Unit 5+ and Mixed Use



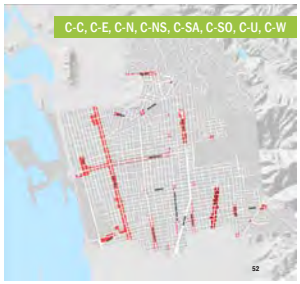
ANTICIPATED OUTCOMES

- Considers diversity of project types, sizes, locations
- Codifies typical City requirements
- Reduces reliance on subjective Use Permit requirements

51

Mixed Use vs. Residential Only

- In most Commercial Districts, development standards vary between mixed-use and residential-only projects
- Results in significantly greater achievable floor area for mixed-use projects
- Intended to encourage mixed-use development along commercial corridors
- Unintended ground floor vacancies



52

Example: C-C District

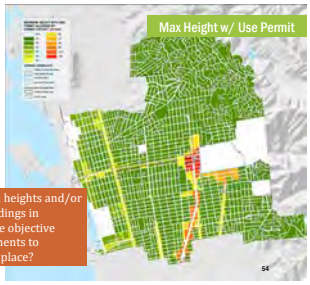
	Mixed-Use	Residential-Only
Lot Area, min	No min	5,000 sf
Bldg Height, max	40', 50' w/ UP	35'
# Stories, max	3, 4 w/ UP	3
Lot Coverage (Interior), max	100%	1-2 story: 45% 3-story: 40%
Lot Coverage (Corner), max	100%	1-2 story: 50% 3-story: 45%
Floor Area Ratio, max	3.0	No max
Approx. Max Floor Area on a 5,000 sf interior lot	15,000 sf	6,000 sf

Q: Should residential-only projects on commercial corridors—outside designated nodes—**have the same built envelope and maximum floor area** as mixed-use residential projects?

53

Heights & Stories

- Majority of the City allows a maximum height of 35' and 3 stories.
- In Downtown:
  Max two 120-foot buildings + three 180-foot buildings in C-DMU Core
- In Southside:
  Currently allows 45-75 with use permit in R-3, R-S, R-SMU, C-T, C-SA
- In Southside Plan Initial Study: Up to three 12-story buildings



Q: Should the City raise maximum heights and/or uncapping the number of tall buildings in Downtown and the Southside once objective standards and programmatic elements to incentivize affordable units are in place?

54

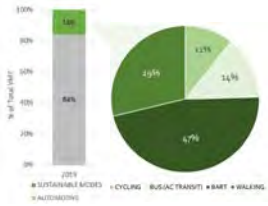
2019 GHG Inventory

Source: 2019 Greenhouse Gas Inventory, UC Berkeley and the Berkeley Lab are not included in the GHG Inventory

DECARBONIZING BUILDINGS

- Prohibition of Natural Gas Infrastructure in New Construction
- Low Carbon Concrete
- EBCE Renewable 100
- Existing Buildings Electrification Strategy

Reducing transportation emissions



56

THANK YOU

Photo Credit: Jessica Christian / The Chronicle

FOR MORE INFORMATION

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57

Office of the City Manager

WORKSESSION
September 20, 2022

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Jordan Klein, Director, Planning and Development Department

Subject: Residential Objective Standards: Middle Housing and Southside

SUMMARY

In response to City Council referrals, recent changes in housing-related State laws, and the requirement to update the City's Housing Element, City staff are preparing Zoning Ordinance and zoning map changes for:

1. **Lower density districts**, which include the R-1, R-1A, R-2, R-2A, and MU-R zoning districts, to create or modify objective residential development standards to encourage duplexes, triplexes/fourplexes, townhomes, and other small-scale multi-family housing types ("middle housing") that have historically appeared in Berkeley neighborhoods comprised of single-family homes. The intent is to address the need for more housing options, including rental and ownership.
2. **The Southside Area**, to create or modify objective standards for building height, coverage, parking, ground-floor residential uses, and zoning district boundaries to increase residential development potential—particularly student-oriented housing—in portions of the R-3, R-S, R-SMU, C-SA, and C-T zoning districts within the Southside Area.

The proposed amendments are based on input from community engagement through the Housing Element Update as well as prior meetings with Council, Planning Commission, Southside Environmental Impact Report (EIR) Subcommittee, and the Zoning Ordinance Revision Project Subcommittees. The City Council is asked to receive a staff presentation and provide feedback on the proposed objective development standards and approaches.

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CURRENT SITATUTION AND ITS EFFECTS

As stated in prior reports[1], the City Council referred staff to consider and codify objective zoning standards with the goal of encouraging the creation of additional residential development and affordable homes. Further purposes include:

- Address State laws that seek to reduce time involved in permitting processes through by-right and ministerial approvals.
- Increase certainty for applicants by removing subjective judgements from project approvals.
- Reduce the administrative costs and burden associated with needing to provide qualitative justifications for discretionary review.

LOWER DENSITY DISTRICTS

Over the past year, staff have worked to implement the City Council's direction to end exclusionary zoning[2] and allow for "missing middle" development[3] in Berkeley's lower density zones[4]. As cited in the Council referrals, the intent is to:

- Foster a broader range of housing types across Berkeley in areas with access to essential components of livability like parks, schools, employment, transit, and other services; and
- End single family residential zoning, which has its roots in racist exclusionary zoning policy and leads to racial and economic segregation.

Middle housing can meet the needs of renters as well as create more ownership opportunities by offering flexibility for a range of unit sizes and incentivizing housing types that are "affordable by design," i.e. with less development cost per unit due to the increased density and other modified development standards.

The draft proposed standards are designed to increase the total number of units allowed based on lot size, increase the total achievable floor area on a lot as the number of units increases, and encourage a mix of unit sizes and densities. In the lower density Residential zoning districts, this is accomplished by marginally increasing allowed lot coverage and floor area ratios (FAR) as the number of units increases, but at a rate that results in lower average unit sizes for larger buildings. In the MU-R district, this is accomplished by increasing FAR as the number of units increases, as there is already no limit to lot coverage.

Table 1 below provides a summary of the proposed standards, the recommended changes, and the policy rationale for each recommendation. Each standard is further discussed below and a detailed table listing all of the draft proposed development

---

[1] November 9, 2021. Objective Standards for Density, Design, and Shadows. Berkeley City Council.

[2] February 23, 2021. Resolution to End Exclusionary Zoning in Berkeley. Berkeley City Council.

[3] April 23, 2019. Missing Middle Housing Report. Berkeley City Council

[4] The ES-R District is excluded from this program because new dwelling units are currently prohibited in that limited area due to extreme hazards and inadequate infrastructure.

standard changes can be found in Attachment 2. In addition, staff are considering strategies for wildfire mitigation, view preservation, and solar access and address these concerns in the report following the discussion on standards.

Table 1. Summary of Proposed Lower Density Residential Standards

Standard	Recommendation	Policy Goal
Minimum and Maximum Densities	Set minimum and maximum densities expressed in units per acre	Encourage appropriate densities Increase predictability of review process and outcome Maintain middle housing scale in low-density residential districts
Maximum Floor Area Ratio (FAR)	Set a maximum FAR that scales up as the number of units increases	Maintain middle housing scale in low-density residential districts Encourage a mix of unit sizes that are "affordable by design" Comply with SB 478 which prohibits a local agency from imposing a FAR less than 1.0 on a housing project with 3 to 7 units, or less than 1.25 on a housing project with 8 to 10 units
Minimum Open Space	Reduce required minimum open space, and set the requirement based on square feet of building area, rather than per unit	Maintain middle housing scale in low-density residential districts
Maximum Height	Set a maximum average height and/or maximum overall height without an option to modify with a Use Permit	Streamline the approval process Increase predictability of review process and outcome
Lot Coverage and Setbacks	Increase allowable lot coverage as the number of units increases; Reduce rear setbacks with reduced building height.	Maintain middle housing scale in low-density residential districts
Building Separation	Remove building separation requirement where there is more than one building on a lot	
Permits and Levels of Discretion	Enable projects with two or more units to be approved with a Zoning Certificate (ZC)	Maintain middle housing scale in low-density residential districts Streamline the approval process

Zoning Map Amendment

In response to City Council's feedback at its March 15, 2022 worksession, the proposed R-1A and R-2 district standards have been merged to be one set of standards, identified as "Residential Multi-Unit 2 (R-2)", which also would be reflected on a zoning map amendment (Attachment 1). Both R-1A and R-2 districts are in the same General Plan land use designation already: Lower Medium Density Residential (LMDR).

Permits and Levels of Discretion

Current Standards: Table 2 includes the current permit requirements in lower-density residential districts for residential and live/work projects that include more than one dwelling unit. The proposed standards do not change any permit requirements for Single-Family, Group Living Accommodation or Mixed-Use Residential[5] uses in these zones, so those regulations are not listed.

Table 2. Current Permit Requirements

	R-1	R-1H	R-1A	R-2	R-2H	R-2A	R-2AH	MU-R
Two-Family	NP	NP	UP(PH)	UP(PH)	NP	UP(PH)	UP(PH)	AUP [1]
Multi-Family	NP	NP	NP	UP(PH)	NP	UP(PH)	UP(PH)	AUP/UP(PH) [1]
Live/Work	NP	NP	NP	NP	NP	NP	NP	AUP/UP(PH)[1]
[1] A Use Permit is required to establish a unit that is within 150 feet of an M or MM district; or a construction product manufacturing or primary product manufacturing use. (*BMC 23.206.090(B)(8) MU-R Mixed Use-Residential District*) UP(PH) = Use Permit (Public Hearing); AUP = Administrative Use Permit; NP = Not Permitted								

Proposed Standards: The proposed standards, shown in Table 3, would combine Two-Family and Multi-Family Residential uses into a single Multi-Unit Residential use type. The City would provide ministerial approval with a Zoning Certificate for Multi-Unit Residential and Live/Work projects that comply with all objective standards; no discretionary permit or public hearing would be required. A Zoning Certificate is a ministerial approval reviewed by staff to verify compliance with the Zoning Ordinance, and is not appealable.

Table 3. Proposed Permit Requirements

	R-1	R-1H	R-2	R-2H	R-2A	R-2AH	MU-R
Multi-Unit Residential	ZC	ZC	ZC	ZC	ZC	ZC	ZC[1]
Live/Work	NP	NP	NP	NP	NP	NP	ZC[1]
[1] A Use Permit is required to establish a unit that is within 150 feet of an M or MM district; or a construction product manufacturing or primary product manufacturing use. (*BMC 23.206.090(B)(8) MU-R Mixed Use-Residential District*)							

[5] Mixed-use residential is allowed in the R-2 and R-2A, and involves combinations of residential use with other permissible non-residential uses, such as childcare center and religious assembly.

Minimum and Maximum Densities

In July 2017, Council directed staff to consider adoption of a numerical density and/or building intensity standard that can be applied on a parcel-by-parcel basis in an easy and predictable manner.[6]

Current Standards: The Zoning Ordinance does not include any minimum or maximum density standards expressed in "units per acre" for low-density residential zones. In the R-1, R-1A, R-2, and R-2A districts, density is limited by requirements for a "minimum lot size per unit" standard and by specific residential land use types (e.g. "Single-Family", "Two-Family").

- The R-1 district currently permits only single-family uses. The resulting density on a 5,000 square foot lot is approximately nine units per acre. However, SB 9 State legislation applies throughout single-family zoning districts including in the Hillside Overlay (H) district, and permits up to two units ministerially on a lot and/or an urban lot split to subdivide an existing single-family parcel into two parcels.
- The R-1A district currently permits single-family and two-family uses. No more than two units are allowed on a lot. The resulting density on a 5,000 square-foot lot is roughly 17 units per acre.
- R-2 and R-2A districts currently permit single-family, two-family, and multi-family residential uses with a UP(PH), with density determined based on lot size. The resulting density on a 5,000 square-foot lot is roughly 17 units per acre in the R-2 district and 26 units per acre in the R-2A district.
- MU-R currently permits single-family and two-family uses with an AUP, and multi-family with a UP(PH) or AUP depending on project size and proximity to a M or MM district. The resulting density on a 5,000 square foot lot is roughly 35 units per acre.

Proposed Standards: Table 4 summarizes the proposed density standards expressed in units per acre, and includes the maximum number of units that may result from each standard on a typical 5,000 square foot lot in each zone. There is no minimum density requirement for lots in the H district. Minimum densities would apply for new development on vacant lots or redevelopment and infill of existing nonvacant lots.

SB 9 would no longer apply to the R-1 district because it would no longer be a single-family zone. Projects with five or more units that include affordable units on-site would be eligible to utilize the State Density Bonus Law.

[6] July 11, 2017. Housing Accountability Act. Berkeley City Council.

Table 4. Proposed Density Standards

	R-1	R-1H	R-2	R-2H	R-2A	R-2AH	MU-R
Minimum Density (units/acre)	10	No min.	10	No min.	20	No min.	20
Maximum Density (units/acre)	25	20	35	20	55	55	55
Example: Resulting units on a 5,000 sf lot							
Minimum Units	*1*	*No min.*	*1*	*No min.*	*2*	*No min.*	*2*
Maximum Units	*3*	*2*	*4*	*2*	*6*	*6*	*6*

The proposed density standards do not include any eligible Accessory Dwelling Units (ADUs) permitted under recently-adopted ADU provisions. A maximum of one ADU is permitted on lots with more than one detached dwelling. A maximum of two detached ADUs or up to 25 percent of the total number of existing units may be converted into ADUs on a lot with a duplex or multiple attached dwelling units. In R-1H, R-2H, and R-2AH, a maximum of one ADU or JADU is permitted.

Maximum Floor Area Ratio (FAR)

Current Standards: The Zoning Ordinance does not include a specific FAR standard in the R-1, R-1H, R-1A, R-2, R-2H, R-2A, R-2H and R-2AH districts. However, an effective maximum FAR of 1.2 can be calculated based on existing standards for lot coverage and maximum number of stories. The BMC includes a maximum 1.5 FAR in the MU-R district.

Proposed Standards: Table 5 summarizes the proposed maximum FAR standards. The existing effective FAR is applied to one-unit and non-residential projects, which would continue to require a use permit and public hearing process[7]. No FAR limit is applied if a project is subdividing existing habitable space to create additional dwelling units.

The City Council has referred consideration of an increase in the FAR as the number of units increases on a site. The recommended FAR standards also reflect guidance from the ZORP Subcommittees to encourage the development of smaller or medium-sized, cost-efficient units that are "affordable by design."[8] In addition, SB 478 prohibits a local agency from imposing a FAR less than 1.0 on a housing project with three to seven

[7] The focus of the Middle Housing project is to facilitate multi-unit housing development; analysis of single-family development standards is not a part of this scope.

[8] The ZORP Subcommittees also recommended development standards that would incentivize, but not require, the preservation of existing buildings. However, this would assume there is merit to preserving all existing street-facing buildings and that "preservation" can be objectively defined. For these reasons, the proposed FAR standards do not include a preservation bonus.

units, or less than 1.25 on a housing project with eight to 10 units.

Table 5. Proposed Maximum FAR Standards

	R-1	R-1H	R-2	R-2H	R-2A	R-2AH	MU-R
1 Unit or Non-Residential	1.2 [1]	1.2 [1]	1.2 [1]	1.2 [1]	1.2 [1]	1.2 [1]	1.5 [2]
2 Units	0.5	0.5	0.6	0.6	1.0	1.0	1.5
3 - 7 Units	1.0	1.0	1.0	1.0	1.25	1.25	1.5
8 + Units	1.25	1.25	1.25	1.25	1.5	1.5	1.75
[1] UP(PH) [2] AUP							

Minimum Required Open Space

Current Standards: Table 6 summarizes current minimum open space requirements in lower-density districts, on a per unit basis.

Proposed Standards: The proposed development standard would require 150 sf of open space for every 1,000 sf of floor area on a project site in each of the lower density districts, not based on the number of units since individual units may vary in size and occupancy. The proposed standard is designed to permit greater flexibility in the configuration of open space on a lot while also preserving the requirement to provide residents with usable open space.

Table 6. Required Open Space

	R-1	R-1H	R-1A	R-2	R-2H	R-2A	R-2AH	MU-R
Current Minimum Open Space								
Per Dwelling Unit (sf)	400					300		150
Proposed Minimum Open Space								
Per 1,000 sf Floor Area	150		--	150				

Maximum Height

Current Standards: The Zoning Ordinance generally limits average building heights for main buildings in most lower density residential districts to 28 feet and 3 stories, with a possible increase to 35 feet with an AUP. In the H district, the Zoning Officer may approve an AUP to increase the allowed average height (28 feet) and allowed maximum height (35 feet). In the R-1A district, rear main buildings are limited to 22 feet and 2 stories. In the MU-R, the maximum height is 35 feet and 3 stories without the need for an additional AUP. Current standards also limit the height of residential additions to 14 feet, with a possible increase to 35 feet with an AUP.

Proposed Standards: The proposed development standards for maximum building height include the following (see Table 7):

- Outside of the H District, the maximum average building height in lower-density residential districts would be 28 feet and the maximum overall height would be 35

feet. In addition, the maximum height would be reduced to 22 feet within 15 feet of a rear property line.

- Within the H District, the maximum overall building height would be reduced to 28 feet, to address concerns for both wildfire mitigation (e.g., less fire fuel in the form of building materials), structural fireground operations (e.g., ground ladder placement for access to windows and the roof), and view preservation.
- The limit on the maximum number of stories would be removed; maximum height would be measured in feet.
- Maximum height standards for main buildings, rear buildings, and residential additions would be the same. (ADUs have separate regulations that would be unaffected.)

The proposed development standards largely preserve existing height limits, while providing a pathway for a nondiscretionary process based on objective standards. The proposed standards also include provisions that consider potential impacts on neighboring properties, such as lower maximum heights near the rear property line and reduced height limits in the H District. Attachment 3, Figure 3.5 includes height measurement diagrams that illustrate how the existing and proposed development standards consider sloped situations in the H District.

Table 7. Current and Proposed Height Standards

	R-1	R-1H	R-1A	R-2	R-2H	R-2A	R-2AH	MU-R
Current Standards								
Max. Average Height (ft)	28	28	28	28	28	28	28	--
Max. Height (ft)	--	35	--	--	35	--	35	35
Max. Height with AUP (ft)	35	No max	35	35	No max	35	No max	--
Proposed Standards								
Max. Average Height (ft)	28	--	28	28	--	28	--	--
Max. Height (ft)	35	28	35	35	28	35	28	35

Maximum Lot Coverage

Current Standards: Table 8 summarizes existing maximum lot coverage requirements. Current requirements distinguish between interior and corner lots, and reduce maximum lot coverage for taller projects.

Table 8. Current Maximum Lot Coverage Standards

	R-1	R-1H	R-1A	R-2	R-2H	R-2A	R-2AH	MU-R
Interior & Through-Lots								
1 Story	40%	40%	40%	45%	45%	45%	45%	100%
2 Stories	40%	40%	40%	40%	40%	40%	40%	100%
3 Stories	40%	40%	40%	35%	35%	35%	35%	100%

Corner Lots								
1 Story	40%	40%	50%	50%	50%	50%	50%	100%
2 Stories	40%	40%	45%	45%	45%	45%	45%	100%
3 Stories	40%	40%	45%	40%	40%	40%	40%	100%

Proposed Standards: The proposed development standards, summarized in Table 9:

- Marginally increase maximum lot coverage in most lower-density residential districts.
- Use the total number of units in a project as the controlling factor for the standard, instead of the number of stories.
- Eliminates the distinction between interior/through lots and corner lots.

Table 9. Proposed Maximum Lot Coverage Standards

	R-1	**R-1H**	**R-1A**	**R-2**	**R-2H**	**R-2A**	**R-2AH**	**MU-R**
1 - 2 Units & Non-Residential	40%	40%	50%	50%	50%	50%	50%	100%
3 - 7 Units	50%	50%	55%	55%	55%	55%	55%	100%
8 + Units	55%	55%	55%	55%	55%	60%	60%	100%

Minimum Setbacks

Current Standards: The Zoning Ordinance currently regulates four types of setbacks:

- Front and Rear Setbacks: Front and rear setbacks are 20 feet in the R-1, R-1H, R-1A, R-2 and R-2H zoning districts, and 15 feet in the R-2A and the R-2AH districts.

  In the MU-R zoning district, lots adjacent to a non-residential district have no rear setback, unless they abut a street, in which case a five-foot rear setback is required. A lot in the MU-R district adjacent to a residential district must provide a rear setback of either 10 feet or 10 percent of the lot's width, whichever is less.

- Interior Side Setbacks: Interior side setbacks are currently four feet in the R-1, R-1H, and R-1A, and increases based on building height in the R-2, R-2H, R-2A, and R2A-H. At the second story, the interior setback increases to six feet in the R-2, R-2H, R-2A, and R-2H districts. Interior side setbacks can be reduced to three feet or five feet with a ZC.

  In the MU-R district, lots adjacent to a residential district must provide an interior side setback of either 10 feet or 10 percent of the lot's width, whichever is less. There are no other interior side setback requirements in the MU-R.

- Street Side Setbacks: Street side setbacks are four feet in the R-1, R-1H, and R-1A districts, 10 feet in the R-2 and R-2H districts, and vary by height in the R-2A and R-2AH districts (six feet at first story, eight feet at second story and 10 feet at third story).

In the MU-R district, lots adjacent to a non-residential district must provide a five-foot street side setback. Lots adjacent to a residential district must provide a street side setback of either 10 feet or 10 percent of the lot's width, whichever is less. There are no other street side setback requirements in the MU-R.

A Zoning Officer may approve an AUP to reduce the minimum setbacks in the H District.

Proposed Standards: The proposed development standards include the following, as detailed in Table 2 of Attachment 2.

- Front Setbacks: Staff reviewed development patterns around Berkeley and found that many neighborhoods have existing setbacks of less than the zoning standard. Based on this, front setback standards are proposed to be reduced by five feet from the current standard, except in the H districts and MUR, which would maintain existing regulations. Furthermore, a project could provide a smaller setback based on the average of the front setback(s) of adjacent existing structure(s).
- Rear Setbacks: The rear setback in all lower-density residential districts would be reduced to four feet, except in the H districts and MUR, which would maintain existing regulations. As noted above, a building's maximum height would be limited to 22 feet within 15 feet of the rear property line. The four-foot setback is consistent with the required setbacks for ADUs. The 15- and 20-foot rear setbacks required for H district lots help maintain defensible space.
- Interior Side Setbacks: The interior side setback in all lower-density residential districts would be a minimum of four feet, except in the H district where the interior side setback would increase to five feet, and in the MU-R, which would maintain its existing regulations. The increase from the current four-feet to a five-foot setback in the H district is to accommodate upcoming State Board of Forestry's Zone Zero requirement for an ember-resistant zone within five feet of a structure in a Very High Fire Hazard Severity Zone (VHFHSZ). Zone Zero is directed by AB 3074 (2020) and takes effect January 1, 2023 for new structures. Newly constructed ADUs would continue to adhere to a minimum four-foot setback.
- Street Side Setbacks: Street side setbacks in the R-1, R-1H and R-1A would be 4 feet. There would be no changes to street side setbacks in the MU-R.

Building Separation

Current Standards: Current building separation requirements are summarized in Table 10:

Table 10. Current Building Separation Standards

	R-1	R-1H	R-1A	R-2	R-2H	R-2A	R-2AH	MU-R
1 Story (ft)	No min.	No min.	8	8	8	8	8	No min.
2 Stories (ft)	No min.	No min.	12	12	12	12	12	No min.
3 Stories (ft)	No min.	No min.	16	16	16	16	16	No min.
Reduce with an AUP	--	--	AUP	AUP	AUP	AUP	AUP	--

Proposed Standards: The proposed development standards would eliminate all building separation requirements. Building and fire code requirements for fire rating and separation would continue to apply.

Front Street-Facing Façade Requirements

Currently there are no objective design standards for front-facing facades and elevations. During the June 1, 2022 Planning Commission meeting, staff received comments expressing concerns about blank walls as viewed from the public right-of-way.

To create visual interest and prevent blank walls facing the street, the proposed development standards would require a minimum of 20 percent of the front façade elevation within the front 40 feet of a lot to be comprised of entries, windows or glazing, and/or railings. Trim, including window shutters, would be counted towards meeting this requirement; garage doors would not be included. Attachment 3, Figure 3.6 includes front façade elevation diagrams to illustrate how the proposed standard would be measured.

Neighbor Noticing

Similar to the current ADU notification requirement, City staff would mail notices to owners and tenants of adjacent, confronting, and abutting properties within ten working days of a building permit application submittal. Notification would include information on how to contact the applicant on the design and construction of the proposed project.

Wildfire Mitigation

The State Department of Forestry and Fire Protection (CALFIRE) develops initial boundaries for VHFHSZ throughout California, and the final boundaries of a VHFHSZ are adopted by each jurisdiction. The VHFHSZ formally adopted by the City is larger than originally proposed by CALFIRE and is consistent with the boundaries for Fire Zones 2 and 3, and largely follows the boundary for the H district.

The majority of sites in the H district are within R-1H, where SB 9 currently applies. Middle housing projects in the H district would be subject to the same existing building standards or state fire mitigation measures that are currently applied to SB 9 projects.[9]

[9] SB 9 does not include an absolute prohibition on development in fire hazard areas. Within a very high fire hazard severity zone, sites must adopt "fire hazard mitigation measures pursuant to existing building standards or state fire mitigation measures applicable to the development." Gov. Code § 65913.4(a)(6)(D).

Staff will continue to confer with the Berkeley Fire Department on objective wildfire mitigation measures for streamlined projects in the VHFSZ. Considerations include maintenance of defensible space, as well as standards that improve fireground operations and evacuation access.

View Preservation

Following the June 2022 Planning Commission meeting, staff received comments expressing concerns about potential private view impacts resulting from by-right development in the H District.

Currently, a new home in the H District requires a UP(PH), and a major residential addition requires an AUP. To approve an AUP for a major residential addition, the Zoning Administrator must find that the addition would not "unreasonably obstruct sunlight, air, or views." Under existing H District standards, a view corridor is defined as:

> *A significant view of the Berkeley Hills, San Francisco Bay, Mt. Tamalpais, or a significant landmark such as the Campanile, Golden Gate Bridge, and Alcatraz Island or any other significant vista that substantially enhances the value and enjoyment of real property.*

To approve a UP(PH) or AUP, the ZAB or Zoning Administrator must find that the proposed project "will not be detrimental or injurious to property and improvements of the adjacent properties, the surrounding area or neighborhood or to the general welfare of the City." While the Zoning Ordinance does not define detriment, the City's informational handout for AUPs and UP(PH)s states that a project resulting in the "unreasonable obstruction of a neighbor's significant view" may be considered detrimental.

If by-right housing development is to be allowed in the H District, the City would no longer use the discretionary permit process and the non-detriment findings to consider potential neighbor view impacts resulting from proposed projects. For this reason, staff proposes to implement an objective 28-foot maximum building height standard in the H district, which cannot be adjusted by a discretionary permit (see Attachment 3, Figure 3.5 Height Measurement in the H district). This would reduce the maximum building height and provide a more predictable development envelope in order to reduce possible obstruction of neighbor views.

Solar Access

Members of the ZORP Subcommittees and community have expressed concern about how the proposed development standards may impact solar access to neighboring existing or planned rooftop solar panels. In response to this concern, staff produced solar models to evaluate shadow impacts in a "maximum impact scenario" (see Attachment 3, Figure 3.7 Solar Modeling Diagrams). The solar model considers:

- *Building Height*: A flat-roofed 35-foot building height compared to the shadow effects of a flat-roofed 28-foot height building;
- *Building Volume*: The entire building envelope (which in actuality would be reduced by FAR and coverage standards);

- *Orientation*: East-West and North-South building orientations;
- *Daytime*: Between 8:00am and 4:00pm, although the highest solar generation is usually from 11:00am to 4:00pm when sun rays are at right angles to the panels;
- *Equinox*: A solar equinox day (September or March), where there is greater differentiation between the shadows as compared to the winter solstice, where solar panels at both 28-feet height and 35-feet height would be more equally impacted by reduced daylight;
- *No Other Shade*: Clear skies and no existing trees or vegetation that could impact solar access.

In this "maximum impact scenario" model, the amount of increase in shadow area for the seven-foot height difference is less than 10 percent averaged over the course of a day. As a result of the solar model analysis, staff proposes:

- A 28-foot maximum average height, paired with a 35-foot maximum height to the ridge, and
- A maximum building height of 22 feet in the rear 15 feet of a lot.

These height standards would address solar access concerns in balance with the objective of providing opportunities for more housing development throughout the city. Lastly, as a civil matter, State law allows for parties to voluntarily enter into solar or view easement agreements (e.g., where a neighbor may grant an easement to a solar system owner).

SOUTHSIDE PLAN AREA

The existing Southside Plan was adopted in 2011 and since 2016, the City Council has forwarded six referrals related to increasing housing production and availability in the Southside Area. The proposed standards in this section refer to the area located on the south side of the UC Berkeley campus, roughly bounded by Bancroft Way, Dwight Way, Fulton Street and Piedmont Avenue (see Attachment 1, Map 3. *Southside Area – Existing Zoning*). The intent of these proposed standards is to implement the City Council's direction through revised zoning regulations.

Table 11 below provides a summary of the proposed standards, the general direction of the recommended changes and the policy rationale for each recommendation. Each standard is further discussed below and the specific development standard changes can be found in Attachment 2.

Table 11. Summary of Proposed Southside Area Standards

Standard	Recommendation	Policy Goal
Minimum and Maximum Densities	Set minimum and maximum densities expressed in units per acre	Encourage appropriate densities Provide predictability for the review process and outcome Facilitate calculations for State Density Bonus and possible future local density bonus

Maximum Floor Area Ratio (FAR)	Set a maximum FAR that scales up as units increase	Encourage housing development Facilitate calculations for State Density Bonus and future local density bonus
Minimum Open Space	Reduce required minimum open space, and set requirement to a per 1,000 square foot standard, rather than per unit	Encourage housing development Increase predictability of development outcomes
Maximum Height	Set a maximum height limit without option to exceed with a Use Permit	
Lot Coverage and Setbacks	Increase lot coverage and reduce setbacks	
Building Separation	Remove building separation requirement	

Minimum and Maximum Densities

The Zoning Ordinance does not include any minimum or maximum density standards for the Southside districts that are expressed in "units per acre". A maximum density of 350 sf per resident is allowed for Group Living Accommodations (GLA) in the R-3, R-S, C-T, and C-SA Districts, and 175 sf per resident in the R-SMU. The ZAB may approve a UP(PH) to increase the GLA density.

Proposed Approach: The specific values for minimum and maximum dwelling units per acre are pending additional staff analysis and feedback from City Council, Planning Commission, and community engagement activities.

Maximum Height

In October 2017 and May 2018, Council referred staff to increase height in the R-SMU, R-S, and R-3[10], as well as to allow up to two 12-story buildings and increase height for six projects[11] in the Southside Area, from Dwight to Bancroft and from College to Fulton.

For all Southside zoning districts, the proposal is to remove the Use Permit option to exceed height limits without added project quotas to provide clarity and predictability. Height limits stated in the Zoning Ordinance will be the maximum building height allowed, unless waived through State or a local density bonus. The limit on the maximum number of stories would be removed; maximum height would only be measured in feet. Zoning standards for building height are proposed to be changed in the following ways:

- Allow up to 85 feet in R-SMU district (increase from 60 feet, four stories) and in C-T north of Dwight (increase from 65 feet, no stories given). This would feasibly

[10] October 31, 2017. Increase Height and FAR in the Southside. Berkeley City Council.

[11] May 1, 2018. Increase Student Housing in the Southside. Berkeley City Council.

permit a building of at least 12 stories if a project were to maximize State or a local density bonus.

- Allow up to 65 feet in the C-T district south of Dwight (currently 50 feet, or up to 65 feet with a Use Permit).
- Allow up to 55 feet in R-S district (increase from 35 feet, three stories).
- Allow up to 45 feet in R-3 district (increase from 35 feet, three stories).
- Allow up to 60 feet in the C-SA district (currently 36 feet if non-residential and 60 feet if residential).

The Council also requested zoning provisions to facilitate the construction of student housing through a process that does "not require additional CEQA review"[12] or through a local density bonus in the R-SMU and/or C-T (north of Dwight) districts[13]. At this time, staff believes the zoning height amendments listed above provide opportunities to reach that height using State density bonus law. In Fall 2022, staff will be presenting to Planning Commission a local bonus program that reflects recent State law for student housing, without requiring the participation of UC Berkeley[14].

Maximum Lot Coverage and Minimum Setbacks

Zoning standards for building setbacks and lot coverage are proposed to be changed in the following ways, as detailed in Table 4 of Attachment 2:

- Permit 70 percent lot coverage in R-3 district locations (increase from current 50 percent maximum)
- Permit 75 percent lot coverage in R-S district locations (increase from current 70 percent maximum).
- Permit 85 percent lot coverage in R-SMU district locations (increase from current 60 percent maximum).
- Permit 100 percent lot coverage in C-SA district locations (to match existing standard for non-residential land uses).

Change existing minimum setback requirements as follows, with no changes to C-SA district locations:

- No minimum front setback required for R-SMU, R-S, and C-SA districts (currently already allowed with an AUP in R-SMU and R-S, and by right in C-T).
- No minimum street side setbacks required for R-SMU and R-S districts.
- No minimum side setback required for the R-SMU district (currently already allowed with an AUP).

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[12] November 27, 2018. Advance More Student Housing Now. Berkeley City Council.

[13] May 30, 2017. Pilot Density Bonus Program. Berkeley City Council.

[14] SB 290, Skinner. Gov. Code §65915 Density Bonus. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65915&lawCode=GOV

- Reduce the various lower-story and upper-story side setbacks for R-SMU, R-S, and R-3 districts to a single setback of 4 feet.
- Reduce lower-story and upper story rear setbacks for R-SMU, R-S, and R-3 districts to a single setback of 4 feet. No minimum would be required in the C-SA within the Southside Area, except when adjacent to a Residential District.
- Eliminate requirement for shade studies in the C-T district.

For all Southside districts, remove specified discretionary review option to modify setbacks and lot coverage.

Minimum Required Open Space

Current Standards: Table 12 summarizes current minimum open space requirements in Southside Area zoning districts.

Table 12. Current Required Open Space

	R-3	R-S	R-SMU	C-SA Mixed Use	C-SA Residential Only	C-T
Per Dwelling Unit (sf)	200	50	40	40	200	40
Per GLA Resident (sf)	90	20	20	No min.	90	No min.

Proposed Approach: Similar to the proposed Middle Housing standards, staff propose creating an open space standard for the Southside districts based on a ratio per 1,000 sf of building floor area instead of on the number of units. The proposed open space standard would be designed to increase floor area dedicated to residential development while also preserving the requirement to provide residents with common and/or private usable open space.

Building Separation

Current Standards: Current building separation requirements are summarized in Table 13.

Table 13. Current Building Separation Standards

	R-3	R-S	R-SMU	C-SA	C-T
1st story	8 ft				No minimum
2nd story	12 ft				
3rd story	16 ft				
4th story		20 ft			
5th story			24 ft		
6th story				28 ft	

Proposed Standards: The proposed development standards would eliminate all building separation requirements. Building and fire code requirements for fire rating and separation would still apply.

Ground-Floor Residential Use

Proposed Approach: Zoning standards for ground-floor residential use are anticipated to be changed to allow ground-floor residential throughout the C-T District if it is located behind a commercial use that fronts the street. In all Southside locations where there is ground-floor residential use, zoning provisions would also include design standards to incentivize or require ground-floor activation, consistent with the C-T District's purpose to "encourage those uses and structural architecture that reinforce, and discourage those uses and architecture that interrupt, the pedestrian orientation of the district."

OFF-STREET PARKING REQUIREMENTS

Minimum and maximum standards for parking spaces will remain unchanged for lower density districts and in the Southside Area. Current standards include:

- *Minimum Parking*: No minimum parking requirement, except for parcels located along narrow roads in the H District. If located on a roadway less than 26 feet in width, a minimum of one parking space per unit for projects with fewer than 10 units. For projects with 10 or more units, one parking space per 1,000 sf of gross floor area is required.
- *Maximum Parking*: With limited exemptions[15], a maximum of 0.5 spaces per unit is allowed for residential projects with two or more dwelling units on a parcel if a project is located within 0.25 miles of a major transit stop or along a transit corridor with 15-minute headways during peak periods.

[15] Off-Street Parking Maximums for Residential Development. https://berkeley.municipal.codes/BMC/23.322.070(A)(2)

Newly constructed residential units are not eligible to receive parking permits under the Residential Permit Parking Program (RPP) as provided in BMC 14.72 Preferential Parking Program.[16]

Proposed changes to parking-related standards include:

- *Tandem Parking*: Currently, an AUP is required to provide off-street tandem parking spaces for all residential uses except ADUs. The proposed standards would allow tandem parking without an AUP to encourage reduced driveway widths and curb-cuts.
- *Front Setback in the H District*: Currently in the H district, the Zoning Officer may approve an AUP to reduce the minimum required front setback. The proposed standard would maintain the existing front setback requirement, but permit surface parking within the front setback to allow for off-street parking.[17]
- *Landscape Buffer:* Another commonly requested AUP is for an exception to the landscape buffer that is required along off-street parking spaces, driveways, and other vehicle-related paving. The landscape buffer is not commonly provided in existing sites and the proposed standards would eliminate the requirement to align with existing conditions.

DISCUSSION ON RESIDENTIAL OBJECTIVE STANDARDS FRAMEWORK

When considering policies to address objective residential standards, including density, solar access, or view preservation, State law prohibits: a) the adoption of any new subjective development standards for housing development projects; and b) the adoption of new objective standards that would reduce the number of achievable residential units.

> **Do the proposed development standards and approaches achieve the goals of the City Council referrals, namely encouraging the development of middle housing in lower density districts and increasing housing production and availability in the Southside Area?**

> **Are there provisions of the proposed zoning standards that should be changed or revised?**

> **Are there additional considerations that remain unaddressed by the proposed development standards?**

[16] Preferential Parking Program. https://berkeley.municipal.codes/BMC/14.72.080

[17] Small accessory structures, such as sheds, that are less than 120 square feet and eight feet in height will continue to be allowed without requiring a permit.

BACKGROUND

CITY COUNCIL REFERRALS

The proposed objective standards are presented to respond to the following City Council referrals:

Table 14. City Council Referrals and Reports

Residential Objective Standards	
Housing Accountability Act (7/11/2017)	Requested research into a set of objective zoning standards for new development projects in the following four areas: • Density and/or building intensity • Public health and safety standards • Design review standards • Views, shadows, and other impacts that underlie detriment findings
Objective Standards for Density, Design, and Shadows (11/9/2021)	Consider and codify objective zoning standards with the goal of encouraging the creation of additional residential development and affordable homes. Further purposes include: • Address State laws that seek to reduce time involved in permitting processes • Increase certainty for applicants • Reduce administrative costs and burden associated with discretionary review.
Lower Density Districts	
Missing Middle Housing (4/23/2019)	Examine methods to provide for a broader range of housing types in areas of Berkeley with access to parks, schools, employment, transit, and other services. The Council directed the City Manager to explore opportunities to allow “missing middle” housing types in the R-1, R-1A, R-2, and R-2A zoning districts.
Eliminating Exclusionary Zoning (2/23/2021)	Allow multi-family housing in residential neighborhoods throughout Berkeley, and to allow for small-scale multi-family development in the R-1, R-1A, R-2, and R-2A zoning districts. As part of this effort, the resolution calls for the city to also: • Protect public safety in all neighborhoods • Allow for new housing that reflects the existing mix of multi-family housing types within neighborhoods • Provide strong anti-displacement and tenant protections • Accommodate families in new and rehabilitated multi-family housing developments • Ensure that new development does not demolish any rent-controlled or below market-rate housing • Explore incentives for projects to contribute to the need for affordable housing • Carry out a robust community process when developing zoning changes.
Southside Area	
Community Benefits within C-T (7/12/2016)	Allow increased development potential in the Telegraph Commercial (C-T) District between Dwight Avenue and Bancroft Avenue and develop community benefit requirements, with a focus on labor practices and affordable housing.

Non-Commercial Ground Floor in C-T (4/4/2017)	Create a Use Permit process to allow non-commercial use on the ground floor in appropriate locations, where commercial might otherwise be required. A pilot project is suggested for the C-T District.
Pilot Density Program in C-T (5/30/2017)	Develop a pilot Density Bonus program for the C-T District to generate in-lieu fees that could be used to build housing for homeless and extremely low-income residents.
Increase Height and FAR (10/31/2017)	Facilitate student housing by increasing the height and Floor Area Ratio (FAR) in the portions of the R-SMU, R-S and R-3 District which are located within the Southside area west of College Avenue.
Increase Student Housing (5/1/2018)	Convert commercial space into residential use within all districts in the Southside located west of College Avenue.
More Student Housing Now (11/27/2018)	Convert commercial space in the C-T to residential use, expand the Car-Free Housing overlay in the Southside, allow two high-rises for student housing, and consider micro-units and modular units.
Affordable Housing Overlay	
Affordable Housing Overlay (11/9/2021)	Consider an affordable housing overlay to permit increased height and density, with ministerial approval, for qualifying 100% affordable housing projects in the R-1, R-1A, R-2, R-2A, R-3, R-4, MUR, and all C-prefixed zoning districts.

PRIOR FEEDBACK ON LOWER DENSITY RESIDENTIAL STANDARDS

City Council Worksession Feedback

As part of the Housing Element Update, staff received feedback pertinent to middle housing standards at the March 15, 2022 City Council worksession.[18] Councilmembers identified the following key considerations:

- Permit higher density equitably throughout the City, including in high resource, high income neighborhoods, and consider provisions of the H District.
- Create an incentive for adaptive reuse and smaller, more affordable units, including allowing for more than four units in lower density districts.
- Consider adopting the same standards for the R-1, R-1A, R-2 and R-2A districts (i.e., merging zoning districts) and treating Residential zones similarly.
- Embrace climate adaptation and resilience through local power generation, but solar access should not be a barrier to creating more housing.

ZORP Subcommittees Feedback

To advise staff on the development of objective standards, the Planning Commission and the Zoning Adjustments Board appointed members to two ZORP Subcommittees.

[18] March 15, 2022. *Housing Element Update and Residential Objective Standards.* City Council Worksession.

The Subcommittees met concurrently on two occasions. On December 15, 2021, the Subcommittees met to receive a background presentation and to approve the Objective Standards Framework and overall project approach. On February 16, 2022, the Subcommittees met to provide feedback on an initial version of the proposed middle housing development standards.

In their two meetings, the ZORP Subcommittees identified the following considerations when determining appropriate objective development standards:

- Encouraging smaller units that are “affordable by design.”
- Permitting more density while discouraging financial speculation.
- Balancing the environmental trade-offs between protecting rooftop solar access and higher densities.

Planning Commission

Staff presented preliminary standards for lower density districts to the Planning Commission on June 1, 2022 to elicit feedback from commissioners and the community. At the meeting, commissioners identified the following as important items:

- Encourage smaller unit sizes and consider eliminating minimum lot size requirements.
- Reduce minimum required open space dimensions -- currently a minimum width and length of 10 feet is required, or a minimum of six feet for balconies.
- Consider a “shared solar budget” or arrangement between incumbent solar owners and neighbors whose projects may create new shadows.

PRIOR FEEDBACK ON SOUTHSIDE AREA STANDARDS

Planning Commission

On December 17, 2019, the Planning Commission reviewed and provided input on the proposed project description for the Southside EIR. Planning staff returned on February 5, 2020, with the proposed scope of ordinance changes and zoning map amendments to include in the EIR Project Description. A public hearing and EIR Scoping Session was held on September 2, 2020 to receive a project update and hear from stakeholders and members of the public on issues that the EIR should address. Notable comments from the Scoping Meeting included ensuring an adequate analysis of recreation and parks resources and the accuracy of the EIR’s buildout assumptions.

Southside EIR Subcommittee

On December 17, 2019, the Subcommittee held a meeting to review options to consider in the project description. The Subcommittee was generally supportive of the options provided by staff. Their main concern was whether the current boundary of the Southside contains enough opportunity sites to justify the EIR and zoning changes.

RELATED CONCURRENT PROJECTS

Housing Element

This focus area includes policies that ensure compliance with State Housing Element law and implement zoning policies proposed in the 6th Cycle 2023-2031 Housing Element to meet the City's approximately 9,000-unit Regional Housing Needs Allocation (RHNA) and a minimum 15 percent buffer. A first draft of the Housing Element Update was submitted to the California Department of Housing and Community Development (HCD) on August 10, 2022.

The proposed middle housing standards are featured in the draft Housing Element Update under Program 29-Middle Housing, and the Southside zoning map and development standard amendments are featured under Program 27-Priority Development Areas (PDAs), Commercial and Transit Corridors. The Housing Element draft Environmental Impact Report (EIR) assumes 1,745 additional units throughout the R-1, R-1A, R-2, R-2A, and MUR districts. An additional 1,000 units in the C-T, R-S, and R-SMU districts within the Southside Area is also analyzed for the 2023-2031 planning period.

As part the Housing Element process, the City has received public input on residential objective standards at City Council worksessions, public workshops, stakeholder meetings, and outreach events. The proposed objective standards allow for increased housing capacity and streamlined residential development consistent with the updated Housing Element.

Proposed Citywide Affordable Housing Requirements

In March 2022, Planning Commission recommended to City Council the approval of a comprehensive update to the City's affordable housing requirements[19], which would apply to all new residential development including middle housing projects, establish a per-square-foot in-lieu fee instead of assessing fees on a per-unit basis, and consider a sliding scale reduced fee for projects with less than 12,000 gross residential square feet. Staff are preparing an item for possible City Council action in Fall 2022 to update the Citywide affordable housing requirements in the Zoning Ordinance.

Demolition Ordinance Update

The Demolition Ordinance prohibits demolition of specified dwelling units where a building has been removed from the rental market under the Ellis Act during the preceding five years or "there have been verified cases of harassment or threatened or actual illegal eviction during the immediately preceding three years." Applicants are generally required to provide relocation benefits, including moving expenses and differential rent payments. In addition, displaced tenants are provided a right of first refusal to rent new units. The City is currently reviewing the demolition ordinance to ensure compliance with State density bonus, SB 330, and other laws, and will amend

[19] March 2, 2022. *Public Hearing on Amendments to Citywide Affordable Housing Requirements*. Planning Commission.

the administrative procedures, fee, and replacement requirements accordingly. Staff will bring recommended amendments to Planning Commission in Fall 2022.

Affordable Housing Overlay and Local Density Bonus

At its meeting on July 6, 2022, the Planning Commission heard a staff report[20] and provided feedback on two items:

1) A May 2017 City Council referral to develop a *local density bonus program* for the C-T (Telegraph Avenue Commercial) zoning district to allow density bonuses without requiring on-site affordable units and to generate in-lieu fees that could be used to build housing for homeless and extremely low income residents; and

2) A November 2021 City Council referral to request to consider an *affordable housing overlay* to permit increased height and density for housing projects comprised entirely of affordable units.

The Planning Commission communicated to staff that it wanted to move forward with a local density bonus program. Staff will present two options for such a program to the Planning Commission in Fall 2022. One will be based on SB 1227 (Skinner), which provided for student housing through the State density bonus, and a second will be based more directly on the City's affordable housing impact fee program.

The Planning Commission provided feedback on the affordable housing overlay referral and referred a number of the specific recommendations to other work which will focus on multi-family housing in the higher-density zoning districts.

ENVIRONMENTAL SUSTAINABILITY

The proposed amendments to the Zoning Ordinance and Zoning Map are expected to result in greater infill housing development potential near transit and in employment-rich areas. Prioritizing density and affordable housing in these areas will incentivize community members to use alternative modes of transportation and reduce vehicle miles traveled (VMT), which are critical for reducing greenhouse gas emissions, and will bring the City closer to meeting its Climate Action Plan and Climate Emergency goals.

POSSIBLE FUTURE ACTION

Middle Housing. Staff anticipate presenting a draft ordinance for Middle Housing to the Planning Commission in Spring 2023 after the final Housing Element Update and final Environmental Impact Report (EIR) are adopted. Upon receiving further direction and recommendation from the Planning Commission, staff will return to the Council with a final recommended Zoning Ordinance and zoning map changes.

Southside. Throughout the Fall 2022 semester, City staff will conduct outreach and engagement with Southside Area stakeholders, including UC Berkeley students and campus planning, affordable and market-rate residential developers, and neighborhood groups. Based on City Council direction and initial engagement efforts, staff will return

[20] July 6, 2022. *Affordable Housing Overlay ad Southside Local Density Bonus Program.* Planning Commission.

to the Planning Commission in late Fall with revised development standards for Southside, to be presented in concert with options for a local density bonus methodology. Upon receiving further direction and recommendation from the Planning Commission, staff will return to the Council with a final recommended Zoning Ordinance and zoning map changes.

As part of separate upcoming project, “Phase 2 Residential Objective Standards for Higher Density Residential and Commercial Districts”, the Planning Department will consider confirming, modifying or creating objective design and development standards for projects in higher density residential and commercial districts, which may include R-3, R-4, and all C Districts. These policies will provide clarity and predictability for State-streamlined projects (e.g. SB 35, AB 1397) and create a pathway for additional local streamlined projects in order to reduce reliance on the use permit process and non-detriment findings.

FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

In addition to staff time, the City has budgeted $350,000 to hire a consultant to assist in preparing objective design standards for higher density residential and commercial districts.

CONTACT PERSON

Grace Wu, Principal Planner, Land Use Planning Division, (510) 981-7484

ATTACHMENTS

1. Maps of Lower Density Zoning Districts and Southside Plan Area
2. Existing and Proposed Development Standards Tables
3. Lower Density Residential Diagrams

Referenced City Council and Planning Commission Referrals and Reports

4. July 12, 2016. Community Benefits within C-T District. Berkeley City Council.
5. April 4, 2017. Non-Commercial Ground Floor in C-T District. Berkeley City Council.
6. May 30, 2017. Pilot Density Program in C-T District. Berkeley City Council.
7. July 11, 2017. Housing Accountability Act. Berkeley City Council.
8. October 31, 2017. Increase Height and FAR in Southside. Berkeley City Council.
9. May 1, 2018. Increase Student Housing. Berkeley City Council.
10. November 27, 2018. More Student Housing Now. Berkeley City Council.
11. April 23, 2019. Missing Middle Housing. Berkeley City Council.

12. February 23, 2021. Eliminating Exclusionary Zoning. Berkeley City Council.
13. November 9, 2021. Affordable Housing Overlay. Berkeley City Council.
14. November 9, 2021. Objective Standards for Density, Design, and Shadows. Supplemental Packet 2. Berkeley City Council.
15. November 9, 2021. Objective Standards for Density, Design, and Shadows. Supplemental Packet 3. Berkeley City Council.
16. March 3, 2022. Public Hearing on Amendments to Citywide Affordable Housing Requirements. Planning Commission Staff Report.
17. March 15, 2022. Housing Element and Residential Objective Standards. Berkeley City Council Worksession.
18. July 6, 2022. Affordable Housing Overlay and Southside Local Density Bonus Program. Planning Commission Staff Report.

Figure F-13 Work Session #4 Presentation

Why are we creating Residential Objective Standards?

City Council Referrals + Reports

1. Community Benefits within C-T (2016)
2. Non-Commercial Ground Floor in C-T (2017)
3. Pilot Density Program in C-T (2017)
4. Increase Height and FAR in Southside (2017)
5. Housing Accountability Act (2017)
6. Increase Student Housing (2018)
7. More Student Housing Now (2018)
8. Missing Middle Housing (2019)
9. Eliminating Exclusionary Zoning (2021)
10. Objective Standards for Design, Design, Shadows (2021)
11. Affordable Housing Overlay (2021)

Residential Objective Standards
Lower Density Districts
Southside Area

2

What are Objective Standards?

SUBJECTIVE
Often require interpretation and personal judgement

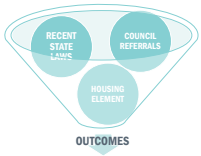
"A side setback can be reduced if appropriate given the architectural design of surrounding buildings."

OBJECTIVE
Measurable, verifiable, and knowable to all parties

"The minimum side setback is 4 feet."

3

What is the goal of Residential Objective Standards?



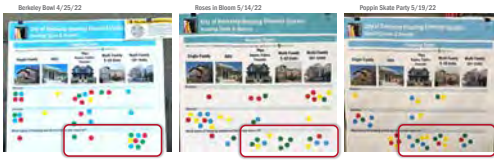
STREAMLINED
REDUCE ADMINISTRATIVE BURDEN & COSTS

PREDICTABILITY
CLEAR MULTI-UNIT DEVELOPMENT CRITERIA

HOUSING
RESIDENTIAL DEVELOPMENT AND AFFORDABLE HOMES

4

"What type of housing would you like to see more of?"



Desire for a mix of housing types and higher density living

6

Council, Commission, and Committee Feedback

ZORP Subcommittees (12/15 & 2/16)
- Encourage smaller units that are "affordable by design"
- Permitting more density while discouraging financial speculation
- Balance protecting solar access and allowing higher densities

City Council (3/15)
- Consider merging zoning districts
- Permit higher density equitably throughout the City, including the Hillside Overlay
- Incentive for adaptive reuse and smaller, more affordable units, allow more than four units
- Embrace climate adaption, but solar access should not be a barrier to creating more housing

Planning Commission (6/1)
- Encourage smaller unit sizes
- Reduce minimum open space dimensions
- Neighbor negotiation over solar & shadows
- Concern about blank facades

7

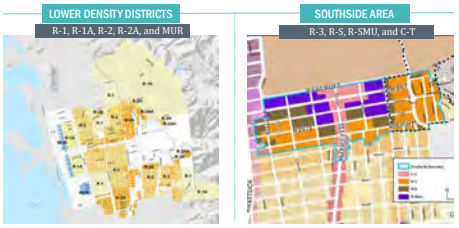
AGENDA – 2 PARTS

PART I – MIDDLE HOUSING
1. Draft Proposed Standards
2. Wildfire, Views, and Solar

PART II – SOUTHSIDE AREA
1. Draft Proposed Standards

DISCUSSION

8



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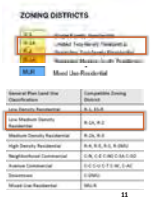
MIDDLE HOUSING DEVELOPMENT STANDARDS

1. Merging Zoning Districts
2. Allowed Uses & Permits Required
3. Min and Max Density (Units per Acre)
4. Max Floor Area Ratio (FAR)
5. Min Open Space
6. Max Height
7. Min Lot Coverage & Setbacks
8. Min Separation

10

NOT A BLANK SLATE
- Existing Standards
- Development Patterns
- City Council Referrals
- State Laws
- Environmental/Social/Economic/ Demographic Factors

Middle Housing Map Amendment – Merge R-1A and R-2



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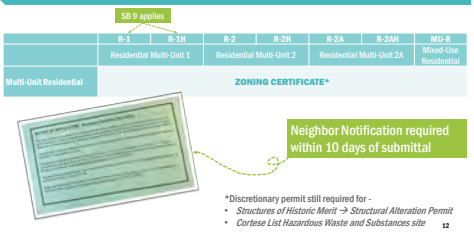
Land Use & Permits & Noticing Required



*Discretionary permit still required for -
- *Structures of Historic Merit → Structural Alteration Permit*
- *Cortese List Hazardous Waste and Substances site*

12

Minimum & Maximum Density (Units per Acre)

	R-1	R-2	R-2A	MU-R	In Hillside Overlay R-1H	In Hillside Overlay R-2H	In Hillside Overlay R-2AH
Min. Density (du/ac)	10	10	20	20	No min.	No min.	No min.
Max. Density (du/ac)	25	35	55	55	20	20	55

Resulting units on a 5,000 sf lot...

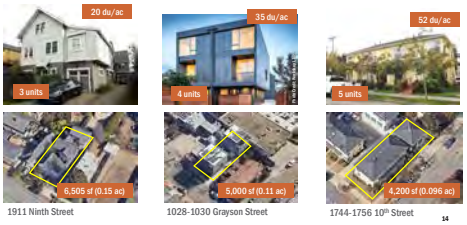
Min. # Units	1	1	2	2	No min.	No min.	No min.
Max. # Units	3	4	6	6	2	2	6
+ ADUs!	Varies*						

**ADUs allowed per https://berkeley.municipal.codes/BMC/23.306*
- *More than 1 detached dwellings → max 1 ADU*
- *Duplex or attached multi-family dwellings → max 2 detached ADUs OR 25% of # existing units converted*

Note: Minimum densities would apply for new development on a vacant lot or redevelopment of a nonvacant lot.

13

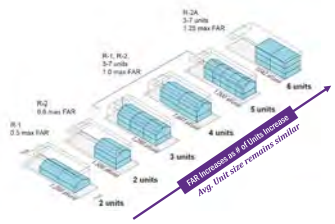
Density - Examples



1911 Ninth Street | 1028-1030 Grayson Street | 1744-1756 10th Street

14

Floor Area Ratio: Encourage smaller unit sizes



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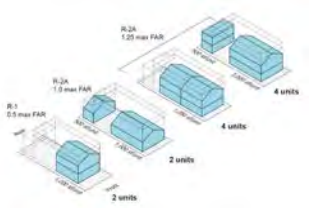
Floor Area Ratio: Encourage a mix of housing types



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FAR - Examples

1911 Ninth Street | 1028-1030 Grayson Street | 1744-1756 10th Street

17

Building Height Standards

28-foot max average height AND 35-foot max height
- *Except MUR, which maintains 35-foot max height only*
- *Reduce to 22 feet max height within rear 15 feet of lot*
- *Reduce to 28 feet max height in the H Overlay*
- *Limit by height in feet; not # of stories*
- *Main buildings and additions treated the same*

...

Four Prototype Models & Neighborhood Context

21

Development Standard Considerations

Lot Coverage	Setbacks	Open Space	Bldg Separation
More Units → More Coverage	Match neighbors (front); Match ADUs (side/rear)	Ratio based on **total floor area**, not per unit	Remove "wedding cake" requirements
For most lots, max lot coverage is 50 or 55%.	Remove "wedding cake" requirements	More flexible, Still usable	

22

Front Elevation Facade

MIN 20% VISUAL INTEREST

- *Entries*
- *Windows or glazing, incl. trim, shutters*
- *Railings*

23

Parking Spaces

No Minimum Parking Required

Except parcels located along narrow roads in the H district: 1 space per unit

No Maximum Parking Required

Except projects located within 0.25 mile of a major transit; 0.5 space per unit, including H District

H District: Options to Consider

- *Removing the max parking limit throughout Fire Zone 2*
- *Requiring minimum off-street parking either on a per unit basis, or a sliding scale of residential floor area.*

24

OTHER CONSIDERATIONS

1. Wildfire
2. Views
3. Solar Access

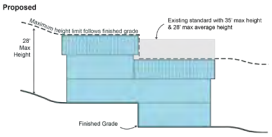
25

26

Wildfire Hazards Mitigation

Height: Reduced height from 35 to 28 feet

Interior Side Setback: Increased to 5 feet



27

Private View Impacts

Existing rules:

- AUP or Use Permit required for major residential addition or new home
- Residential additions may not "unreasonably obstruct sunlight, air, or views"
- Additions and new homes may not be "detrimental or injurious" to adjacent properties
- A project resulting in the "unreasonable obstruction of a neighbor's significant view" may be considered detrimental

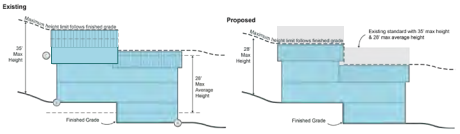
28

Private View Impacts

- Proposed standards would allow middle housing by-right
- The City would no longer use the discretionary permit process to consider potential neighbor view impacts
- Proposed standards include changes to building height standards to address private view impacts for middle housing projects

29

Hillside Overlay Height Standard



30

Shadow Studies

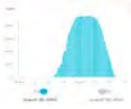
Purpose:

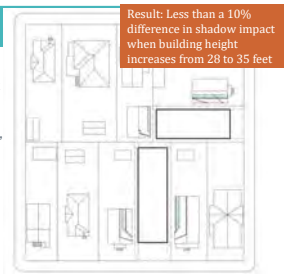
- Better understand and quantify potential shadow impacts on adjacent rooftops
- Assess whether additional standards are needed
- Consider how effective additional standards would be in reducing shadow impacts

https://vimeo.com/711872142

Model Methodology

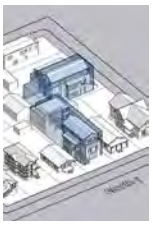
- Projected shadows from allowed building envelopes on the equinox (March or September 21)
- Calculated the percentage of adjacent rooftops shaded at 8am, 10am, noon, 2pm, and 4pm





Result: Less than a 10% difference in shadow impact when building height increases from 28 to 35 feet

Proposed Standards Based on Model Results



- Proposed height and setbacks standards are sufficient to address rooftop solar impacts; **additional standards are not needed**
- Proposed middle housing standards, including lot coverage and FAR limitations, are **sufficient** to address privacy and aesthetic impacts on adjacent properties
- Homeowners may establish a solar easement with their neighbor to guarantee no future reduction in solar access (not enforced by the City)

33

SOUTHSIDE DEVELOPMENT STANDARDS

1. Background
2. Fall 2022 Outreach & Engagement
3. Zoning Map Amendments
4. Allowed Uses & Permits Required
5. Max Height
6. Min Lot Coverage & Setbacks
7. Min Open Space
8. Min Separation

Southside Background

City Council Referrals + Reports

1. Community Benefits within C-T (2016)
2. Non-Commercial Ground Floor in C-T (2017)
3. Pilot Density Program in C-T (2017)
4. Increase Height and FAR in Southside (2017)
5. Housing Accountability Act (2017)
6. Increase Student Housing (2018)
7. More Student Housing Now (2018)
8. Missing Middle Housing (2019)
9. Eliminating Exclusionary Zoning (2021)
10. Objective Standards for Design, Design, Shadows (2021)
11. Affordable Housing Overlay (2021)

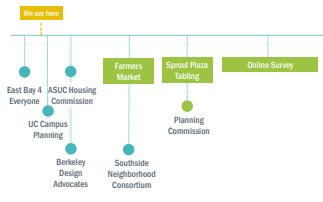
→ **Southside Zoning Ordinance Amendments Project (2020)**

- Zoning map adjustments
- New development standards
- Revised permitted land uses
- Administrative Draft EIR → Housing Element EIR

These proposed standards encourage more development than the 2020 proposal

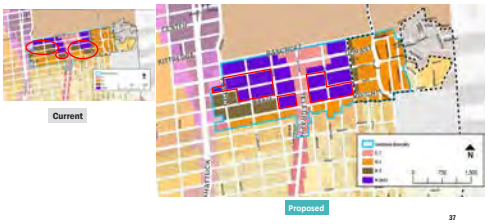
35

Outreach & Engagement Fall 2022



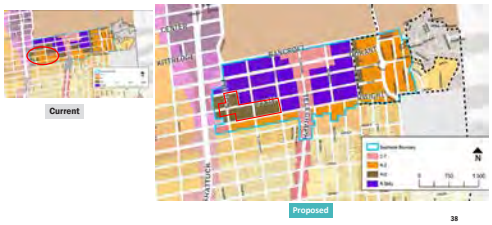
36

Southside Map Amendments – Expand R-SMU



37

Southside Map Amendments – R-3 to R-S



38

Proposed Southside Development Standard Changes

Land Use & Permits
Permit residential uses at the ground floor in the C-T

Maximum Heights
Increase maximum heights by 10 ft to 20 ft

Lot Coverage
Increase lot coverage to between 70% and 85%

Minimum Setbacks
Reduce most setbacks in the R-S and R-SMU

Reduce side setbacks in the R-3

Bldg. Separation
Eliminate building separation requirements (Fire and Building Code still apply)

Open Space
New ratio based on **total floor area**, not per unit

39

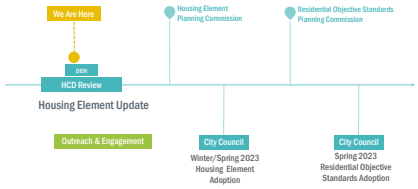
Southside: Pending additional analysis & input

Density…
- Per unit? Per room? Per bed?
- State (& local) density bonus
- Housing Element RHNA: Separate living quarters

Floor Area Ratio….
- Sliding scale?

40

Possible Future Actions



THANK YOU

Photo Credit: Jessica Christian / The Chronicle

CONTACT US

HousingElement@cityofberkeley.info

Meeting the Referral Goals?
Do the proposed development standards achieve the goals of the City Council referrals, namely encouraging the development of middle housing in lower density districts and increasing housing production and availability in the Southside area?

Changes or Revisions?
Are there provisions of the proposed zoning standards that should be changed or revised?

Additional Considerations?
Are there additional considerations that remain unaddressed by the proposed development standards?

42

F3 PLANNING COMMISSION

In addition to meeting with City Council, Housing Element Update presentations were given at three Planning Commission meeting between September 2021 and May 2022. These meetings provided an update to Commissioners and members of the public on the Housing Element, and sought input on key stakeholders for outreach. Staff specifically requested comments on the scope and content of the EIR, on issues that the EIR should address, as well as feedback on the Sites Inventory and proposed housing programs. Each subsection will include the staff memo and associated presentation.

Planning and Development Department
Land Use Planning Division

STAFF MEMORANDUM

DATE: September 1, 2021

TO: Members of the Planning Commission

FROM: Grace Wu, Senior Planner
Alene Pearson, Principal Planner

SUBJECT: Overview of the Upcoming Housing Element Update and Request to Identify a Member to Participate in the Public Outreach Effort

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RECOMMENDATION
Receive information about the update to the Housing Element of the General Plan, discuss potential community partners to be included on the stakeholder list, and identify a commissioner to participate in public outreach efforts related to the Housing Element Update who will report back to the Planning Commission at future meetings.

BACKGROUND
The Housing Element Update will serve as the City of Berkeley's housing plan for the next eight-year cycle (the 6th cycle, 2023-2031), consistent with mandates of State law and regional planning efforts. It is an important opportunity for Berkeley's residents and community members to come together on assessing housing needs, identifying policy and resource priorities, and finding solutions to implement a wide range of housing choices. The plan contains goals, policies, and programs that will guide the City's decision-making around the development and rehabilitation of housing and necessary zoning amendments to accommodate a substantial increase in the amount of housing, including affordable housing, in the city.

Racial and social equity, and protections for vulnerable and historically impacted communities, are key factors in this Housing Element Update. State law also requires that the Housing Element affirmatively furthers fair housing and examines its policies and programs to ensure they prevent poverty concentration and segregation.

As part of the outreach effort for the Housing Element Update, 10 boards and commissions were identified as having a role in the outreach and policy preparation process because their recommendations may have direct implications on the City's housing policies, programs, and residential development standards[1]. Each Board or

[1] Commission on Aging; Children, Youth, and Recreation Commission; Commission on Disability; Energy Commission; Housing Advisory Commission; Homeless Services Panel of Experts; Homeless Commission; Landmarks Planning Commission; Planning Commission; Zoning Adjustments Board.

Commission is being asked to identify a member to participate in the public outreach efforts by joining the email list, attending three public workshops over the course of 18 months, and providing project updates at their respective board or commission meetings.

Key Components of a Housing Element

The content of the Housing Element and the methodologies used for analyzing constraints and sites inventory are dictated by State law and guided by the California Department of Housing and Community Development (HCD). The Housing Element includes the following components:

1. *Housing Needs Assessment*: Examine demographic, employment and housing trends and conditions and identify existing and projected housing needs of the community, with attention paid to special housing needs (e.g., large families, persons with disabilities).
2. *Evaluation of Past Performance:* Review the prior Housing Element to measure progress in implementing policies and programs.
3. *Housing Sites Inventory*: Identify available sites for housing development to ensure there is enough land zoned to meet the future need at all income levels.
4. *Community Engagement:* Implement a robust community engagement program, reaching out to all economic segments of the community, and especially underrepresented groups.
5. *Constraints Analysis:* Analyze and recommend remedies for existing and potential governmental and nongovernmental barriers to housing development.
6. *Policies and Programs:* Establish policies and programs to be carried out during the 2023-2031 planning period to fulfill the identified housing needs.

State law does not require that jurisdictions *build* or *finance* new housing, but cities are required to identify and zone sufficient sites to accommodate the anticipated growth over the next eight-year period.

Regional Housing Needs Allocation (RHNA)

Overall, the Bay Area must plan for 441,176 new housing units during the 6th cycle, compared with 187,990 for the 5th cycle (2015-2023). Each jurisdiction in California receives a target number of units across income levels, called the Regional Housing Needs Allocation (RHNA)[2], that must be planned for in the Housing Element Update. Berkeley's draft RHNA is 8,934 residential units. The City did not appeal its draft RHNA allocation, recognizing that the allowable circumstances for appeals outlined in Government Code Section 65584.05 were not applicable to the City of Berkeley[3]. The

[2] May 20, 2021. *Final Regional Housing Needs Allocation (RHNA) Methodology and Draft Allocations.* ABAG.https://abag.ca.gov/sites/default/files/documents/2021-05/ABAG_2023-2031_Draft_RHNA_Plan.pdf

[3] *2023-2031 RHNA Appeals Process*. ABAG. https://abag.ca.gov/our-work/housing/rhna-regional-housing-needs-allocation/2023-2031-rhna-appeals-process

final target RHNA will be issued by the Association of Bay Area Governments (ABAG) in December 2021.

Table 1 provides a comparison of Berkeley's RHNA numbers at all income levels during the 5th cycle, the number of new units that have been issued building permits between 2015 and 2020, and the draft RHNA for the upcoming 6th cycle. While the total units issued building permits over the last five years are in line with the 5th cycle RHNA, challenges remain for meeting lower and moderate income housing targets.

Table 1: Berkeley RHNA Allocation, 5th & 6th Cycles

Income Level[4]	5th Cycle RHNA Units	Units Permitted 2015-2020[5]	6th Cycle DRAFT RHNA Units
Very Low (< 50% AMI)	532	232	2,446
Low (50 – 80% AMI)	442	41	1,408
Moderate (80 – 120% AMI)	584	91	1,416
Above Moderate (> 120% AMI)	1,401	2,579	3,664
Total	**2,959**	**2,943**	**8,934**

Timeline

Due to strict deadlines imposed by the State and severe penalties for missed deadlines[6], it is critical that the Housing Element Update stay on schedule and is approved by City Council and certified by HCD by January 31, 2023. This means that the majority of the housing needs analysis and assessment, sites inventory, and rezoning will be *identified* within the first six months of the 18-month project in order to allow for sufficient time to conduct a thorough and legally defensible environmental review (see Figure 1: Housing Element Project Timeline).

Figure 1: Housing Element Project Timeline

[4] 2021 income levels by family size are available at https://www.acgov.org/cda/hcd/documents/2021IncomeandRentLimits.pdf

[5] Based on revised 2015-2020 APR unit counts, accepted by HCD on July 14, 2021

[6] Failure to comply would impact Berkeley's eligibility and competitiveness for federal, state, and regional affordable housing and infrastructure funding sources. Many state and regional grant and loan programs require a compliant Housing Element, including the Affordable Housing and Sustainable Communities Program (AHSC), the Local Housing Trust Fund Program (LHTF), and Metropolitan Transportation Commission's (MTC) One Bay Area Grant transportation funding.

Outreach and Engagement
Outreach and engagement are integral parts of this project from initiation to adoption. The overall plan for outreach and engagement includes 20 stakeholder interviews, a community-wide survey, 20 small format meetings, three work sessions with the City Council, and three public workshops. Based in part on the feedback received from the 10 boards and commissions, City staff—working with an outreach consultant—will invite community partners and stakeholders to participate in the interviews and small format meetings.

DISCUSSION

1. Which community partners should be included on the stakeholder list, with the goal to further fair housing and engage racially and socially disadvantaged communities?
2. Which member of the Planning Commission is interested and able to participate in the Housing Element Update public outreach effort? Participation includes joining the email list, attending three public workshops over the course of 18 months, and providing project updates at future commission meetings.

Prepared by: Grace Wu, Senior Planner, gwu@cityofberkeley.info, 510-981-7484

LINKS

1. April 30, 2021. *Housing Element Off-Agenda Memo.* Berkeley City Council. https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Housing%20Element%20Update%20042821.pdf
2. April 28, 2015. *Adopted 2015-2023 5th Cycle Housing Element*. https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Commissions/Commission_for_Planning/2015-2023%20Berkeley%20Housing%20Element_FINAL.pdf

Figure F-14 Planning Commission Meeting #1 Presentation

HOUSING ELEMENT UPDATE OVERVIEW

6th Cycle 2023-2031

City of Berkeley Boards and Commissions

September 2021

Grace Wu, Senior Planner

Agenda

1. The Berkeley General Plan
2. Housing Element Overview
3. Regional Housing Needs Allocation (RHNA)
   - Berkeley RHNA 5th Cycle and 6th Cycle
   - RHNA & Sites Inventory
4. Sites Inventory
5. Housing Considerations
6. 6th Cycle Housing Element Update Process
7. Discussion

2

The Berkeley General Plan is a comprehensive and long-range statement of priorities and values developed to guide public decision-making in future years.

All land use approvals and decisions must be consistent with the goals, objectives, and policies of the General Plan.

The Berkeley General Plan contains the following "Elements":

1. Land Use
2. Transportation
3. **Housing** ← We are here
4. Disaster Preparedness and Safety
5. Open Space and Recreation
6. Environmental Management
7. Economic Development and Employment
8. Urban Design and Preservation
9. Citizen Participation

3

Housing Element Overview

- Required Element of the General Plan
- Must be updated on an 8-year cycle, certified by HCD
- Currently planning for the 6th cycle (2023-2031)
- The certification process takes several months and the statutory deadline is January 31, 2023

4

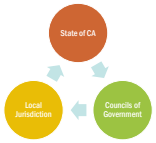
Regional Housing Needs Allocation (RHNA)

For each region, the State analyzes:

+ Jobs to homes ratio
+ Proximity to jobs and education centers
+ Expected job and population growth
+ Demographic trends that affect housing demand

= # of units to plan for in each region, by income level

= Regional Housing Needs Allocation, or RHNA



- The methodology for distributing the RHNA was approved in January 2021
- The Bay Area must plan for 441,176 new housing units during the 6th cycle (vs. 187,990 in 5th cycle)
- Berkeley's draft 6th cycle RHNA is 8,934 units
- The final RHNA will be issued by ABAG in December 2021

5

Regional Housing Needs Allocation (RHNA)

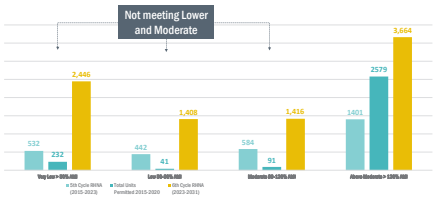
5th & 6th Cycle

Revised 2015-2020 APR, accepted by HCD on July 14, 2021

6

Regional Housing Needs Allocation (RHNA)

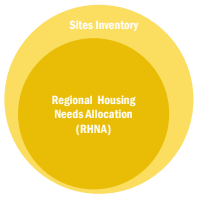
5th & 6th cycle



Revised 2015-2020 APR, accepted by HCD on July 14, 2021

7

RHNA & Sites Inventory



- Must show enough land zoned for housing to meet our RHNA
- Include a buffer (no net loss by income level)
- More feasibility analysis required for:
  - Small Sites less than 0.5 acres
  - Large Sites greater than 10 acres
  - Non-vacant sites
- New rules for reused sites

***If actual housing production is less than RHNA, certain affordable projects are subject to a streamlined approvals process (SB 35)**

8

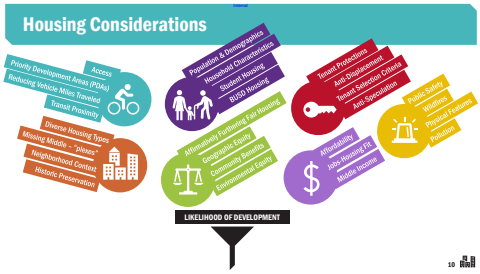
Sites Inventory

Publicly-owned or leased sites	Vacant sites that could be developed with residential	Nonvacant sites that could be developed with housing units or more housing units	Nonvacant sites that could be rezoned for residential or more housing units

- City is not required to *build* or *finance* the housing, but must *plan and accommodate* for it
- Does not automatically authorize the construction of residential developments
- Private Property - No obligation by property owner or tenant to take action
- Reliant on the development industry to construct housing units

9

Housing Considerations



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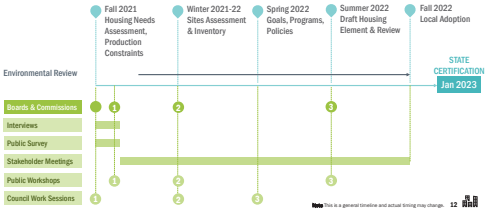
The 6th Housing Element Update Process

Note: This is a general timeline and actual timing may change.

11

The 6th Housing Element Update Process



Note: This is a general timeline and actual timing may change.

12

Discussion

1. Which **community partners** should be included on the **stakeholder list**, with the goal to further fair housing and engage racially and socially disadvantaged communities?
2. Which **member of your board or commission** is interested and able to participate in the **Housing Element Update public outreach effort**?
   - Join the email list
   - Attend three public workshops (Oct 2012, early 2022, summer 2022)
   - Report back at future board / commission meetings.

13

Links to Slides

1. The Berkeley General Plan
2. Housing Element Overview
3. Regional Housing Needs Allocation (RHNA)
   - Berkeley RHNA 5th Cycle and 6th Cycle
   - RHNA & Sites Inventory
4. Sites Inventory
5. Housing Considerations
6. 6th Cycle Housing Element Update Process
7. Discussion

14

Planning and Development Department
Land Use Planning Division

DATE: February 9, 2022

TO: Members of the Planning Commission

FROM: Alene Pearson, Principal Planner

SUBJECT: Housing Element Update and Environmental Impact Report (EIR) Scoping Session

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INTRODUCTION

The City of Berkeley is currently updating its Housing Element, which will serve as the City's housing plan for the next eight years (2023-2031). An Environment Impact Report (EIR) is required to evaluate the potential physical environmental impacts that could result from actions required to implement the policies and programs proposed in the Housing Element Update. A Notice of Preparation (NOP) has been issued and a 30-day comment period is underway (see Attachment 1). In this scoping session, the Commission will receive a status report on the Housing Element Update and NOP, consider public testimony, and provide comments on the scope and content of the EIR.

BACKGROUND

The City of Berkeley is preparing the 2023-2031 Housing Element Update to comply with the legal mandate that requires each local government to identify adequate sites for housing to meet the existing and projected needs for households with varying income-levels in the community. The Housing Element Update will establish goals, policies, and actions to address the existing and projected housing needs in Berkeley according to State law and guidance from the Department of Housing and Community Development (HCD). It is intended to provide the City with a comprehensive strategy for promoting the production of safe, decent and affordable housing, and affirmatively furthering fair housing (AFFH).

Berkeley's Final RHNA

Each jurisdiction in California receives a target number of housing units to plan for during each eight-year housing element cycle, called the Regional Housing Needs Allocation (RHNA), based on local economic and demographic trends. On December 16, 2021, the Executive Board of the Association of Bay Area Governments (ABAG) conducted a public hearing and adopted the Final RHNA Plan for the 2023-2031

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E-mail: planning@cityofberkeley.info

housing cycle. Berkeley's RHNA is 8,934 residential units. For comparison with Berkeley's RHNA from the previous cycle (2015-2023), see Table 1.

Table 1: Berkeley's RHNA

Income Level	2015-2023 RHNA Units	2023-2031 RHNA Units
Very Low (< 50% AMI)	532	2,446
Low (50-80% AMI)	442	1,408
Moderate (80-120% AMI)	584	1,416
Above Moderate (>120% AMI)	1,401	3,664
Total	**2,959**	**8,934**

Housing Element Site Inventory Analysis
An essential component of the Housing Element is to identify sufficient sites that can accommodate the 2023-2031 RHNA. Sites are considered suitable for residential development if they are zoned appropriately and available for residential use during the planning period. HCD provides a framework for determining if the current zoning regulations, physical conditions of parcels, and existing land uses on parcels provide adequate sites to accommodate Berkeley's RHNA.

The staff report that accompanied the City Council Worksession on December 9, 2021 provided a detailed overview of the steps necessary to identify sufficient sites (see Attachment 2). In summary, jurisdictions must complete the following five steps:

1. Identify Likely Housing Sites and Production
2. Screen for Vacant and Underutilized Parcels
3. Screen for Suitability of Parcels
4. Evaluate and Analyze Sites
5. Calculate Potential Buildout of Sites

The final site inventory will include a detailed data table, according to a template provided by HCD, that lists potential sites that have been identified to meet Berkeley's RHNA. The site inventory table provides characteristics of each potential site (including existing use, zoning, address), calculates allowable buildout by income category, documents the viability of each parcel to build housing (with photos and descriptions), and shows the results of the AFFH analysis.

Note, the inventory does not require development of any particular site and is not indented to imply that a site will be developed at a certain density, only that it could be based on the HCD framework. The intent is to demonstrate that the City has adequately planned and zoned for appropriate development that could be attractive to private, non-profit and public housing developers at appropriate densities to meet the projected demand for housing in a variety of income categories.

Preliminary Site Inventory Analysis
The process summarized above is iterative, and not necessarily linear. The project team has completed the first round of steps 1 and 2 and has conducted a preliminary analysis of potential buildout (step 5) in order to understand the capacity of sites under current zoning and to identify the outside limits of the project to be analyzed in the EIR. Although this may seem premature, the CEQA timeline and HCD's review periods require the start of environmental review at this stage in order to meet the Housing Element's statutory deadline of January 31, 2023.

The first two steps in the site inventory process require identification of adequate sites to accommodate the RHNA. Attachment 3 provides a preliminary assessment of sites, presented in three categories, described below:

- *Sites Likely to Develop*
- *Sites in the Pipeline*
- *Opportunity Sites or Potential Additional Sites*

Sites that are likely to develop include projects that received their land use entitlement after 2018 but have not yet been built. For these projects, the affordability breakdown in the table reflects actual project plans, including density bonus units. HCD also allows jurisdictions to include future ADUs in the category of "sites likely to develop" based on past development trends. Furthermore, HCD's methodology provides assumed levels of affordability for ADUs. Lastly, development at the BART sites is included as "sites likely to develop" based on current planning efforts -- because project specifics are not known at this time, a conservative total estimate of 1,200 units is being used with 35% affordability split evenly between Very Low and Low Income affordability levels. *The preliminary assessment of sites likely to develop accounts for over 5,100 units.*

Sites in the pipeline include projects that are under review or are actively engaging with the City in anticipation of submitting an application for review. Affordability levels for sites in the pipeline reflect proposed project plans to the extent they are known. *The preliminary assessment of sites in the pipeline accounts for over 2,400 units.*

Opportunity sites or potential additional sites do not have specific projects associated with them. This category includes parcels that are assessed based on HCD criteria as potential opportunity sites for future housing development. HCD's criteria includes the following:

- Land is vacant as identified in the existing land use data.
- Parcel has an improvement-to-land assessed value ratio of 0.75 or less.
- Buildings on the parcel are greater than 40 years old for residential buildings and 30 years old for non-residential buildings.
- Parcel does not have historic buildings and rent controlled units.
- Parcel does not have condos or large apartment buildings.
- Parcel is not State- or county-owned.

Buildout Potential and Income Limits of Opportunity Sites
Berkeley's zoning districts do not have maximum density standards expressed in "dwelling units per acre", so the preliminary number of potential units for opportunity sites was calculated using 70% of the upper limit of a density range that reflects recent projects that have been built within the district. The project team is following HCD guidance to develop accurate density estimates and buildout potential and is still in the process of researching and refining these numbers.

Because opportunity sites are not associated with actual development proposals, HCD provides guidance on assigning assumed income categories to the units that could be developed on these (or similar) parcels. The HCD methodology is based on allowable density, with increased density serving as a proxy for more affordability. Parcels that are zoned to allow 30 dwelling units per acre or more are categorized in the "lower income" category (Very Low- or Low-Income households) and parcels with zoning that allows less than 30 units per acre in the Moderate- and Above Moderate-Income categories.

The HCD guidance for this stage of the analysis is an admittedly blunt approach to considering the issue of housing affordability. Berkeley has other tools at its disposal for addressing the affordability of new development, preservation of existing units, and other aspects of housing policy, which will also be described in the Housing Element. The focus in the EIR, however, is on the physical development activity necessary for meeting the overall RHNA; additional analysis will be provided in subsequent discussions about the other policies and programs that will be included in the Housing Element Update.

Potential Rezoning and EIR
Based on the units already accounted for in "Sites Likely to Develop" and "Sites in the Pipeline", HCD certification will require that the Housing Element identify opportunity sites to accommodate approximately 2,000 units. *Preliminary analysis of opportunity sites identified over 8,000 units, suggesting that current zoning is adequate to meet HCD's RHNA requirements for a compliant Housing Element.*

Although Berkeley's current zoning seems to be sufficient to meet RHNA, recent development activity suggests current zoning alone does not deliver the level of deed-restricted affordable housing and economic diversity that the City aims to achieve. In particular, density bonus and inclusionary units have fallen short of providing the overall 20% Very Low and Low Income units expressed in the City's inclusionary housing ordinance.

Furthermore, City Council has provided direction through referrals and resolutions (see Attachment 4) regarding where and how to encourage additional housing, with a focus on affordable housing that supports a diversity of income levels and household types. In order to allow these actions to occur, the Housing Element EIR needs to study potential environmental impacts that could result from up-zoning and new programs. The project description for the EIR will broadly cover requested actions from Council in order to

provide flexibility as the Housing Element Update proceeds and opportunity sites are identified.

DISCUSSION

Public Review Period and Scoping Meeting

The Planning Department has hired Rincon Consultants to prepare the CEQA analysis, including the NOP, which informs public agencies and the community early in the process of the broad strokes of the process. The NOP was released on January 17, 2022, beginning a 30-day review period, which will close on February 16, 2022.

This scoping meeting informs the community and public agencies about the Housing Element and EIR, and solicits comments from the Planning Commission and the public regarding the EIR scope, issues of concern, potential alternatives, and mitigation measures. These comments, along with the comments collected through the entire review period, will be considered in the preparation of the EIR. The result of the EIR analysis will inform future Planning Commission discussion and the recommendations submitted to the City Council for adoption.

CEQA and Zoning -- Next Steps

Following the close of the NOP comment period, the Draft EIR will be prepared and circulated for the required 45-day public comment period. Although the Housing Element Update would not approve any physical development (e.g., construction of housing or infrastructure), the EIR will assume that such actions are reasonably foreseeable future outcomes of the Housing Element Update. As such the EIR will evaluate the potential physical environmental impacts that could result from future actions for implementing the policies and programs, and resulting development, at a programmatic level.

The Draft EIR will also examine a reasonable range of alternatives to the proposed project, including the CEQA-mandated No Project Alternative and other potential alternatives that may be capable of reducing or avoiding potential environmental effects while meeting most of the basic objectives of the project. In addition, the EIR will address cumulative impacts, growth inducing impacts, and other issues required by CEQA.

The estimated timeline for the public portions of the CEQA review are as follows:

Description	Timing	Public Review Process
Development and Release of Public Draft of Notice of Preparation (NOP)	December 2021 - January 2022	2/9/22 -- Planning Commission review
30-day NOP Comment Period	January 17 – February 16, 2022	Scoping Meeting at 2/9/22 Planning Commission
Draft EIR released for 45-day review and comment period	July 15 – August 29, 2022	Planning Commission hearing
Discussion of Housing Element EIR changes	September – November 2022	Subcommittee and Planning Commission review
Final EIR and Final Housing Element adopted	November 2022 – January 2023	Planning Commission recommendation; City Council action

STAFF RECOMMENDATION

The Planning Commission should review the NOP, provide comments on the scope and content of the EIR, and receive comments from members of the public, organizations and interested agencies on issues the EIR should address. Written comments can be directed in writing to Grace Wu, Senior Planner either by mail or electronically:

Land Use Planning Division
1947 Center Street, 2nd Floor
Berkeley, CA 94704

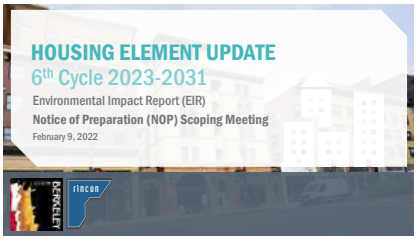
GWu@cityofberkeley.info.

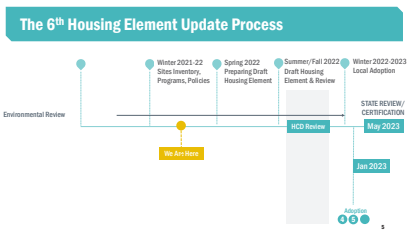
Comments must be received on or before 5pm on Monday, February 21, 2022.

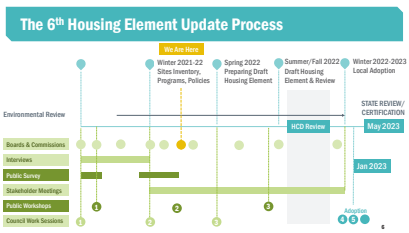
ATTACHMENTS

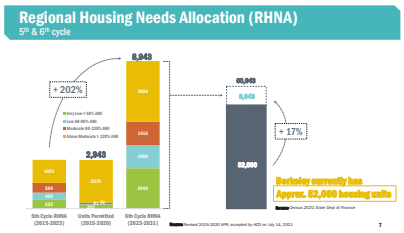
1. Notice of Preparation
2. Staff Report from December 9, 2021 Housing Element Update Work Session
3. Preliminary Site Capacity Analysis
4. Housing Element Related Referrals and Resolutions

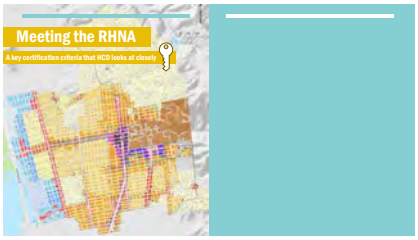
Figure F-15 Planning Commission Meeting #2 Presentation

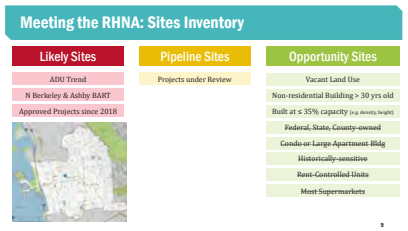


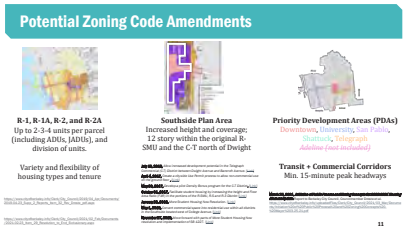


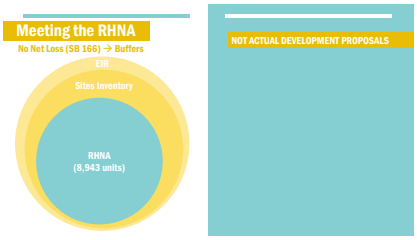


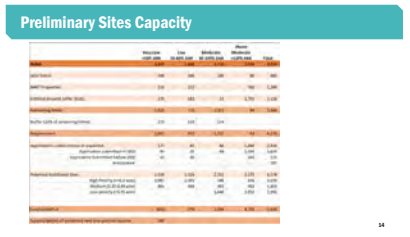


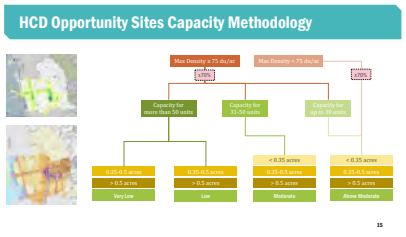




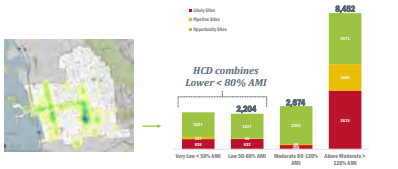








Preliminary Sites Inventory Capacity



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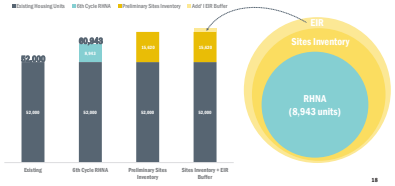
RHNA vs. Preliminary Sites Inventory Capacity

17

Existing → RHNA → Sites Inventory → EIR



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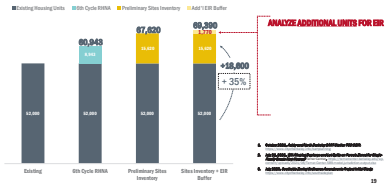
Additional EIR Buffer



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CEQA

1. Purpose
2. Draft EIR
3. CEQA Topics
4. EIR Process
5. Scoping Meeting & Comments

20

California Environmental Quality Act (CEQA)

Purpose of CEQA:

- Disclose the potential significant environmental effects of proposed actions
- Identify ways to avoid or reduce adverse environmental effects
- Consider feasible alternatives to proposed actions
- Foster interagency coordination in the review of projects
- Enhance public participation in the planning process

21

What's in a Draft Environmental Impact Report (EIR)?

- A project description
- An environmental setting
- Evaluation of environmental impacts
  - Thresholds of significance
  - Mitigation measures
- Project alternatives
  - A meaningful discussion of project alternatives that would reduce adverse environmental impacts

22

List of CEQA Topics

23

Environmental Impact Report (EIR) Process

24

Purpose of the Scoping Meeting

- Inform the community and concerned agencies about the project and the EIR
- Solicit input regarding the EIR scope, issues of concern, potential alternatives, and mitigation measures
- Inform the community about future opportunities for input

25

We Welcome Comments Regarding:

- The scope, focus, and content of the EIR
- Mitigation measures to avoid or reduce environmental effects
- Alternatives to avoid or reduce environmental effects
- Please submit written comments by Monday, February 21, 2022 to:

Grace Wu
Land Use Planning Division
1947 Center Street, 2nd Floor
Berkeley, CA 94704

Or via email GWu@cityofberkeley.info

26

Planning and Development Department
Land Use Planning Division

DATE: May 4, 2022

TO: Members of the Planning Commission

FROM: Grace Wu, Senior Planner

SUBJECT: Housing Element Update: Preliminary Sites, Goals, Policies, and Programs

---

INTRODUCTION

The City of Berkeley is currently updating its Housing Element, which will serve as the City's housing plan for the eight-year period between 2023-2031. Under state law, the Housing Element must provide a Sites Inventory that catalogs a jurisdiction's capacity to accommodate its Regional Housing Needs Allocation (RHNA). The Housing Element must also identify the City's housing needs and outline goals, policies, and programs to address them. This report provides a preview of the preliminary Sites Inventory and the Goals, Policies, and Programs that will be included in the public draft of the Housing Element Update, which will be available in June 2022. The Draft Housing Element will then undergo further review by Department of Housing and Community Development (HCD) and comment be incorporated prior to returning to Planning Commission for recommendation and City Council for local adoption.

BACKGROUND

The City of Berkeley is preparing the 2023-2031 Housing Element Update to comply with the State mandate that requires each local jurisdiction to identify adequate sites for housing to meet the existing and projected needs of households at varying income-levels in the community. The Housing Element Update will establish goals, policies, and programs to address the existing and projected housing needs in Berkeley according to State law and guidance from the HCD. It is intended to provide the City with a comprehensive strategy for promoting the production of safe, decent and affordable housing, and affirmatively furthering fair housing (AFFH).

Housing Element Site Inventory Analysis

The staff reports that accompanied the Planning Commission meeting on February 9, 2022[1] and the City Council Worksession on March 15, 2022[2] provide a detailed overview of the criteria and steps necessary to identify land suitable for residential development that can be feasibly developed during the 2023-2031 period. In summary, the City adhered to the following five steps:

1. Identify **Likely sites**, reflecting recently entitled projects since 2018 and current BART planning efforts at North Berkeley and Ashby stations. Accessory Dwelling Unit (ADU) trends are also incorporated within Likely sites.
2. Identify **Pipeline sites**, based on projects that are under review or actively engaging with the City in anticipation of submitting an application.
3. Identify **Opportunity Sites**, or potential sites for future housing development, based on HCD's criteria:
    a. Land is vacant as identified in the existing land use data.
    b. Parcel has an improvement-to-land assessed value ratio of 0.75 or less.
    c. Buildings on the parcel are greater than 40 years old for residential buildings and 30 years old for non-residential buildings.
    d. Parcel does not have historic buildings and rent controlled units.
    e. Parcel does not have condos or large apartment buildings.
    f. Parcel is not State- or county-owned.
4. Evaluate and analyze Opportunity Sites for realistic feasibility.
5. Calculate overall Sites Inventory capacity, by income category (Table 1).

Table 1 Summary Sites Inventory Capacity

Sites/Projects	Total Net Units	Income Distribution			
		Very Low	Low	Moderate	Above Moderate
Likely Sites	4,685	622	628	249	3,186
ADU Trend	*800*	*240*	*240*	*240*	*80*
BART Properties	*1,200*	*210*	*210*	*0*	*780*
Entitled Projects	*2,685*	*172*	*178*	*9*	*2,326*
Pipeline Sites	2,414	204	180	68	1,962
Applications under review	*2,126*	*178*	*86*	*68*	*1,794*
Anticipated	*288*	*26*	*94*	*0*	*168*
Opportunity Sites	9,028	1,649	1,649	2,886	2,845
Total Site Capacity	**16,127**	**2,475**	**2,457**	**3,203**	**7,993**
2023-2031 RHNA	**8,934**	**2,446**	**1,408**	**1,416**	**3,664**
RHNA Surplus	+7,193	+29	+1,049	+1,787	+4,329

[1] February 9, 2022. Planning Commission: Housing Element EIR Scoping Session. https://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Commissions/2022-02-09_PC_Item%2010.pdf

[2] March 15, 2022. City Council Housing Element Worksession #3. https://www.cityofberkeley.info/Clerk/City_Council/2022/03_Mar/Documents/2022-03-15_Item_01_Housing_Element_pdf.aspx

The preliminary Likely and Pipeline sites are detailed in Attachment 1. For projects under Likely sites, the affordability categories reflect actual project plans, including density bonus units. For Pipeline sites, the affordability levels reflect proposed project plans to the extent they are known. For ADUs, the City assumed levels of affordability based on the draft *Using ADUs to Satisfy RHNA Technical Memo*, produced by the Association of Bay Area Governments (ABAG).[3]

Opportunity Sites: Density and Affordability Assumptions

The Opportunity Sites includes a detailed table, in accordance with HCD's template, that lists potential sites that have been identified to have the realistic capacity to meet Berkeley's RHNA (Attachment 2). The table provides characteristics of each opportunity site (including assessor parcel number, existing building age, vacancy status, existing zoning, density assumption, and capacity assumption) to calculate allowable buildout by income category.

The City estimated development potential for Opportunity Sites by calculating the average density achieved for recently approved, under construction, or completed mixed-use and residential projects per zoning district. This calculation is critical since the majority of the City's zoning districts do not have density standards. The density assumptions listed in Table 2 were used to calculate the capacity of Opportunity Sites.

Table 2 Achieved Density Trends and Density Assumptions

District	Average Density Based on 2 or More Projects (du/ac)	Density Assumption for RHNA (du/ac)	Methodology Overview
R-1	6.1	6.0	
ES-R	1.2	1.0	
R-1A	16.4	15.0	Based on 2 projects with densities from 14.6 to 18.2 du/ac
R-2	21.6	20.0	Based on 3 projects with densities from 12.9 to 36.9 du/ac
R-2A	26.9	25.0	Based on 13 projects with densities from 12.9 to 50.8 du/ac
R-3	45.9	40.0	Based on 9 projects with densities from 21.4 to 85.1 du/ac
R-4	86.1	75.0	Based on 5 projects with densities from 26.8 to 150.6 du/ac
R-S	102.5	100.0	Based on 3 projects with densities from 64.5 to 129.1 du/ac
R-SMU	212.0	200.0	Based on 2 projects with densities from 189.5 to 234.6 du/ac
C-C	143.1	125.0	Based on 2 projects with densities from 112.6 to 173.5 du/ac. Note that 1 project was approved under the former C-1 zoning designation but is now zoned C-C

[3] September 8, 2021. ABAG. http://21elements.com/documents-mainmenu-3/housing-elements/rhna-6-2022-2030/1327-draft-adu-affordability-report-sep-8-2021-1/file

C-U	158.8	150.0	Based on 5 projects with densities from 17.5 to 268 du/ac. Note that 3 of these projects were approved under the former C-1 designation but are now zoned C-U
Neighborhood Commercial (C-N, C-E, C-NS, C-SO)	58.1	50.0	Based on 3 projects with densities from 28.6 to 94.7 du/ac
C-SA	183.5	180.0	Based on 7 projects with densities from 106.7 to 207.8 du/ac
C-T	168.1	160.0	Based on 10 projects with densities from 31.3 to 442.9 du/ac
C-DMU Core	339.8	320.0	Based on 9 projects with densities from 188.1 to 457.4 du/ac
C-DMU Outer Core	247.4	225.0	Based on 6 projects with densities from 143.4 to 390.0 du/ac
C-DMU Corridor	167.8	150.0	Not enough projects so based on C-DMU Buffer projects
C-DMU Buffer	167.8	150.0	Based on 6 projects with densities from 129.3 to 190.5 du/ac
C-W	136.8	135.0	Based on 22 projects with densities from 53.4 to 272 du/ac
C-AC	210.0	210.0	70% of max density defined in recently adopted Specific Area Plan
MU-R	28.0	34.8	Based on 9 projects with densities between 20.0 to 34.8 du/ac

State law (AB 2342, Government Code 65583.2) uses density as a proxy for income levels and affordability for the sites inventory. Under state law, the “default density” for most jurisdictions in urban counties is 30 units/acre. Default density refers to the density considered suitable to encourage and facilitate the development of affordable housing. Table 3 shows the site characteristics used to determine affordability for the sites inventory. In general, zones with lower assumed densities and smaller parcel sizes are presumed to produce units that are affordable to moderate and above moderate households. The sites inventory assumes that sites with densities of at least 30 du/acre are affordable to lower income households.

Table 3 Affordability by Density, Size, and Site Capacity

Income Level	Site Characteristics
Lower **< 80% AMI**	Site size is between 0.35 and 10 acres alone or in consolidation with adjacent sites; AND Density assumed is at least 30 du/ac; AND Site capacity is at least 50 units
Moderate **80-120% AMI**	Site size is between 0.10 and 0.35 acres alone or in consolidation with adjacent sites; AND Site capacity is between 30 and 50 units
Above Moderate **> 120% AMI**	Density assumed is less than 30 du/ac; OR Site capacity is less than 30 units

Housing Element Sites Inventory and Opportunity Sites

This report includes a preliminary list of Opportunity Sites, and the assumed income category by parcel, that met the above criteria. This list is assessed to ensure that the units identified to accommodate the RHNA—particularly lower income units—will affirmatively further fair housing and are not disproportionately concentrated in areas with larger populations of interest or special needs populations such as racial and ethnic minority groups, persons with disabilities, and cost-burdened renters.

This list is being shared prior to the June 2022 release of the Housing Element public draft to allow additional time for discussion and review. The Sites Inventory will undergo further review by HCD this summer, after responses to public review comments are incorporated.

Note, the Sites Inventory, including the Opportunity Sites, does not require development of any particular site and is not intended to imply that a site will be developed at a certain density or income level, only that it *could* be based on HCD's framework. The intent is to demonstrate that the City has adequately planned and zoned for appropriate development that could accommodate private, non-profit and public housing developments at appropriate densities to meet the projected demand for housing in a variety of income categories.

However, if actual housing production is less than the RHNA, eligible affordable housing projects are subject to a streamlined approvals process (SB 35). Determinations are calculated at the mid-point and end of each eight-year planning period based on progress of a pro-rata share of the City's RHNA. Currently, the City of Berkeley has made insufficient progress toward its very low and low income RHNA and is subject to SB 35 streamlining provisions for projects that include at least 50% affordability.

In addition, AB 1397 requires that 5th cycle opportunity sites re-used in the 6th cycle and identified to accommodate lower income units (Very Low-Income and Low-Income) be subject to by-right approval if projects include 20% affordable units for lower income households on-site. Preliminary analysis shows that this will affect approximately 18 opportunity sites (1,419 units), located along Berkeley's commercial corridors.

Goals, Policies, and Programs
Berkeley's Housing Element Update must include goals, policies and programs that will address identified housing needs—including special needs populations, respond to governmental and non-governmental constraints, and facilitate the development of housing to meet RHNA.

Through outreach and engagement – at public workshops, board and commission meetings, Council worksessions, interviews and small-format meetings, tabling events, and surveys – the Housing Element team has compiled a comprehensive set of goals and policies that reflect feedback received. The preliminary set includes six main goals and 33 policies to enact those goals (Attachment 3). The six goals and their objectives are:

Goal A Housing Affordability. Berkeley residents should have access to quality housing at a range of housing options and prices. Housing is least affordable for people at the lowest income levels, especially those with extremely low income, and City resources should focus on this area of need.

Goal B Housing Preservation. Existing housing should be maintained and improved. The City promotes energy efficiency and electrification improvements in new and existing residential buildings in order to improve building comfort and safety, reduce energy and water use and costs, provide quality and resilient housing, and reduce greenhouse gas emissions. Improvements that will prepare buildings for a major seismic event should be encouraged.

Goal C Housing Production. Berkeley should provide adequate housing capacity to meet its current and future housing needs. New housing should be developed to expand housing opportunities and choices in Berkeley to meet the diverse needs of all socioeconomic segments of the community, and should be safe, healthy and resilient.

Goal D Special Needs Housing and Homelessness Prevention. Berkeley should expand the supply of housing for special needs groups, including housing affordable to those with extremely low incomes.

Goal E Affirmatively Furthering Fair Housing. The City should continue to take meaningful actions to affirmatively further fair housing choices in Berkeley.

Goal F Governmental Constraints. Berkeley should identify and mitigate barriers to the construction and improvement of housing.

This list of goals was shared with staff from departments and divisions throughout the city[4] to identify specific programs (existing and proposed) that would facilitate implementation of policies and achieve the stated goals and objectives.

HCD requires that Housing Element Programs be well developed. Programs must include specific action steps to achieve the City's goals and policies and take into account the following:

- Include a timeline for implementation,
- Identify staff resources (by Department and/or Division) that will be responsible for implementation,
- Describe the City's specific role in implementation and resources (e.g. providing funding, dedicating staffing), and
- Identify specific and measurable outcomes.

[4] Health, Housing, and Community Services (HHCS), Rent Stabilization Board (RSB), Berkeley Housing Authority (BHA), City Manager's Office-Neighborhood Service Code Enforcement (NSCE) Unit, Building and Safety, Office of Energy and Sustainability.

In this preliminary set, City staff identified 37 housing programs (Attachment 4), offered through several City departments and divisions. They each address one or more goals and policies outlined above. Many of the housing programs reflect City Council referrals that are funded and/or staffed and are already included in the future workplans for departments.

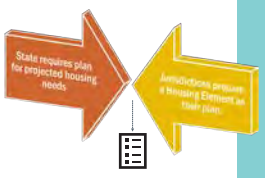
DISCUSSION
Are there gaps in the preliminary Sites Inventory?

Are there gaps in the proposed housing programs? If so, what are specific implementation steps, metrics, and timelines that can be identified for them?

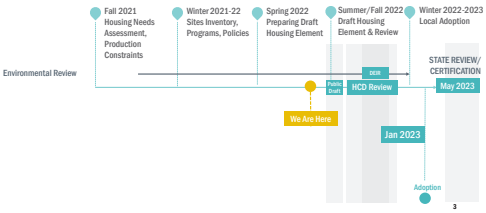
With the requirements for Affirmatively Furthering Fair Housing (AFFH), the City must identify neighborhoods that the City will direct additional efforts and resources to address disparities in the availability of affordable housing, housing conditions, and neighborhood conditions. What are specific neighborhoods and actions where certain Housing Programs can focus on?

ATTACHMENTS
1. Preliminary Likely and Pipeline Sites
2. Preliminary Opportunity Sites
3. Preliminary Goals and Policies
4. Preliminary Housing Programs

Figure F-16 Planning Commission Meeting #3 Presentation



Required Element of the General Plan
Must be updated every 8 years and certified by HCD
Currently planning for the 6th cycle (2023-2031)
Statutory deadline is January 31, 2023
Bay Area: 441,176 units
Berkeley: 8,934 units



Housing Element includes...

1. **Housing Needs Assessment** — *Demographic trends and needs, including Special Needs populations*
2. **Evaluation of Past Performance** — *How we did in the 5th Cycle Housing Element*
3. **Housing Sites Inventory** — *Likely Sites, Pipeline Sites and Opportunity sites, by income level*
4. **Constraints Analysis** — *Barriers to housing development*
5. **Policies & Programs** — *Address identified housing needs*
6. **Community Engagement** — *Residents, businesses, stakeholders, policy-makers*

AGENDA

I. PRELIMINARY SITES INVENTORY
1. Meeting the RHNA
2. Criteria and Analysis
3. Sites Inventory Capacity

II. PRELIMINARY GOALS, POLICIES, AND PROGRAMS
1. Outreach & Engagement
2. Goals & Policies
3. Preliminary Housing Programs

III. DISCUSSION

PRELIMINARY SITES INVENTORY

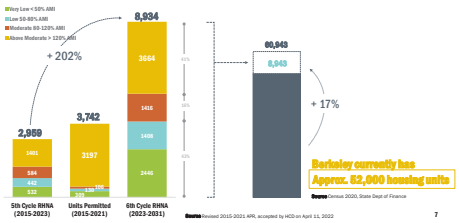
1. Meeting the RHNA
2. HCD Methodology
3. Preliminary Sites Inventory Capacity

Using HCD's Capacity Methodology

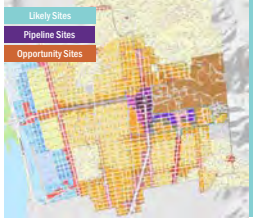
CAPACITY ≠ HOUSING PRODUCTION

Regional Housing Needs Allocation (RHNA)

5th & 6th cycle



Meeting the RHNA



- Adequate Sites
- Zoned Appropriately
- Available for residential use
- Capacity to provide units, by income level, required by RHNA
- Meet HCD's criteria (physical characteristics, density)

Likely Sites

ADU Trends
N Berkeley & Ashby BART
Approved Projects since 2018

Very Low	Low	Mod	Above Mod	Total
622	628	249	3,186	4,685

Pipeline Sites

Projects under Review
Anticipated

Very Low	Low	Mod	Above Mod	Total
204	180	68	1,962	2,414

RHNA

Very Low	Low	Mod	Above Mod	Total
2,446	1,408	1,416	3,664	8,934

Opportunity Sites

Vacant or Underutilized
Improvement to Assessed Land Value ≤ 0.75
Non-residential Building > 30 yrs old
Federal, State, County-owned
Condo or Large Apartment Bldg
Historically-sensitive
Rent-Controlled Units
Most Supermarkets

Very Low	Low	Mod	Above Mod	Total
1649	1649	2886	2845	9028

RHNA

Very Low	Low	Mod	Above Mod	Total
2,446	1,408	1,416	3,664	8,934

Likely Sites
Pipeline Sites
Opportunity Sites

Affirmatively Furthering Fair Housing
Racial Diversity
Concentration of Poverty
Environmental Equity
Community Benefits

Ensure affordable housing is distributed and balanced in "high opportunity" neighborhoods.

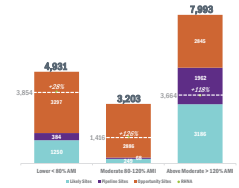
Opportunity Sites: HCD Affordability Methodology

Density Assumption: Average density achieved for 116 recently approved, under construction, or completed mixed-use and residential projects per zoning district.

	< 80% AMI Lower Income	80 – 120% AMI Moderate Income	> 120% AMI Above Moderate Income
Size of Site	Between 0.35 to 10 acres	Between 0.1 and 0.35 acres	
Density Assumption	At least 30 du/ac*		Less than 30 du/ac
Site Capacity	At least 50 units	Between 30 to 50 units	Less than 30 units

*30 du/ac is the "default density" - considered suitable to encourage and facilitate the development of affordable housing [GOV 65583.2]

Meeting the RHNA



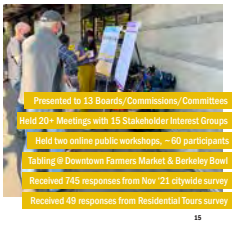
NOT ACTUAL DEVELOPMENT PROPOSALS

- City is not required to build or finance the housing
- Does not automatically authorize the construction of housing units
- No obligation by property owner to take action
- Reliant on the development industry (market rate/affordable) to construct

PRELIMINARY GOALS, POLICIES, AND PROGRAMS

1. Outreach & Engagement
2. Goals & Policies
3. Housing Programs Highlights

Outreach & Engagement



- Presented to 13 Boards/Commissions/Committees
- Held 20+ Meetings with 15 Stakeholder Interest Groups
- Held two online public workshops, ~60 participants
- Tabling @ Downtown Farmers Market & Berkeley Bowl
- Received 745 responses from Nov '21 citywide survey
- Received 49 responses from Residential Tours survey

Housing Goals

A Housing Affordability
Residents should have access to quality housing at a range of housing options and prices.

B Housing Preservation
Existing housing should be maintained and improved for resiliency:
-Energy, Water, Seismic
-Reduce GHG emissions

C Housing Production
Provide adequate housing capacity to meet current and future housing needs.

D Special Needs Housing & Homelessness Prevention
Expand supply of housing to special needs groups, including extremely low incomes.

E Affirmatively Furthering Fair Housing
The City should continue to take meaningful actions to affirmatively further fair housing choices in Berkeley.

F Governmental Constraints
Identify and mitigate barriers to construction and improvement of housing.

16

Draft Housing Policies

A	B	C	D	E	F
Housing Affordability	Housing Preservation	Housing Production	Special Needs & Homelessness Prevention	Affirmatively Furthering Fair Housing	Governmental Constraints
H-1 ELI, VLI, Low and Mod Housing	H-8 Maintain Housing	H-14 Publicly-Owned Sites	H-22 Homelessness & Crisis Prevention	H-28 Fair Housing	H-31 Reduce Gov't Constraints
H-2 Funding Sources	H-9 Rental Housing Conservation	H-15 Medium-High Density Zoning	H-23 Homeless Housing	H-29 Accessible Housing	H-32 Streamline Review Process
H-3 Permanent Affordability	H-10 Code Requirements	H-16 Transit-Oriented Housing	H-24 Family Housing	H-30 Affordable Accessible Housing	H-33 Incentivize Affordable Housing
H-4 Economic Diversity	H-11 Prevent Deferred Maintenance	H-17 Accessory Dwelling Units	H-25 Senior Housing		
H-5 Rent Stabilization	H-12 Seismic Reinforcement	H-18 Regional Housing Needs	H-26 People w/ Disabilities		
H-6 Low-Income Homebuyers	H-13 Resource Efficiency & Climate Resiliency	H-19 Monitoring Housing Element Progress	H-27 Emergency, Transitional, Supportive Housing		
H-7 Berkeley Housing Authority		H-20 University of California			
		H-21 Inter-Jurisdictional & Reg'l Coordination			

Agencies/Departments/Divisions
- Health, Housing, and Community Services (HHCS)
- Rent Stabilization Board (RSB)
- Berkeley Housing Authority (BHA)
- City Manager's Office Neighborhood Service Code Enforcement (NSCE) Unit
- Planning & Development: Building & Safety, Office of Energy & Sustainability, Land Use Planning

17

Preliminary Housing Programs

HP-1 Affordable Housing Berkeley	HP-9 Lead-Poisoning Prevention	HP-17 Building Emissions Saving Ordinance (BESO)	HP-25 Shelter Plus Care	HP-33 Streamlined Permit Processes & Timelines
HP-2 Housing Choice Vouchers	HP-10 Housing Quality Standards	HP-18 BayREN Residential Energy Incentive Programs	HP-26 Community Agency Contracting	HP-34 By-Right Approval on Reused Sites for Affordable Housing
HP-3 Citywide Affordable Housing Requirements	HP-11 Home Modification for Accessibility & Safety	HP-19 Priority Development Areas (PDAs)	HP-27 Housing for Homeless Persons w/ Disabilities	HP-35 Zoning Code Amendments: Special Needs Housing
HP-4 Affordable Housing Overlay	HP-12 Accessible Housing	HP-20 BART Station Area Planning	HP-28 Fair Housing Outreach & Enforcement	HP-36: Zoning Code Amendments to Facilitate Housing Development
HP-5 Preservation of At-Risk Housing	HP-13 Senior & Disabled Home Improvement Loans	HP-21 Middle Housing	HP-29 Rent Stabilization & Tenant Protections	HP-37: Permit Processing Procedures
HP-6 Replacement Housing, Demolition Ordinance	HP-14 Seismic Safety & Preparedness Programs	HP-22 Accessory Dwelling Units	HP-30 Tenant Survey	
HP-7 Rental Housing Code Compliance	HP-15 Pilot Climate Equity Fund	HP-23 Monitoring RHNA Sites	HP-31 Housing Preference Policies	
HP-8 Housing Code	HP-16 Existing Buildings Electrification (BEBE) Strategy	HP-24 1000 Person Plan to End Homelessness	HP-32 Tenant Opportunity to Purchase Act (TOPA)	

19

Preliminary Housing Programs

WORK-IN-PROGRESS

HCD requires Programs to be:
- Specific and Implementable (fundable)
- Contain concrete actions
- Have clear timelines
- Contain metrics to evaluate success

HP-1 Affordable Housing Berkeley	HP-9 Lead-Poisoning Prevention	HP-17 Building Emissions Saving Ordinance (BESO)	HP-25 Shelter Plus Care	HP-33 Streamlined Permit Processes & Timelines
HP-2 Housing Choice Vouchers				HP-34 By-Right Approval on Reused Sites for Affordable Housing
HP-3 Citywide Affordable Housing Requirements	HP-11 Home Modification for Accessibility & Safety	HP-19 Priority Development Areas (PDAs)	HP-27 Housing for Homeless Persons w/ Disabilities	HP-35 Zoning Code Amendments: Special Needs Housing
HP-4 Affordable Housing Overlay				HP-36: Zoning Code Amendments to Facilitate Housing Development
HP-5 Preservation of At-Risk Housing				HP-37: Permit Processing Procedures
HP-6 Replacement Housing, Demolition Ordinance				
HP-7 Rental Housing Code Compliance				
HP-8 Housing Code	HP-16 Existing Buildings Electrification (BEBE) Strategy	HP-24 1000 Person Plan to End Homelessness	HP-32 Tenant Opportunity to Purchase Act (TOPA)	

18

HP-3 Citywide Affordable Housing Requirements

Specific Actions & Timeline	In 2022, amend Berkeley Municipal Code (BMC) Chapter 23.328, updating the citywide Affordable Housing Requirements (AHR) in the Zoning Ordinance. In 2022, adopt a Resolution addressing regulations for a voucher program and establishing an in-lieu fee pursuant to BMC Section 23.328.020(A)(2).
Lead Department(s) / Agency	Planning/HHCS
Funding Source(s)	General Fund; SB 2 Grant Funding; Enterprise Fund – Community Planning Fee
AFFH	Anti-Displacement and Tenant Protection New Opportunities in High Resource Areas Disproportionate Needs
Policies Implemented	H-2, H-3, H-4, H-6, H-18, H-31, H-33

Housing Trust Fund

Specific Actions & Timeline	Fund a minimum of 500 units of nonprofit affordable housing Fund a minimum of 35% affordable housing at Ashby & North Berkeley BART
Lead Department(s) / Agency	HHCS
Funding Source(s)	Measure O, AHMF, Condo Conversion Mitigation Fee, Commercial Linkage Fee, HOME
AFFH	Anti-Displacement and Tenant Protection New Opportunities in High Resource Areas Disproportionate Needs
Policies Implemented	H-2, H-3, H-4, H-6, H-18, H-31, H-33

HP-13 Senior & Disabled Home Improvement Loans

Specific Actions & Timeline	Provide two interest-free loans up to $100,000 annually for a total of 16 loans over eight years.
Lead Department(s) / Agency	HHCS
Funding Source(s)	CalHome Reuse Account (program income) and CDBG
AFFH	Housing Mobility
Policies Implemented	H-25, H-26, H-28, H-29

HP-31 Housing Preference Policies

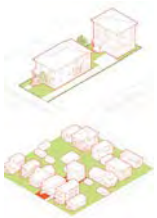
Specific Actions & Timeline	By 2023, the City will adopt a housing preference policy. The City plans to conduct outreach on an ongoing basis, coordinate preferences with the Alameda County Housing Portal for applications, and collect data and monitor annually to asses impact.
Lead Department(s) / Agency	HHCS
Funding Source(s)	General Fund
AFFH	Anti-Displacement and Tenant Protection
Policies Implemented	H-1, H-7, H-28

HP-19 Priority Development Areas

Priority Development Areas (PDAs)
San Pablo, Southside

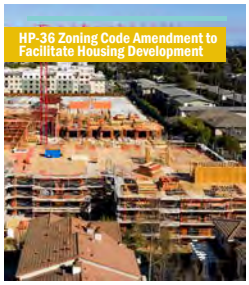
Specific Actions & Timeline	During 2022-2024, develop San Pablo PDA Specific Plan. Conduct analysis, public and stakeholder engagement, and policy options, including zoning and General Plan amendments, with the goal of adopting Specific Plan summer 2025. By June 2023, complete Telegraph PDA/Southside Plan Area zoning map amendments and up-zoning.
Lead Department(s) / Agency	Planning
Funding Source(s)	General Fund, ABAG/MTC PDA Planning Grant
AFFH	New Opportunities in High Resource Areas
Policies Implemented	H-15, H-16, H-18, H-20, H-21, H-31, H-33

HP-21 Middle Housing



Specific Actions & Timeline	By Summer 2022, amend Affordable Housing Fee schedule. By Summer 2023, amend Zoning code to allow two- to four-unit development on one lot.
Lead Department(s) / Agency	Planning
Funding Source(s)	General Fund
AFFH	New Opportunities in High Resource Areas Anti-Displacement and Tenant Protection Targeted outreach in lower density Residential districts: R-1, R-1A, R-2, R-2A, and MU-R
Policies Implemented	H-2, H-3, H-4, H-18, H-24, H-31, H-32, H-33

HP-36 Zoning Code Amendment to Facilitate Housing Development



Specific Actions & Timeline	By January 2024, as part of the Multi-Unit Residential Objective Standards project, minimum densities will be applied to all residential and mixed-use developments with five or more units. By 2026, develop Objective Design Standards for residential and mixed use developments.
Lead Department(s) / Agency	Planning
Funding Source(s)	General Fund
AFFH	Place-Based Strategy for Neighborhood Improvements New Opportunities in High Resource Areas
Policies Implemented	H-18, H-31, H-32

UPCOMING EVENTS

SAVE THE DATE!
Wednesday, June 29, 6pm
Public Workshop #3

Saturday, May 14, 2-5pm –
Roses in Bloom event at the Berkeley Rose Garden (1200 Euclid Ave.)

Thursday, May 19, 5-8pm –
Poppin' Thursday All Ages Skate Party at Grove Park (1730 Oregon St.)

CONTACT US
HousingElement@cityofberkeley.info

FOR MORE INFORMATION / SUBSCRIBE TO THE EMAIL LIST
https://berkeleyca.gov/construction-development/land-use-development/general-plan-and-area-plans/housing-element-update

By Sunday, May 8th - Renter Survey (4 minutes, $10 Berkeley Bowl gift card to first 100 respondents!)

27

Discussion

1. Are there gaps in the preliminary sites inventory?
2. Are there gaps in the proposed housing programs? If so, what are specific implementation steps, metrics, and timelines that can be identified for them?
3. What are specific neighborhoods and actions where certain Housing Programs can focus on?
   With the requirements for Affirmatively Furthering Fair Housing (AFFH), the City must identify neighborhoods that the City will direct additional efforts and resources to address disparities in the availability of affordable housing, housing conditions, and neighborhood conditions.

28

F4 BOARDS & COMMISSION MEETINGS

Throughout the Fall and Winter of 2021, staff met with the following Boards & Commissions to introduce the Housing Element Update, seek input on key stakeholder for outreach, and identify a liaison to participate in ongoing Housing Element outreach efforts.

Figure F-17 Boards & Commission Meetings

Boards & Commissions *(excluding the Planning Commission)*	**Meeting Dates**
Homeless Services Panel of Experts	September 1, 2021
Commission on Disability	September 1, 2021
Landmarks Preservation Committee	September 2, 2021
Zoning Adjustments Board	September 9, 2021
Commission on Aging	September 15, 2021
Energy Commission	September 22, 2021
Children, Youth, and Recreation Commission	September 27, 2021
Housing Advisory Commission	September 30, 2021
Rent Stabilization Board	November 18, 2021
Civic Arts Commission	January 19, 2022
City/UC/Student Relations Committee	January 28, 2022

Each of these boards and comissions received the same memo and presentation as the one presented to at the Planning Commission Meeting #1, shown on pages 83-87.

F5 SURVEYS

Three surveys were shared with the public between October 2021 and May 2022. In October 2021, a city-wide survey asked for thoughts and ideas on housing needs and strengths. The second survey served as a method to obtain feedback from two self-guided walking tours that took residents around Downtown Berkeley and West Berkeley, and asked participants to assess different types of housing (ADU, 2-4 unit, 5+ unit, etc.) and provide feedback on objective standards, features that contribute to or detract from the surrounding neighborhoods, and share more general thoughts about housing in Berkeley. The third survey specifically asked renters for feedback on tenant-focused housing programs and policies in Berkeley.

This section includes an overview of all three surveys, summaries of the responses, and demographics of the respondents. All surveys were available on the Housing Element webpage and in print at the Permit Service Center.

F5.1 CITY-WIDE SURVEY - OCTOBER-NOVEMBER 2021

OVERVIEW

As part of the City of Berkeley's Housing Element Update engagement effort, the public was invited to share thoughts and ideas on housing needs and strengths in Berkeley. The survey was open from October 28th through November 14th, 2021. A total of 747 individuals submitted survey responses.The survey consisted of three housing questions and eight demographic questions. This report summarizes the responses. Responses are used to inform the Housing Element's assessment of needs and constraints as well as the identification of new housing locations.

SUMMARY OF INPUT

What is working well with housing?

Respondents were asked to respond to the following prompt:

"Which of the following does Berkeley do well (select up to 3)? If other(s), please specify."

Results are tabulated in the chart below. The top two choices were "sufficient tenant protections" and "building new accessory dwelling units (ADUs)," and more than a quarter of respondents also selected "building new multi-unit housing" and "incentives for energy efficiency and climate adaptation."

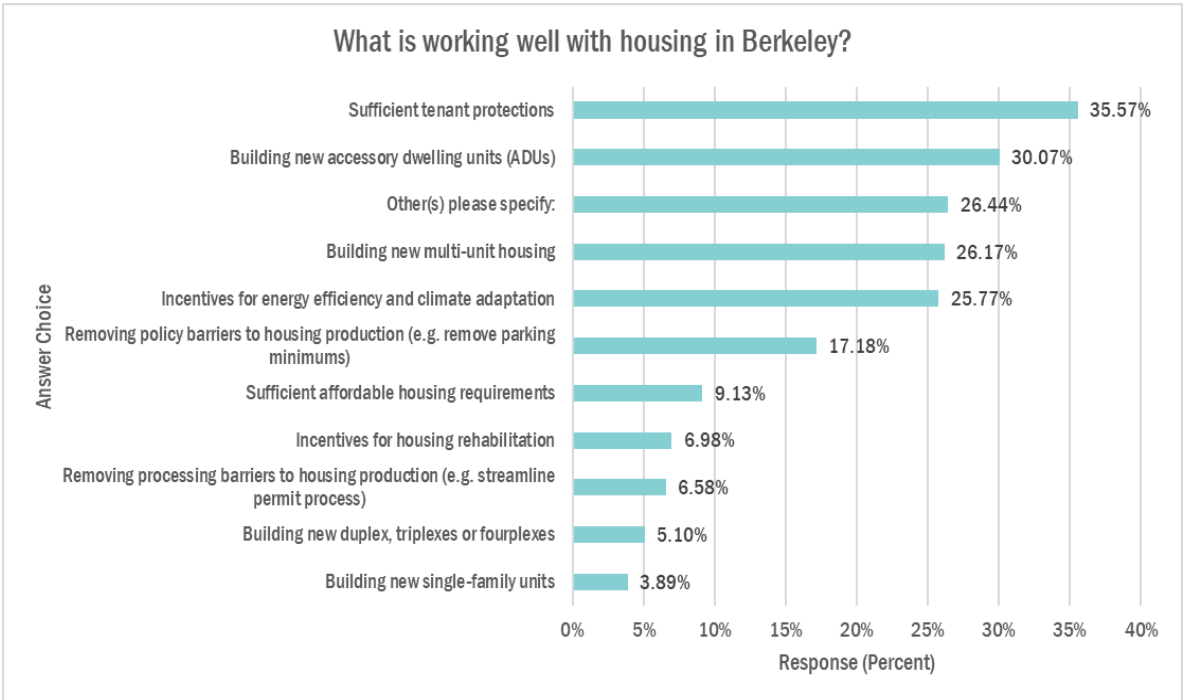
Write-In Responses

"Other" was also a top choice (26.4%) and the write-in comments are summarized below. Some responses to "Other" reiterated one or more of the multiple-choice options. To avoid double-counting, those responses were not added to the multiple-choice tabulation. Additionally, many of the write-in responses focused on Berkeley's housing challenges; those responses are included in the summary of Berkeley's Housing Issues below.

Historic Preservation

- Maintaining the existing character of neighborhoods and older buildings through landmark and structure-of-merit designations

Figure F-18 City-wide Survey Response to "What is working well with housing in Berkeley?"



Financial Incentives for Retrofits

- Providing incentives for housing rehabilitation, including seismic retrofitting, energy efficiency, and climate adaptation

Tenant Support and Services

- Maintaining affordable housing prices with rent control
- Providing helpful services to tenants through the Rent Board

Housing Production

- Building new multi-dwelling housing (affordable and market-rate) in appropriate locations along major corridors such as Shattuck Ave, University Ave., and San Pablo Ave
- Building new multi-unit rental and affordable housing
- Building new market-rate and luxury housing stock

Transportation

- Developing new alternatives to automobile transportation to reduce the need for off-street parking associated with housing projects

Policymakers

- Electing policymakers who are increasingly committed to affordable housing production, preservation, and protections

Fiscal Policy

- Offering property tax refunds to very low-income homeowners
- Generating revenue for affordable housing

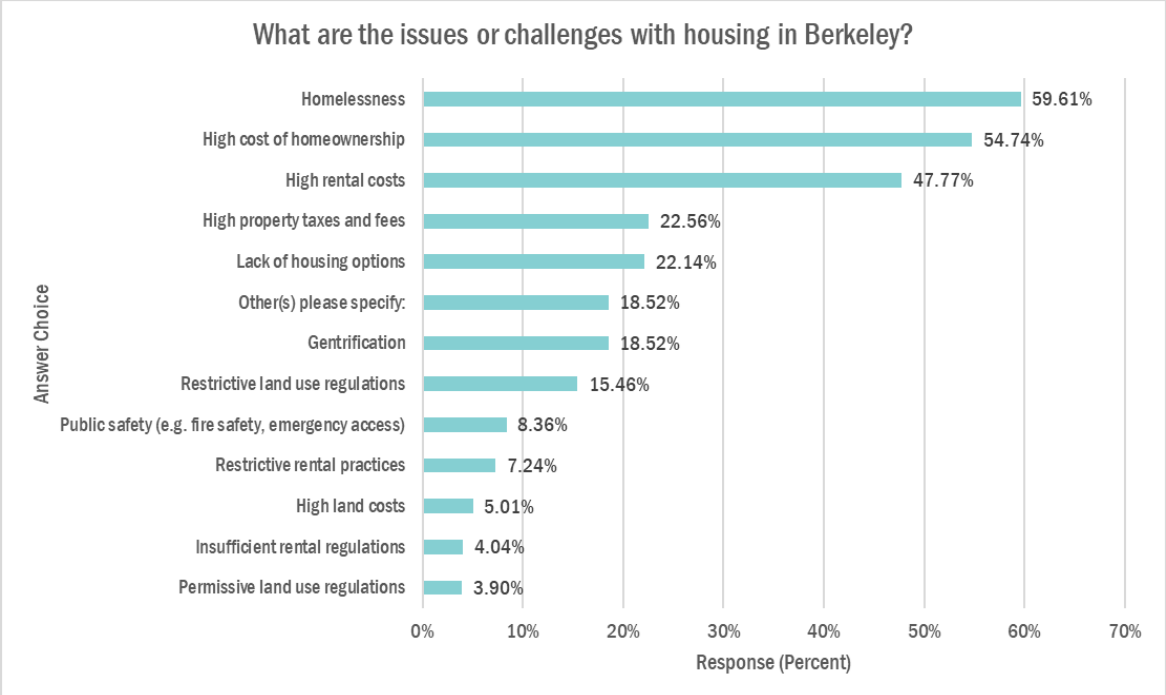
Housing Challenges

Respondents were asked to respond to the following prompt:

"What are the three most critical housing issues or challenges Berkeley faces? If other(s), please specify."

Results are tabulated in the chart to the right. The top three choices were "homelessness," "high cost of homeownership," and "high rental costs."

Figure F-19 City-wide Survey Response to "What are the issues or challenges with housing in Berkeley?"



Write-In Responses

The "Other" write-in comments are summarized below. Some responses to "Other" reiterated one or more of the multiple-choice options, but to avoid double-counting, those responses were not added to the multiple-choice tabulation.

Exclusionary Neighborhoods

Exclusionary Neighborhoods

- Exclusive neighborhoods that lack housing options for low-income families and continue to perpetuate economic segregation
- Affordable housing requirements that fail to address exclusionary neighborhoods that currently serve wealthy single-family homeowners
- Persistent failure to diversify the housing options in many neighborhoods holds Berkeley back

Opposition to new housing

- Organized opposition to new housing developments of nearly any size and location
- Many NIMBY, anti-development members of the community who obstruct the creation of new housing

Government and Regulations

Arduous Permitting Process

- Lengthy, complicated, unpredictable, non-streamlined, and costly process for approving new housing
- Slow process that leads to higher costs and increased overreach from opponents
- Resultant disincentives for maintenance, repairs, remodeling, and new construction

Lack of Historic Preservation

- Not preserving historic homes and neighborhoods
- Allowing historic homes to be demolished
- Need to renovate and add units to historic homes to preserve the character of Berkeley

Challenges to Section 8 program

- Lack of investment in the Section 8 vouchers and the long waitlist
- Barriers to access to affordable housing based on vouchers or minimum income required
- Connect Section 8 voucher-holders with the owners in need

Challenges with rent control and rent stabilization policy

- Severe policies and bureaucracy of the Rent Stabilization Board
- Restrictions on evictions that are too stringent and prevent the necessary removal of some tenants
- Rent control regulations that discourage the development of ADUs as rentals
- Loss of housing stock and disincentives to investment and development due to rent control
- Statewide legislation that gutted City rent stabilization (i.e., The Costa-Hawkins Law destroyed rental housing affordability by enforcing vacancy decontrol.)

Lack of oversight

- Lack of oversight from the City for illegal rent increases on below market-rate units
- Poor living conditions in below market-rate units

High property taxes

- High City property taxes and fees that are not reflected in the quality of current city amenities
- Property taxes that are too high for new homeowners and too low for longstanding homeowners
- Need to raise taxes on wealthy property owners and use the revenue to build housing for all levels of income with a particular focus on extremely low income or no-income individuals

Unrepresentative housing engagement

- Opposition to housing at public meetings that is not representative of community sentiment
- Lack of involvement of local neighborhoods and homeowners in decisions around proposed housing developments at BART station locations
- Lack of specific information for residents that makes it difficult to participate in the process

(e.g., how many new ADUs, how many single family-units are being built, what are affordable housing requirements, how many low-income housing units are required, etc.)

Local leadership

- Failure of City to understand core causes and solutions in considering the need for new housing
- Several City Council members who are unsupportive of new housing developments
- Overrepresentation of YIMBY's on the City Council

New Housing Development

High land cost

- High land costs that make building new housing stock challenging

Private building on public land

- Allowing for-profit housing on public land
- Public land that is used for other than public housing
- Allowing market-rate housing on public land, including the BART stations

Vacant spaces

- Vacant and underutilized retail space on the ground floor of mixed-use buildings that could be used for housing
- Current underutilization of closed schools and other vacant buildings
- Thousands of unused vacant rental units, some of which are public nuisances, should be rehabilitated and made available for tenancy

Lack of parking in new developments

- Parking requirements that are too low for the parking need
- Lack of parking requirements that makes existing residents more resistant to new housing

Housing Stock Imbalances

Limited housing stock

- Not enough housing of all types including multi-unit and single-family homes
- The scarcity of housing inventory, which leads to higher prices for land and homes
- Market-rate rental market shift from family-owned to corporate assets, creating transient renters who are either unable to save for a house because of high rent or forced to move where they can afford a house

Oversaturation of market-rate housing

- Wrong housing balance, resulting in the displacement of those who can't afford market-rate housing
- Need to limit the construction of market-rate housing, as it does not solve the housing shortages for those most needing housing

Insufficient amount of affordable and low-income housing

- Need for more affordable housing rather than primarily market-rate housing
- Lack of affordability for many of the City's residents of housing defined as "affordable"
- Lack of affordable housing explicitly for Berkeley residents or that gives priority to Berkeley families
- Lack of deeply affordable housing and those below $50K household income

High Housing Costs and Displacement

High cost of rentals

- New rental units that are not affordable to much of the community, including teachers, residents, or young people who have grown up in Berkeley
- Lack of support for the working class, those making minimum wage, and the middle class

High cost of homeownership

- The high cost of homeownership, which prevents many residents from owning a home
- Need increased resources and programs to support first-time homebuyers

Displacement

- Lack of solutions to prevent displacement due to the high cost of rentals and homeownership

Special Needs Housing

Lack of solutions for housing homeless and supportive housing

- Homeless health and safety issues as a product of housing issues
- Lack of strong overarching strategy to deal with the ongoing crisis
- Need increased resources to help those struggling with mental illness and addiction, to prevent individuals living on the street

Inadequate senior housing options

- Lack of support for seniors who still have a mortgage and need help staying in their homes
- Not enough downsizing options for seniors
- Lack of affordable senior housing
- Lack of senior housing in the hills

Lack of sufficient housing for people with disabilities

- Need to improve the availability of accessible and inclusively-designed housing
- Implement recommendations from the Commission on Disability and involve the community in engagement on this topic

Insufficient student housing and consideration for UC Berkeley students

- Impacts of increased student enrollment at UC Berkeley on available housing
- Involve students in housing discussions in Berkeley since they make up such a large portion of the residents
- Prioritize making housing more accessible and affordable for students
- Work with the co-ops to expand affordable housing options for students
- Oppose the practice of UC Berkley ground leasing new private dorms

Related Challenges

Population growth

- Unsustainable population growth
- No clear long-term limit on population

Lack of solutions to address the climate emergency

- Need to create more policies and solutions for how housing can mitigate instead of add to the climate emergency
- Plan for environmental hazards

Housing Types and Locations

The City of Berkeley must identify sites to accommodate over 9,000 new units through 2031. Survey respondents were asked to:

"Identify up to five neighborhoods where more new housing should be prioritized in that area."

Participants could select up to five neighborhoods, and for each neighborhood, they were asked to select one or more housing types that are appropriate in that area. The preferred locations by housing type are shown in the bar charts below. Additional bar charts of preferred housing types by location are included in the appendix.

Overall, respondents preferred greater density and varied housing types in all neighborhoods. Generally, respondents also indicated that:

- All neighborhoods are appropriate for condos (multi-unit owned).
- Permanent supportive housing (homeless, transitional) should be located in all neighborhoods.
- Downtown is not suitable for 2-4 unit 'plexes.
- Apartments (multi-unit rental) should be prioritized in Downtown and Southside.
- Berkeley Hills is not an appropriate location for senior housing and housing for people with disabilities.

WRITE-IN RESPONSES

Respondents were also asked to provide any other thoughts they may have about the location or type of housing in Berkeley. The main themes are summarized below. The complete list of responses is included in the Appendix.

Location-Focused Comments

All neighborhoods

- New housing should be built in all neighborhoods across Berkeley.
- All neighborhoods should have a balance of all types of housing.
- Overarching principles of equity should be used in the geographic distribution of housing.
- Senior housing, supportive housing, and housing for people with disabilities should not be segregated to particular areas but integrated and accessible across the city

Corridors

- Housing density should be concentrated along major corridors such as University Ave., San Pablo Ave., Shattuck Ave., and MLK Jr. Way.
- Housing along corridors provides needed access to transportation, businesses, and amenities.
- High-density housing should be in underutilized commercial zones where there is existing infrastructure and transportation as shown in the General Plan (Shattuck Ave., Adeline St., University Ave., San Pablo Ave.).

North Berkeley BART

- Build new housing at a scale comparable to the existing neighborhood.
- Include commercial uses such as cafes as well as residential.
- Preserve some parking spaces.
- Do not build more than six stories.
- Develop mixed-income housing.

Berkeley Marina

- Develop new housing in the Marina.

Downtown

- Build affordable senior housing, permanent supportive housing, and housing for people with disabilities to access existing resources and amenities.
- Concentrate larger apartment buildings Downtown.
- Reduce the negative impacts on existing communities by focusing new larger developments in neighborhoods designed for higher density, such as Downtown.

Berkeley Hills

- Build low-income and denser housing that has traditionally been absent from the Hills.
- Build taller structures that are designed to utilize natural terrain to protect views/yards.
- Provide new housing for students and for those who desire to bike from the Hills.
- Do not build new housing in the Hills due to lack of public transportation, narrow roads, and threats from fire.
- If ADU development is limited in the hills, then all expansion must be limited in the hills including any expansion within existing footprints
- Buy the properties in the Hills, tear them down and re-wild the entire hills region and have it become a part of Tilden Park.

West Berkeley

- Do not locate more transitional or housing for the homeless in West Berkeley, which is already overburdened with this type.
- Do not build new housing developments in West Berkeley, which already has seen sufficient new housing developments and multi-unit apartment buildings.

UC Berkeley Campus

- Build larger buildings (7 – 12+ stories) around campus.

Vacant units and land

- Build housing on existing vacant land.
- Use eminent domain to convert abandoned or underused commercial property to affordable housing.
- Develop a program to fast-track building on empty lots, such as for tiny homes, prefab housing, and storage container homes.
- Prioritize filling existing vacant units; do more to encourage people to rent out the existing empty units.
- Repurpose empty first-floor retail spaces into housing.

- Rehab vacant buildings for housing.
- Develop in place of dilapidated or abandoned buildings currently along Shattuck Ave. and University Ave.

Fire zones

- Do not encourage housing in high-risk fire zones 2 and 3.

Higher-income neighborhoods

- Lower-income housing should be built in historically economically exclusive neighborhoods.
- New housing should be concentrated in areas that have historically resisted new housing to help reduce economic and racial segregation.
- Build a mix of housing types in wealthier neighborhoods, including multi-unit condos, multi-unit apartments, and permanent supportive housing.
- Improve public transit in these areas to accommodate population growth from new housing.

Transit-oriented development

- Concentrate new multi-unit larger-scale development near public transportation including BART and bus lines.
- Sites near public transit options should be prioritized to reduce car traffic, reliance on cars and serve those without a car.
- Improve frequency and expand coverage of the public transportation network across the city, including bus routes and safe bike paths.

Regionally

- Do not encourage more housing within Berkeley but rely on other cities in the Bay with more open space.

Housing Types

Affordable housing

- Recognize housing as a human right.
- Ensure no one is priced out of living in the city.
- Build permanently deeply affordable housing through regulations such as increased inclusionary housing requirements.
- Create housing that is affordable to residents at all income levels.
- Prioritize affordable housing in areas that have been traditionally underserved and redlined.
- Distribute affordable housing evenly throughout neighborhoods.
- Prioritize affordable housing in areas that have not historically had it.
- Specifically focus on redressing inequitable decisions that have been made around housing in Berkeley in the past.

Low-income housing

- Prioritize building low-income housing.
- Increase the number of very low-income units.
- Ensure low-income housing is inclusive of families, people with disabilities, seniors, and other special needs groups.

Workforce housing

- Create workforce housing.
- Prioritize housing for City staff and teachers.

Senior housing

- Do not segregate senior housing into specific areas.
- Ensure necessary services are located near senior housing, including places to shop.
- Build senior housing in areas close to public transportation and services.

Housing for people with disabilities

- Create new housing that is accessible and inclusively designed.
- Be cognizant of all types of disabilities and how housing may need to reflect unique challenges.

Supportive and transitional housing for homeless

- Distribute supportive housing across the city; do not concentrate it in one area.
- Homeless transitional housing should be owned and operated by the City.
- Prioritize getting people off the streets and into appropriate supportive housing.

- Provide adequate social services to homeless individuals.
- Consider how to mitigate any adverse effects of supportive housing on existing neighborhoods.

UC Berkeley and student housing

- Coordinate housing needs with UC Berkeley.
- Ensure UC Berkeley builds more University-owned and managed housing to accommodate all students.
- Create housing that is accessible and affordable to UC Berkeley students, which will also benefit other neighborhoods since students will be able to live closer to campus
- Renters should be granted subsidies from UC Berkeley, since the abundance of students introduces so much competition for rental properties.

Family housing

- Ensure there is appropriate housing that fits the needs of families.
- Preserve existing family housing.
- Recognize there are sometimes difficulties with families living in housing with shared walls as children can be noisy and neighbors are often unsupportive toward families in multi-unit housing.

Single-family housing

- Do not build any new single-family.
- Recognize single-family housing is essential as both an entry-level and family-friendly housing option.
- Balance mix of single-family housing with multi-unit apartments.

2 – 4 unit 'plexes

- Build 2 – 4 unit 'plexes everywhere.
- Prioritize 2 – 4 unit 'plexes in less dense neighborhoods.

Multi-unit housing

- Build multi-unit apartments and condos throughout Berkeley but prioritize locations close to public transportation.

Accessory Dwelling Units (ADUs)

- Encourage ADUs.
- Give priority to ADUs with off-street parking.
- ADUs are well suited for existing residential neighborhoods.
- Streamline the process and reduce the cost to build multiple ADUs in single-family neighborhoods.

Market-rate housing

- The City should not support market-rate housing on public land.

Luxury housing

- Locate luxury housing by freeway onramps like developments on West University Ave.
- Do not build luxury housing on publicly owned land such as BART stations.

Cooperative housing

- Create more mixed-income cooperative housing.
- Build cooperative housing for teachers and first responders like St. Francis Sq co-op in San Francisco.

Land trusts

- Create land trusts as an alternative homeownership model.

Environment and Climate

Climate action

- New development needs to take care to protect mature trees; planting saplings does nothing to significantly help remediate climate change or establish an urban forest.
- Build new housing with strategies in mind to combat the climate emergency.
- Build new housing that is environmentally sustainable and carbon neutral.

Green space

- Design new housing that has ample green space.
- Center new housing around parks and plazas.
- Encourage and plan for new green spaces accompanying new housing for health and sustainability benefits.

- Do not build new housing in existing green or open spaces that currently serve the city.
- Recognize the importance of backyards.

Housing Design and Character

Design

- Require setbacks for both aesthetics and safety.
- Build new housing that has unique aesthetic design over generic box-like structures.
- Prioritize good design and balance it with the cost and time required to build housing.
- Ensure the design of new housing does not produce shadows that limit solar options or block light in such a way that people cannot have gardens.

Parking

- Develop new housing, especially multi-unit, with off-street parking for all residents.
- Reduce parking only in locations that are well served by transit.
- Build multi-unit apartments close to transit without parking to help meet climate goals.
- Rather than sacrifice parking spaces at BART, replace less-desirable buildings with new denser housing.

Neighborhood context

- Preserve existing neighborhoods.
- Develop new housing that complements the existing neighborhood context and culture to encourage social cohesion.
- Ensure policies are sensitive to the impact of new housing on established communities while making clear to residents of those areas what benefits new development will bring.
- Do not be afraid of changing the "feel" of a neighborhood to create enough housing.

Regulations and Planning

Housing Element and required RHNA units

- Housing Element plan must be realistic and credible; the plan must represent likely actual construction in the eight-year horizon.
- Reexamine the 9,000-unit requirement, which is too high and unrealistic.
- Include the hundreds of empty new apartments that no one either wants or cannot afford in the count.
- Dedicate all 9,000 units to low-income, homeless, seniors, and people with disabilities.
- Develop a sufficient long-term plan instead of a 9,000 unit push now which will result in high-density towers.

Zoning

- Upzone all neighborhoods to encourage new housing of all types everywhere.
- Prioritize upzoning in low-density neighborhoods such as the Hills to allow more multi-story apartments.
- Create more mixed-use zoning; separation of uses through zoning promotes higher car usage.

City Systems

Infrastructure

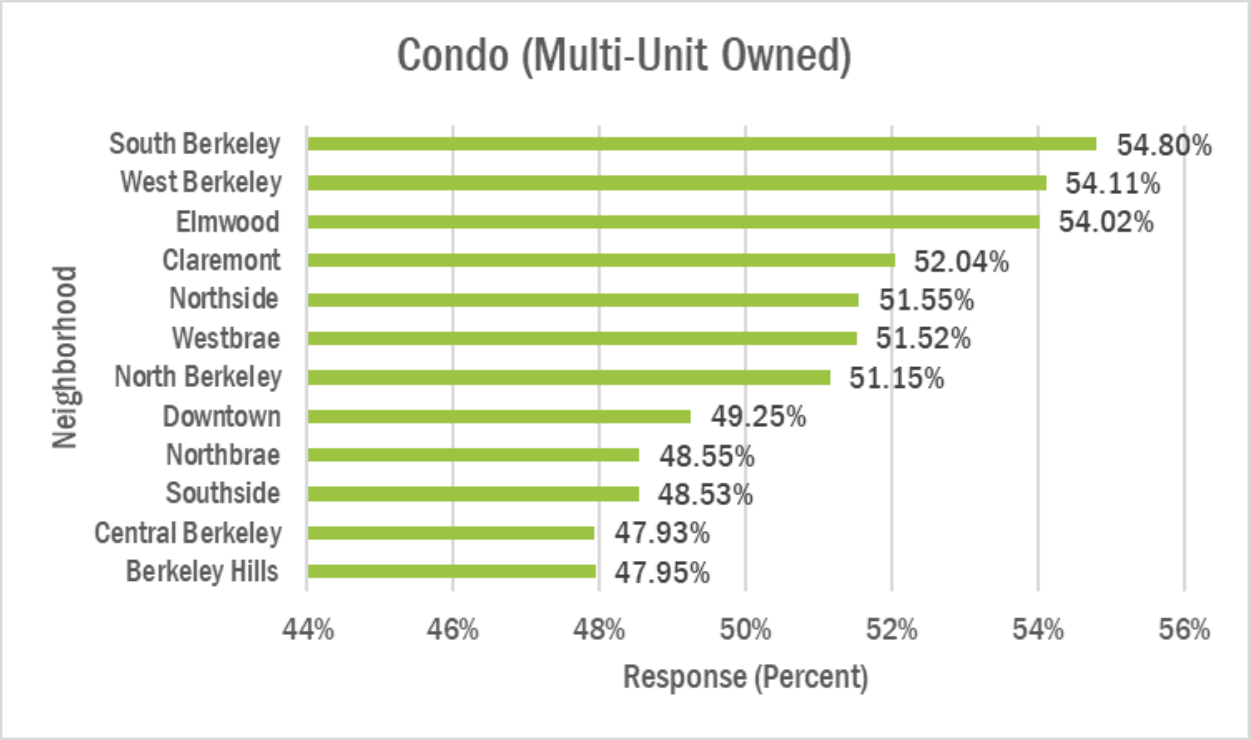
- Ensure sufficient infrastructure to accommodate all current and future residents.
- Mitigate effects of increased population on infrastructure systems including maintenance of roads, sewage system, water, gas pipes, utility lines, and off-grid power.

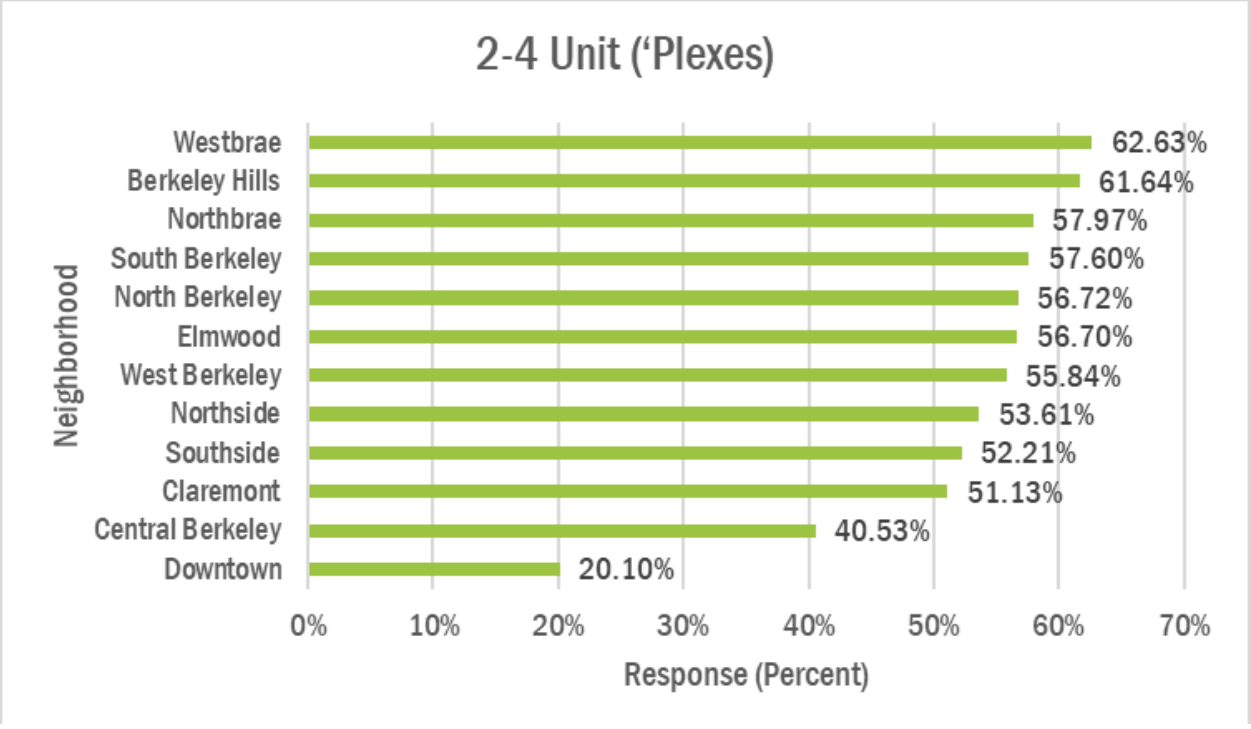
Amenities and services

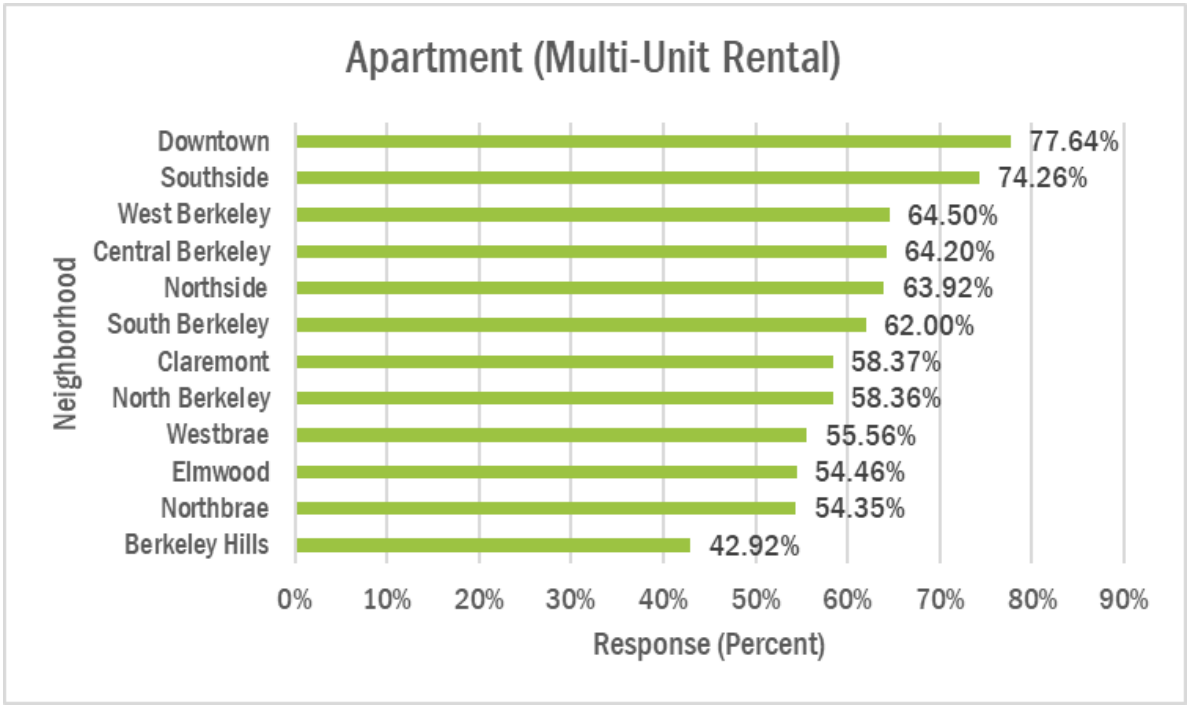
- Ensure new housing has access to amenities.
- Consider how the whole community functions and how services can be integrated.

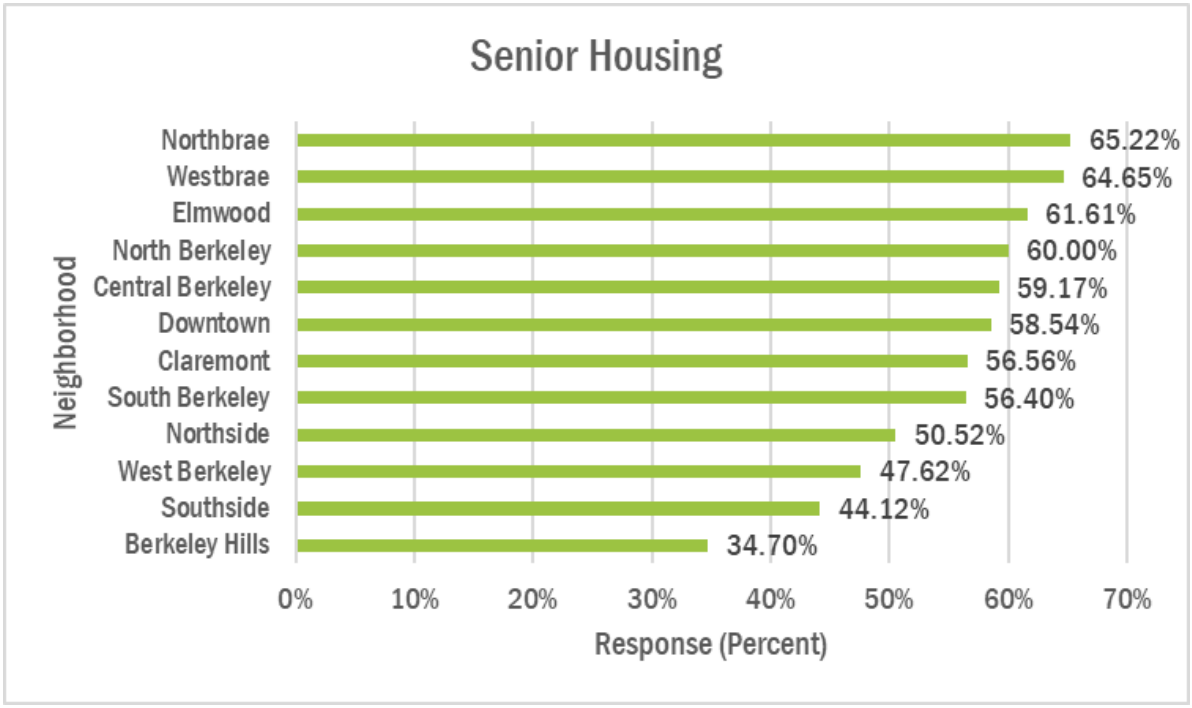
Figure F-20 City-wide Survey - Preferred Location by Housing Type

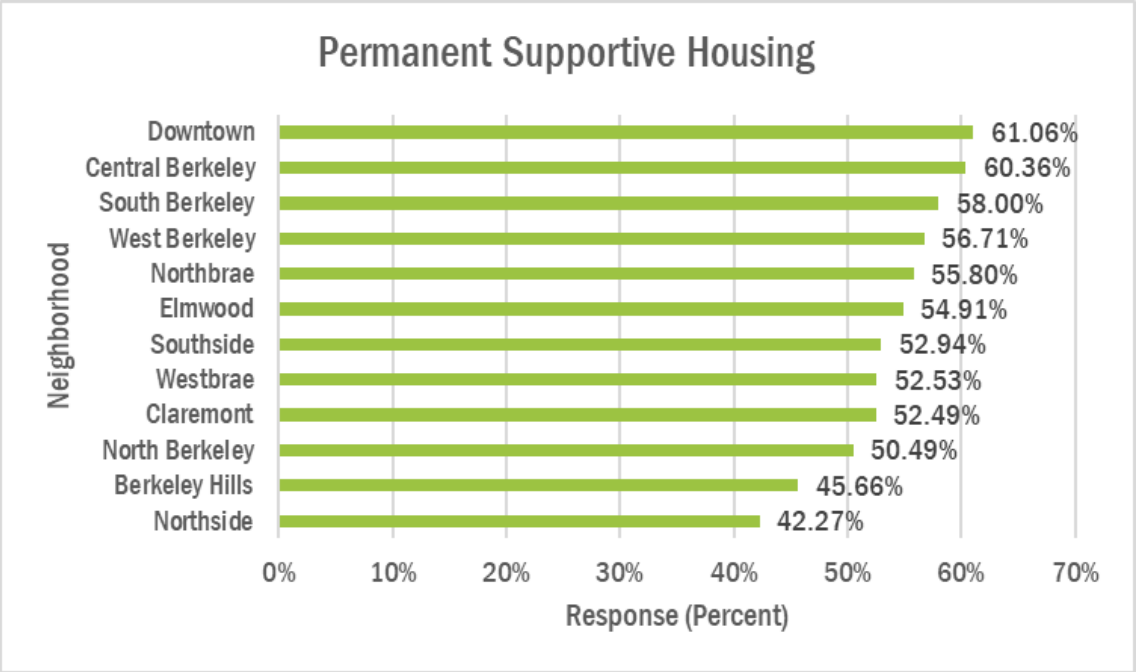
Preferred Location by Housing Type






Apartment (Multi-Unit Rental)
Neighborhood
Downtown 77.64%
Southside 74.26%
West Berkeley 64.50%
Central Berkeley 64.20%
Northside 63.92%
South Berkeley 62.00%
Claremont 58.37%
North Berkeley 58.36%
Westbrae 55.56%
Elmwood 54.46%
Northbrae 54.35%
Berkeley Hills 42.92%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90%
Response (Percent)


Senior Housing
Neighborhood
Northbrae 65.22%
Westbrae 64.65%
Elmwood 61.61%
North Berkeley 60.00%
Central Berkeley 59.17%
Downtown 58.54%
Claremont 56.56%
South Berkeley 56.40%
Northside 50.52%
West Berkeley 47.62%
Southside 44.12%
Berkeley Hills 34.70%
0% 10% 20% 30% 40% 50% 60% 70%
Response (Percent)


Permanent Supportive Housing
Neighborhood
Downtown 61.06%
Central Berkeley 60.36%
South Berkeley 58.00%
West Berkeley 56.71%
Northbrae 55.80%
Elmwood 54.91%
Southside 52.94%
Westbrae 52.53%
Claremont 52.49%
North Berkeley 50.49%
Berkeley Hills 45.66%
Northside 42.27%
0% 10% 20% 30% 40% 50% 60% 70%
Response (Percent)

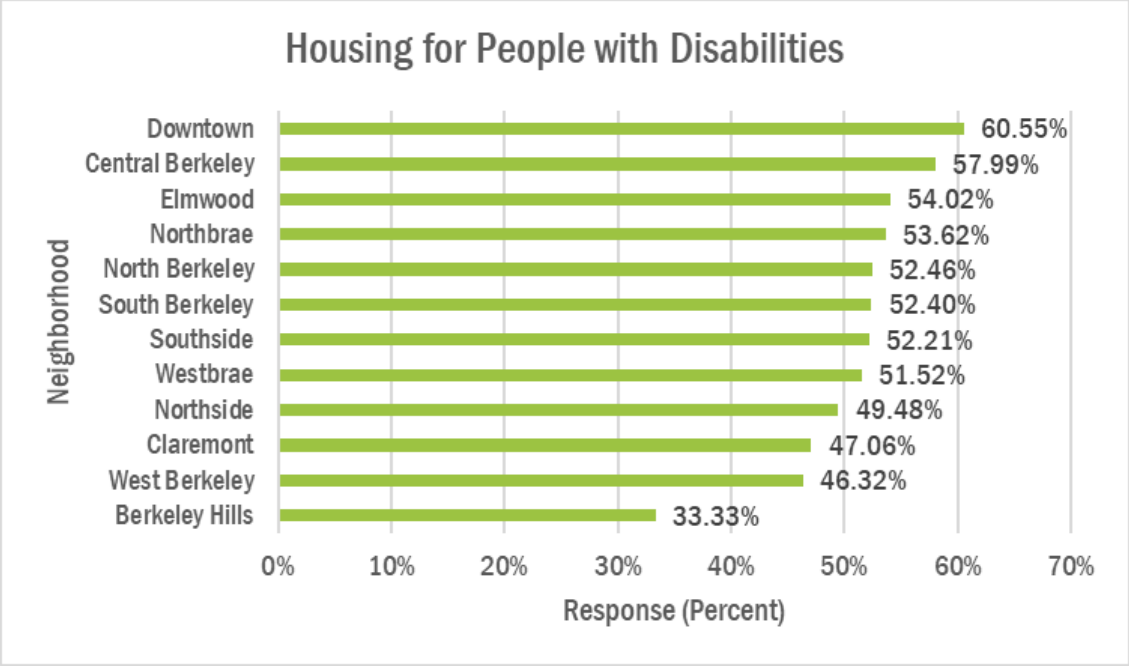
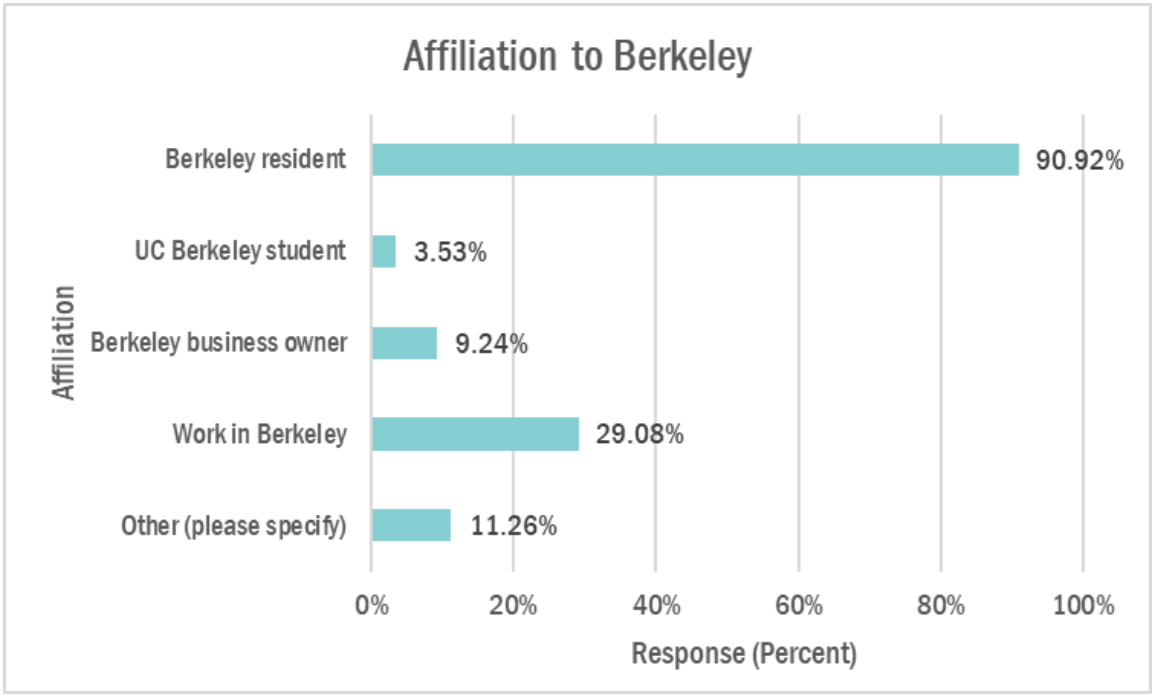
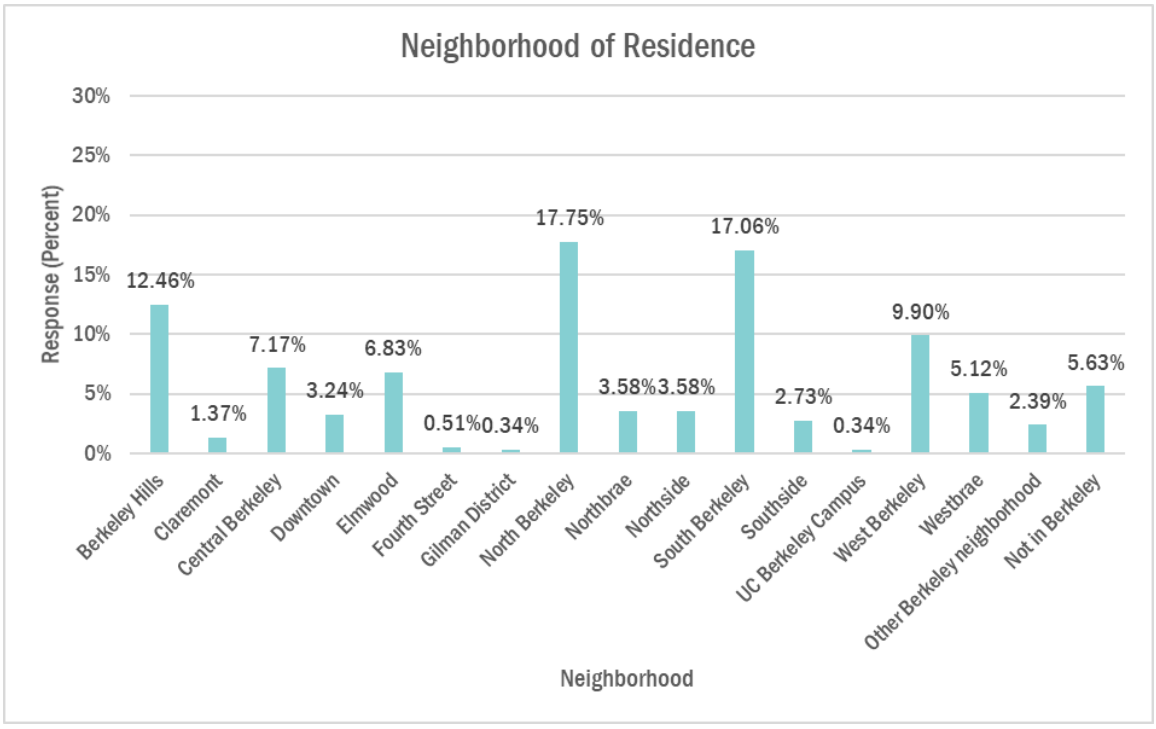
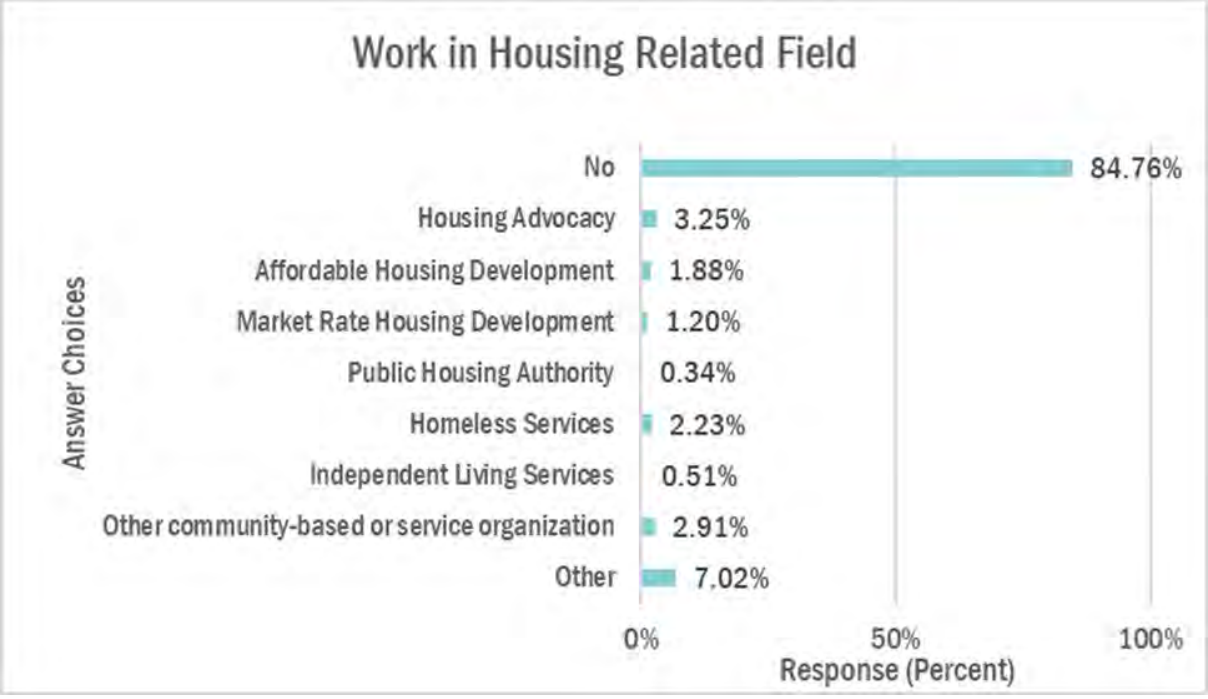
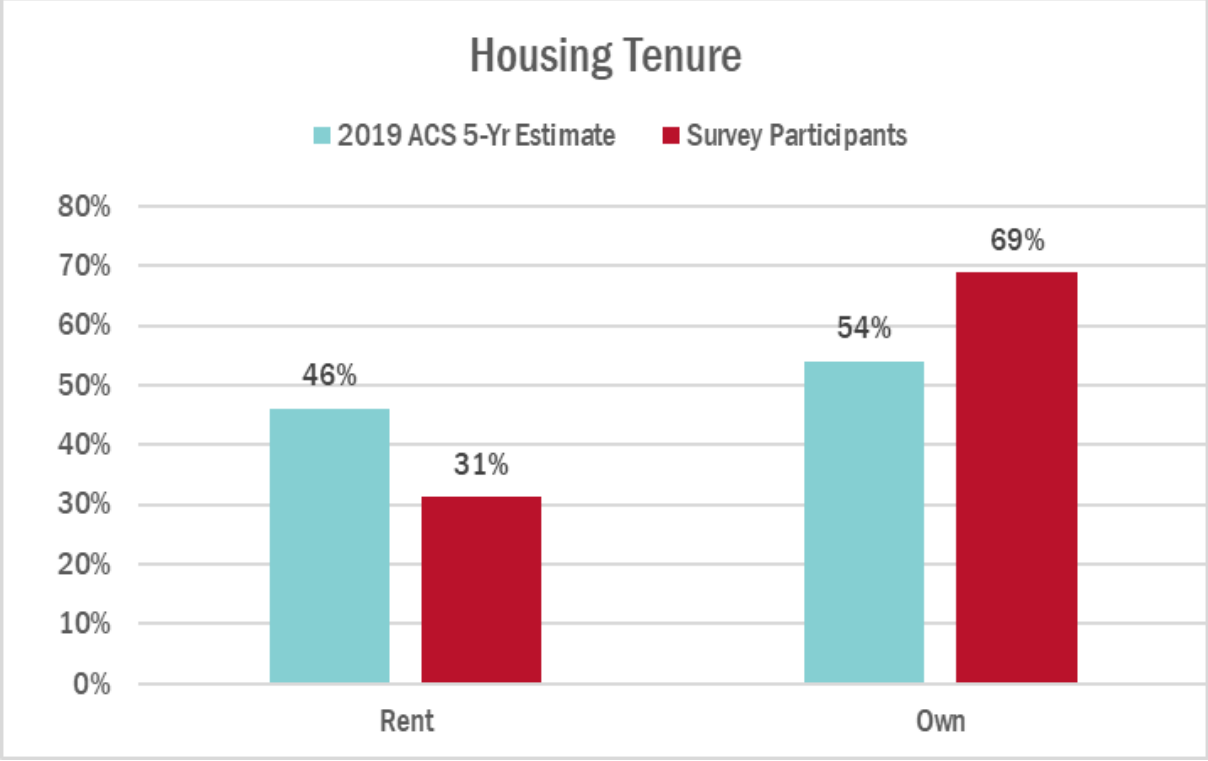

Housing for People with Disabilities
Neighborhood
Downtown 60.55%
Central Berkeley 57.99%
Elmwood 54.02%
Northbrae 53.62%
North Berkeley 52.46%
South Berkeley 52.40%
Southside 52.21%
Westbrae 51.52%
Northside 49.48%
Claremont 47.06%
West Berkeley 46.32%
Berkeley Hills 33.33%
0% 10% 20% 30% 40% 50% 60% 70%
Response (Percent)

Figure F-21 City-wide Survey Participation Demographics

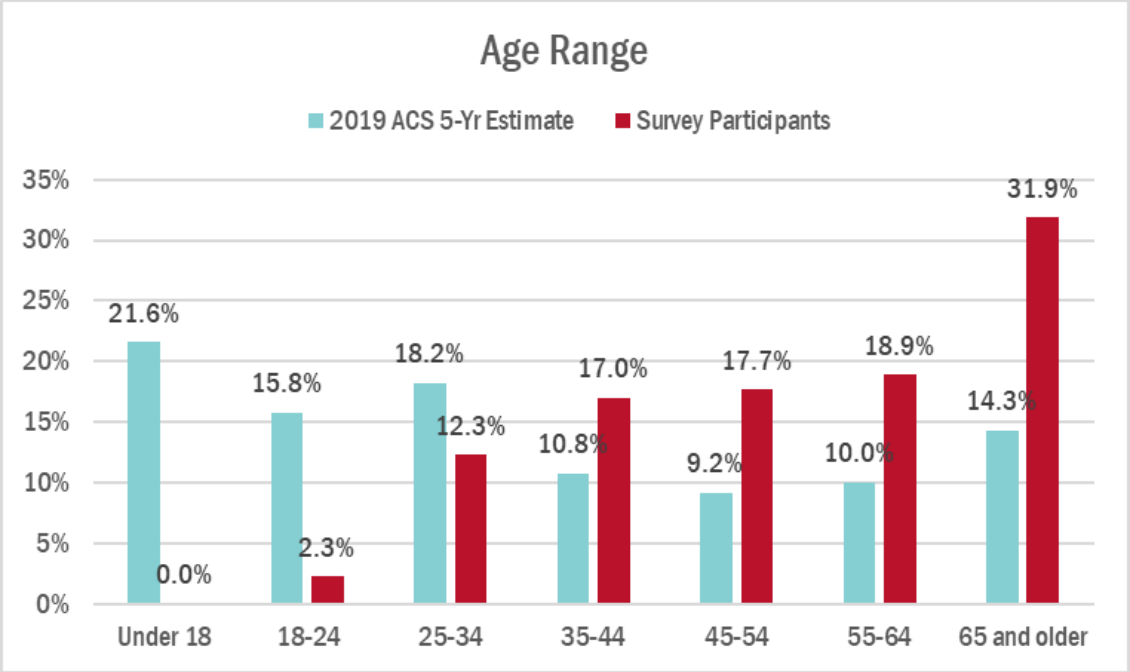




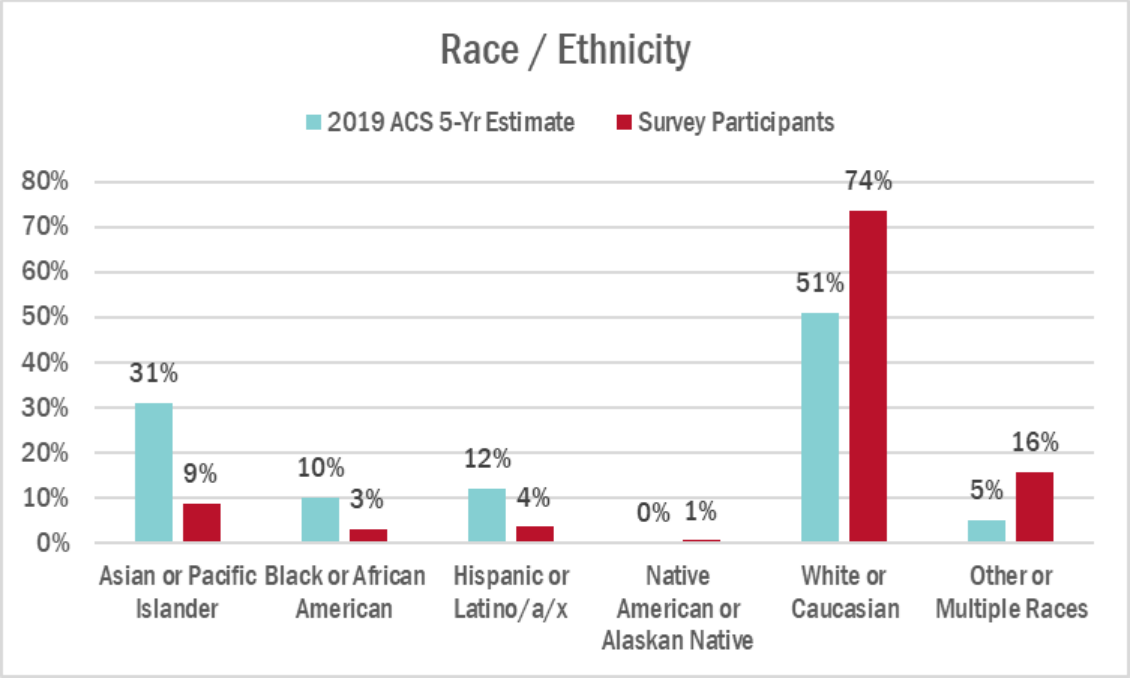




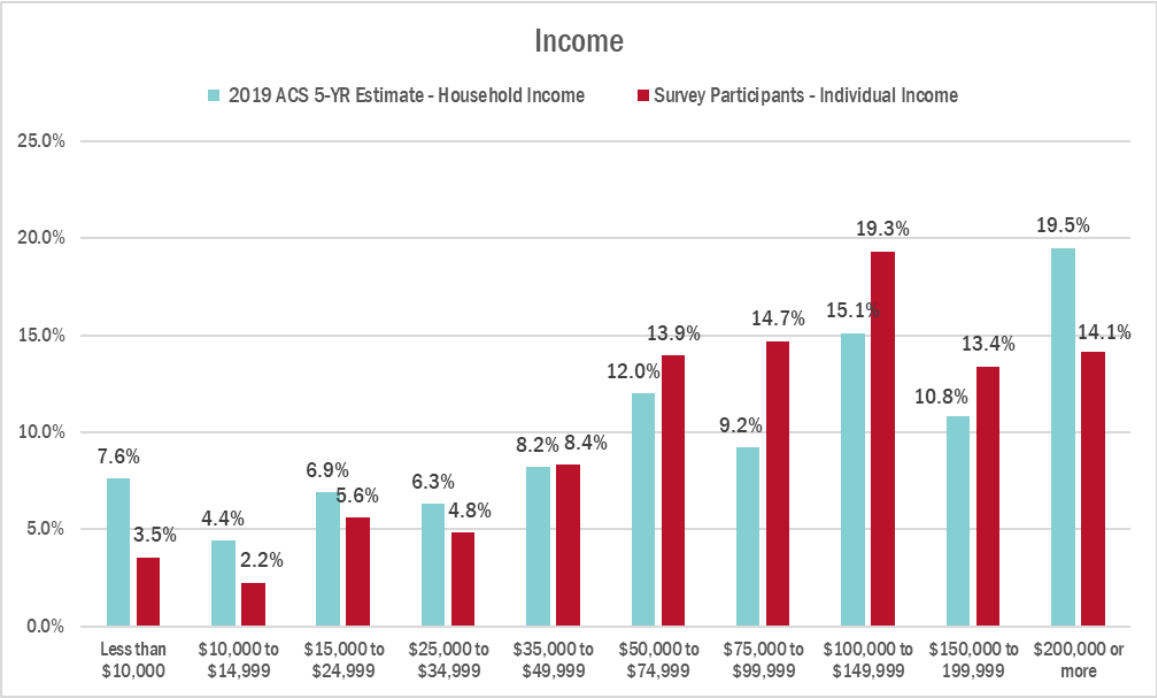
Source: Association of Bay Area Governments Housing Element Data Package. U.S Census Bureau, American Community Survey 5-Year Data (2015 -2019), Table B25003



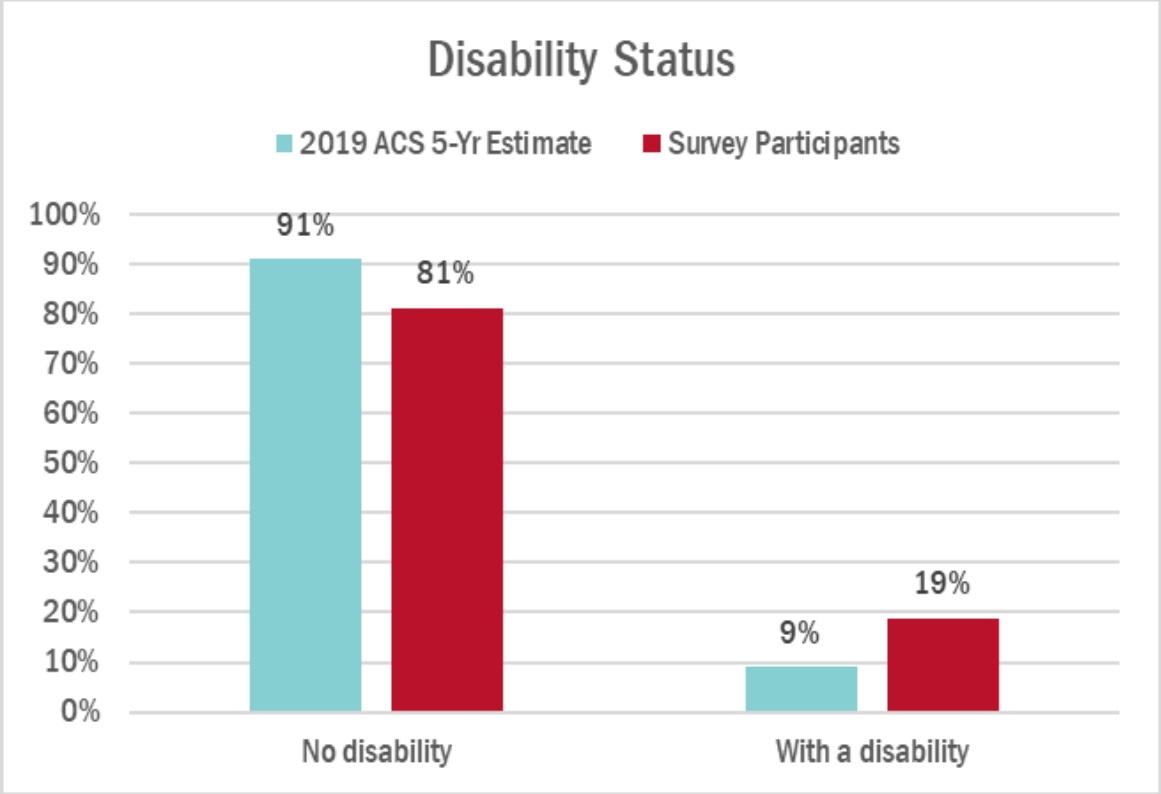
Source: American Community Survey 5-Year Data (2015 -2019), Table S0101



Source: Association of Bay Area Governments Housing Element Data Package. U.S Census Bureau, American Community Survey 5-Year Data (2015 -2019), Table B03002. The Census Bureau defines Hispanic/Latinx ethnicity separately from racial categories. For the purposes of this graph, the Hispanic or Latinx racial/ethnic group represents those who identify as having Hispanic/Latinx ethnicity and may also be members of any racial group.



Source: American Community Survey 5-Year Data (2015 -2019), Table S1901



Source: Association of Bay Area Governments Housing Element Data Package. U.S Census Bureau, American Community Survey 5-Year Data (2015 -2019), Table B18101

F5.2 RESIDENTIAL WALKING TOURS

OVERVIEW

As part of the City's Housing Element Update and Residential Objective Standards projects, two walking tours, one for Downtown Berkeley and another for West Berkeley, were created as an opportunity for residents to provide input on the development of housing options in Berkeley (see tour booklets on pages 48-61). Each tour included an associated survey that asked the following questions for each residential project highlighted on the tour:

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?;
2. What features could be different to improve compatibility?; and
3. Would you like to provide any additional explanation or feedback?

The surveys were open to the public from November 23, 2021 to January 31, 2022. This document provides summary data from the individual walking tours as well as highlights some key themes across both surveys. All open-ended responses received are included in the later portion of this document and organized by tour and stop number.

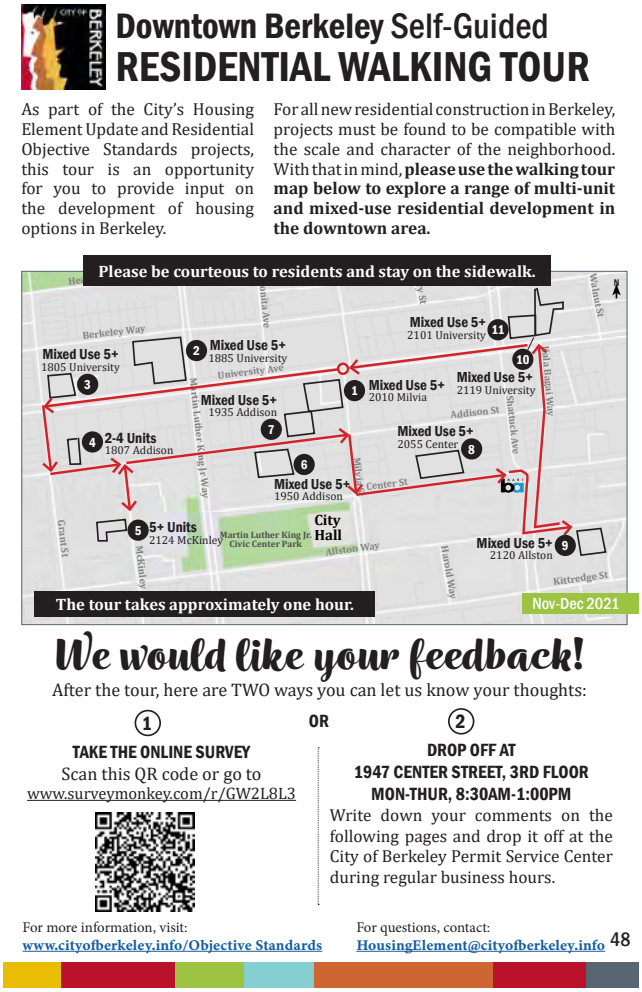
DOWNTOWN BERKELEY TOUR

The Downtown Berkeley Tour (map shown below) received a total of 23 survey responses with 74% ofrespondents completing the entire survey. The Downtowntour included 11 tour stops, primarily mixed-use residential projects with five or more units in addition to two smaller residential-only projects.

When asked what features made the project compatible with the surrounding area, the most common answers across all tour stops were:

- Building height;
- Massing;
- Placement;
- Lot coverage; and
- Other features (See Table A)

Figure F-22 Downtown Berkeley Walking Tour Pamphlet Cover & Map



Common site features mentioned in the "Other" category included:

- Building facade and articulation (bays, recesses,
- and parapets)
- Building materials and colors
- Unique architectural elements ("Berkeley" style)
- Location of parking
- Windows

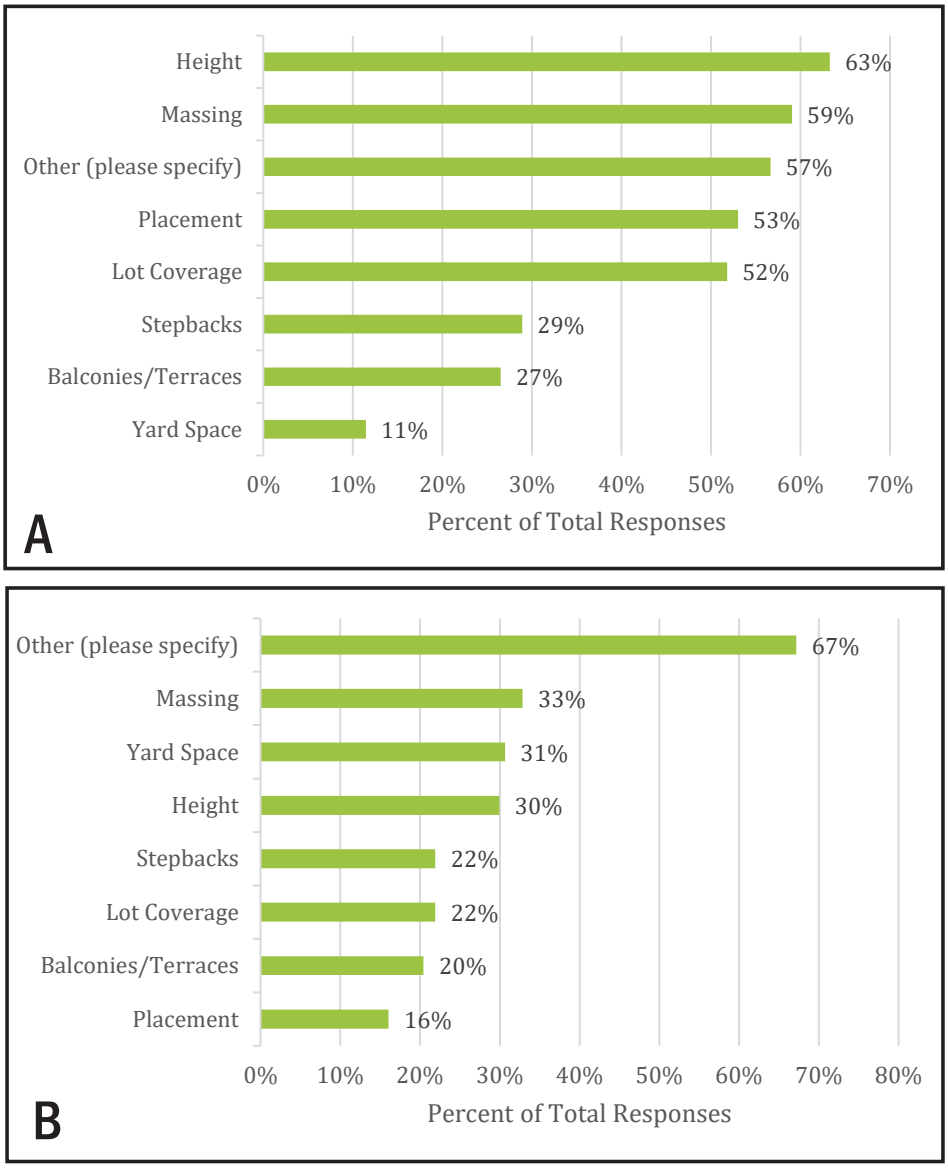
When asked what other features would create more compatability, respondents most frequently answered with:

- Other features;
- Massing; and
- Yard space (See Table B)

Common site features mentioned in the "Other" category included:

- Landscaping, greenery, and open space
- Vehicular access and loading areas
- Architectural details
- Building materials and colors
- Street trees and planters
- Parks or other public spaces
- Building orientation to the street

Figure F-23 Responses to question "What features made the project compatible with the surrounding area?" (A) and "What other features would create more compatibility?" (B).



1 2010 Milvia St. Stonefire

MIXED USE RESIDENTIAL 5+	
Zoning	C-DMU Downtown Buffer
Units	98 (8 BMR)
Year	2017
Height	8 stories, 89'6" max
FAR	6.13
Density	188 units per acre
Coverage	71%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

No natural gas serves these apartments. Learn more about all-electric at www.switchison.org.

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

OPEN-ENDED RESPONSES DOWNTOWN BERKELEY

1. 2010 MILVIA ST.

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Overall, I find this a very attractive and well designed building and appropriately sited on a major downtown intersection. The use of bricks on the ground alongside the sidewalk add definition to the building space. Exterior details and construction materials are very pleasing (and appear to be high end...thus I understand this is one of the most expensive apartments in the city.) Very large terra cotta planters along the building and sidewalk soften the landscape but are unfortunately poorly maintained. It appears that there is a large and attractive patio on the grounds mostly invisible to the public but a very nice amenity. (It would have been helpful to have been able to inspect courtyards and roof gardens, which seem to be essential amenities in such a dense neighborhood.) Of course, I would have like to see more BMR units in this building, but overall it is very successful.
- The building is really over bearing, the only thing positive about it is that is not a solid box building.
- Building is ok for downtown area. I like that it isn't one solid endless facade, like the ugly UC building across University Ave. from this.
- Steel material on the lower portions gives life to the surface, relating better to people and feeling more organic.
- The use of bays on the facades and the roof caps visible from street level relate to Berkeley historically, though I would not say that all buildings should have them. I also appreciate the balconies on the second floor, which make the building a little more social, a little less anonymous, even if no one is actually sitting there.
- The high tower on the corner is reminiscent of other Berkeley buildings
- Open decks for public
- None
- Really tall, even for downtown. -Attractive architectural style, insets and false balconies (railings only a few inches in front of windows) create faced interest, -Teeny little bit of green (planters, street trees) - could be better!
- Parking for all residents or a no-car requirement are desperately needed, as are increased parking for shoppers and movie/theatre goers and means to improve traffic conditions.
- Ground floor amenities such as retail and childcare. Lighting that illuminates the sidewalk at night. street trees.
- Nice building, diversity of textures, somewhat activated ground floor (could be better), good scale for the location.
- I am at this corner all the time.

2. *What features could be different to improve compatibility? (Other)*

- I wish all buildings would have some kind of landscaping or planters along the sidewalks but if they are not maintained they will create an eyesore.
- Two less floors would make the feel of the building pleasant and not so over bearing. We expect in the future to have many more people in Berkeley. We need to be thinking of wide sidewalks and setbacks that put open space in front between building edge and sidewalk.
- Materials: Corten steel is heavy for the character of the neighborhood and not aging well/difficult to clean grafitti
- Empty storefronts totally suck for pedestrian experience. If it is going to be a storefront mashed entirely up to the sidewalk, it shouldn't be empty for more than three or four months. This shouldn't be allowed.
- Space for commons, public gathering, greenspace. These buildings are massive and hard. Not much that lends to a sense of a human scale.
- 1. Massing is overly blocky, especially given the upper floor materials. 2. More creative ground floor retail frontage.
- While the building is better than some, it is bulky and out of scale with its neighbors.
- Make these buildings taller!!
- Grocery stores are needed in new high density housing areas. Mass transit options must be improved and costs lowered for in town use of mass transit.
- More height and more units, especially close to public transportation.

3. *Would you like to provide any additional explanation or feedback?*

- An example of a commercial/residential intersection that has no aesthetic or softening features is at Dwight Way and MLK. Each building is fully built out without only a few cracks in the sidewalk where green (weeds) grow. I hope we will not repeat that mistake!
- Rooftops covered with solar would be a common good. Everyone would be better off if rooftops were prohibited from being credited as open space and that money went to expanding and maintaining city parks instead.
- I understand the height and size for the district, but the lots next door have some of the nicest outdoor seating/garden space in most of downtown. If all of downtown gets this tall and massive, then these few outdoor patio spaces will become increasingly needed. The tall looming buildings only work because they are next to smaller low rise buildings which allow passage of light to the street. Milvia is a very tiny street for such a large building. I hope some consideration for maintaining access to open sunny spaces can be made, rather than allowing absolutely all lots to be built to this size. Publicly accessible ROOFDECKS would help: could allow for taller build up everywhere, but also allow public access to sunlight, sky, and green spaces downtown.
- Given the increase in density, it is essential that construction of hardscape also include greenspace and commons, places for people to recreate and socialize.
- The retail space should be used for an indoor community area because it's constantly empty.
- Additional height and density in the this building would better suit the area. This area already contains many high rise apartment structures, and will be best aided by the addition of new units, regardless of concerns about sight lines or massing mismatch.
- This is not compatible with the surrounding neighborhood.
- This building is better than many but overall architecturally undistinguished and out of scale
- Too high and wrong design or style.
- Just having a railing rather than real balcony seems kind of disappointing though I realize it is a safety measure the sliding door/windows
- As a 20+ year Berkeley single family home owner, I see many of these housing plans as a danger to the quality of living in the city. Homeowners need protections against neighborhood construction projects that add noise (how about limiting construction noise hours), too few parking places for new multifamily dwellings, and multistory (OVER 3 stories) for traditional

neighborhoods

2. 1885 UNIVERSITY AVENUE

2 1885 University Ave. Trader Joe's

MIXED USE RESIDENTIAL 5+	
Zoning	C-1 Gen. Commercial
Units	148 (22 BMR)
Year	2010
Height	5 stories, 54'
FAR	3.3
Density	148 units per acre
Coverage	82%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

50

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- This building incorporates many of the materials and details of older buildings in the downtown area and in
- Berkeley in general. This helps to create the impression that it is a series of buildings (because of the vertical "setbacks" along MLK and Berkeley Way. Trader Joe's and the Greek Coffee Shop make it feel well used and vibrant.
- Coming up University I could see that there is a roof terrace but I don't know if there is any landscaped ground space. Both of those features seem important in very large buildings.
- The building itself works and Trader Joes on the first floor is a welcome asset to the neighborhood not just the people in the building. TJ was a terrific part of the plan and since TJ has great staffing the TJ parking lot also works.
- Great that it has some step back on the Berkeley Way side, but I still think it looms too much over the small house on that side of the building. I think this height is better than the Stonefire on Milvia. -I like the breaking up of the mass into smaller perceived units, rather than a single mass on the whole block. Pretending to be several smaller buildings works on the space. I like the courtyard-like insets away from the street on MLK and University sides.
- Its close to public transportation, local community colleges, on top of a grocery store.
- 1. Ground floor texture is good. 2. Recesses in the massing improves proportions.
- The division of this building into distinct blocks (each 5 window bays wide on the University side) moderates the size. Funny how when this building went up, 5 stories seemed tall. Now it seems short. The ground floor is fairly open, visually, and I appreciate the generous covered retail entrance at the corner. The residential entrance is more subtle, which is appropriate.
- The architecture is comparable with the Berkeley style
- Don't create traffic and parking nightmares!
- Ground floor amenities such as retail and childcare. elimination of setbacks (i.e. building close to the sidewalk) is ideal as it makes for a better pedestrian experience and more efficient use of lot space.
- Great building. Wonderful color, amazing work with the tile and terra cotta insets. I don't generally favor overtly traditionalist styles, but this is very well executed, and I imagine many in Berkeley think it's attractive. Ground floor activation is not great, but it's wonderful having a grocery store here (which I frequent), and I understand that a grocery store does not need many entrances.

2. *What features could be different to improve compatibility? (Other)*

- Every time I go to Trader Joes I se people calling and waiting for Uber/Lyft. Part of the design for all large multiunit buildings needs to include a loading zone specifically for people pick up and drop off and deliveries.
- Architectural style too traditional for a new building
- Great that it has some step back on the Berkeley Way side, but I still think it looms too much over the small house on that side of the building. -I totally can't tell what outdoor spaces residents have, but I assume some nice roof garden/terrace something? -Driveway cut on University is a bit unfortunate, but I like that the heavily trafficked TJ's parking lot has the cul-de-sac on Berkeley Way where its ok for there to occasionally be a mess of cars because it doesn't have thru-traffic to block; it would be much worse to always plug up University Ave. w/ a line of cars trying to get into TJ's.
- More green planting.
- Grocery functions on University create a dead zone that's often too busy for pedestrians to feel safe/comfortable.
- Additional stories on the University side would increase compatibility with the future of Berkeley. Let's look ahead!
- Right style for area and community. Just too high.
- Zero green, except for street trees.
- Parking, noise and traffic must be addressed.
- More height and density, especially close to public transportation.

3. *Would you like to provide any additional explanation or feedback?*

- Same for rooftop deck as for building 1.
- Again, I think this is ok because the surrounding buildings on commercial lots are low. That maintains light down on the street. Once all buildings on all sides are built up, it will feel much darker. Its great to fit a whole grocery store with parking on the same lot as housing. I hope other lots that are largely surface parking, witheither grocery or CVS...etc. can add housing to the lot AND keep grocery/drug store w/ parking....etc. Best of both worlds.
- There needs to be an increased in the requirement of providing open space and green space when constructing for greater density.
- Happy to have a grocery store function here, despite the problems of how loading were dealt with.
- I live in the adjacent neighborhood. It's remarkable how little impact this project has had on traffic. It's really negligible.
- This is a gorgeous building and its mixed use nature fits well into the commercial space along University. The neighborhood would be better served however by greater density on the lot, particularly since this is a desired area to live in.
- Out of all newer buildings this is the best style to fit its existing community.
- Hate the mustard color (but that's a personal opinion). Over-decorated with elaborate mosaics, sculptures and roof railing. (Perhaps an attempt at styling? Looking vintage? Mostly just looks bad.)
- Setbacks on Berkeley Way side respect neighborhood. I prever the architecture on the north section (shingle style). The south section colors are jarring and the decorative elements are too repetitive and need more variety in design. Still this is a fantastic improvement over the strip mall fronted by parking lot that was there before.
- The City must show respect for longtime home owners' needs for quality of life. I don't see plans for infrastructure improvements that will support greater housing and people density. Already the city doesn't keep streets paved regularly, has inadequate parking, not enough services for seniors and the mentally ill, too many clogged traffic corridors, too many burglaries and safety risks, trash lying everywhere, filthy sidewalks in shoppi g areas, and rising noise and pollution levels. These problems need solutions and fixes BEFORE thousands of dwellings are built.
- I would love for more buildings of this scale to be constructed in my neighborhood, near Arch and Cedar.

3 1805 University Ave.

MIXED USE RESIDENTIAL 5+	
Zoning	C-1 Gen. Commercial
Units	29
Year	1998
Height	4 stories, 50'
FAR	2.16
Density	102 units per acre
Coverage	97%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

Fold on the dotted line to create a booklet

3. 1805 UNIVERSITY AVENUE

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- The building is okay it is just boring beige
- Height should be taller in this location, particularly along University. Taller building could then step back to the north abutting adjacent residential properties
- I like that the storefronts have small local businesses. -Very compatible/human scale size for neighborhood. -Great step down along Grant. -I like that driveway cut is not on the main business street
- Lot coverage is appropriate on University.
- There isn't anything about the massing or lot coverage that makes this building particularly compatible or incompatible. It's just an ugly building, but at least it's housing.
- In and out facade, ground floor stone tiles, irregular roof line, all add interest. Simple but attractive architectural style and tan color.
- Parking!
- This building is great! I don't really have a preference for the varied roof line, but I am happy to see buildings of this size and larger in berkeley.s.

2. *What features could be different to improve compatibility? (Other)*

- Overall, this is a functional building and appropriate for University Ave. I like the varying heights of the "building modules" but would have liked to see some improvement in the stepbacks.
- Give the building some design variation in color to make it more interesting. It is just bland. Variation in the color of the stucco shouldn't break the budget.
- The overhangs over the sidewalk aren't very nice to be under, but is better than the Jones building on San Pablo because it gets so much southern sunlight, and this has a much more reasonable height than Jones.
- While fine for the spot this is an ugly building.
- This building does not have any tree wells, or requirements for trees on the sidewalk.
- It would be nice for the residents facing University Ave to be able to have a balconies or terrace.
- 1. Massing on University should be taller. 2. Building seems heavy, creating shadows on the storefronts through it's inept massing.
- I don't mean to be flip, but a better architect would have helped. Street trees to hide the ugly thing?
- The architectural style is both undistinguished and incompatible
- •Zero green, not even a street tree
- Parking
- This is the worst of the lot. The massing/shapes are very blocky and obtrusive. University is a tough location. This would be better with more

color/texture on the upper floors, and better coordination between ground floor and upper floors. For the University St. location, I think even more scale might fit better, perhaps with a courtyard to break up the facade. I support scale, but I can imagine many people disliking this implementation.

3. *Would you like to provide any additional explanation or feedback?*

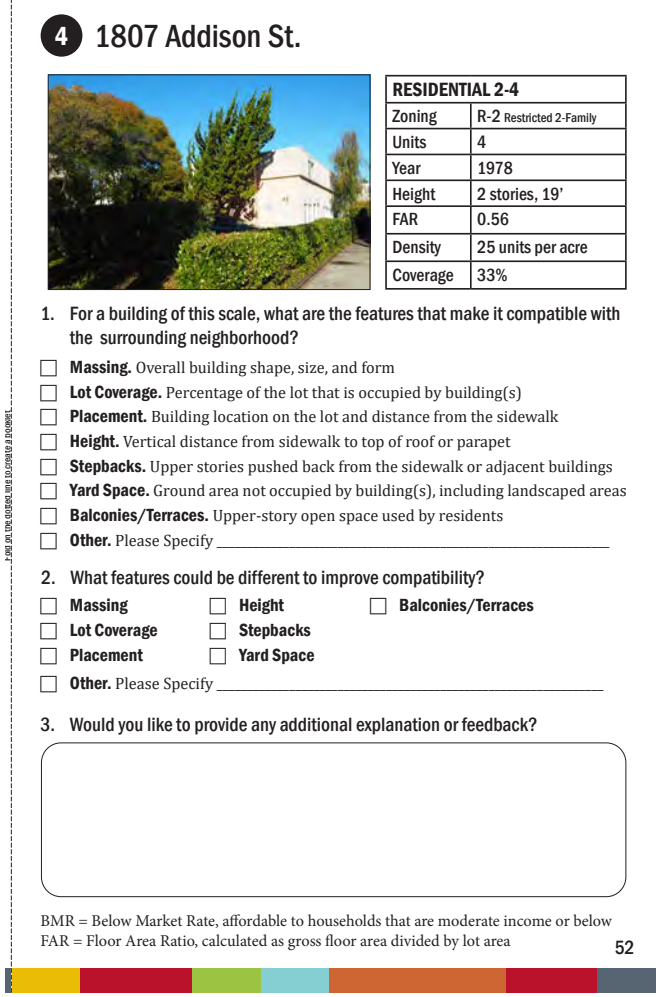
- This corner has a nice wide sidewalk and the corner Talavera shop has some semi bench like stones sticking out at an angle, sometimes used by passengers waiting for their busses at that corner. Perhaps slight tonal color differences in the verical modules would have made the building look softer and more residential.
- While fine for the spot this is an ugly building.
- Trees need to be an essential component of urban planning. They cool the city, reduce somewhat greenhouse gas accumulations, visually soften the hardscape, and provide habitat. Cities should not be ghettos for humans only and rats
- Close to local public transportation and Trader Joe's a block away.
- The building is like an initial massing sketch that got built, with no thought about materials, textures, interest, or hierarchy.
- Down town Berkeley is in desperate need of additional housing, and this stretch of University would benefit from a 5x1 rather than just this 3x1. Additionally, the City of Berkeley is not currently hurting for open retail space and this neighborhood would be bettered by converting often empty commercial space into residential units.
- Really ugly
- This building is a blight
- Just having a railing rather than real balcony seems kind of disappointing though I realize it is a safety measure the sliding door/windows
- More busses and more parking are needed.

4. 1807 ADDISON STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Even though this building is basically a box it is very pleasant and the setback from the street is exceptionally nice.
- -Very discreet from the street. It has a lot of greenery in front, so it doesn't feel as much as an apartment. -I like that it's parking is hidden behind plants, unlike the building next door -Good that it only has one small driveway cut across the sidewalk.
- The building is perfect for the neighborhood. The building is a good distance from the sidewalk leaving open space which is being used as a parking lot at this moment.
- Front yard.
- There isn't much to say about this one. It's a heavily landscaped one-story building. Does



4 1807 Addison St.

RESIDENTIAL 2-4	
Zoning	R-2 Restricted 2-Family
Units	4
Year	1978
Height	2 stories, 19'
FAR	0.56
Density	25 units per acre
Coverage	33%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

☐ **Massing.** Overall building shape, size, and form
☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
☐ **Placement.** Building location on the lot and distance from the sidewalk
☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
☐ **Balconies/Terraces.** Upper-story open space used by residents
☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
☐ **Lot Coverage** ☐ **Stepbacks**
☐ **Placement** ☐ **Yard Space**
☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

52

anyone even notice it when walking by? It is 100% benign. Is that good? More housing would be better, and 'more compatible' with the needs of Berkeley.

- -low second story increases compatibility with residential neighborhood. -set back from sidewalk to create a parking area. -small amount green detail in front of 'front' wall, and tree. Building turned sideways on lot so only see blank side wall front street (mitigated by tree and ivy). Attractive facade but not seen from street.
- Parking
- The greenery is nice

2. *What features could be different to improve compatibility? (Other)*

- There are few apartments in the complex. The entire front of the property is taken up by an awkward and unattractive parking lot. The yard space is divided so that each tenant has only a tiny outdoor space. Seems better to create a more pleasant communal sort of area. Building itself has absolutely no character. It looks like a shoebox. However, perhaps the tenants have more privacy being set back from the street.
- For buildings in the future using permeable paving in the parking lot and native plants as the greenery would would be beneficial to the environment and support local ecosystems.
- Lacks fenestration, orientation or entrances facing the public street. Setback too deep. Too many curb cuts, poor choice of drive aisle fronting the structure
- Parking in front has nice screening from the street. The building is unattractive. There are no architectural details and no yard space.
- Any attempt whatsoever to fit with the neighborhood stylistically, and not have parking exposed in front.
- It would be nice if this building said 'hello' to the sidewalk in any way.
- Window placement and over all design could be more attractive
- Side-facing facade is very close to building next door.
- Parking area a minus and should have been done differently
- Parking
- The front setback creates a lot of wasted space given that we are experiencing a housing crisis. I would love for sites like this to have less restrictive rules, so that interested developers have the opportunity to provide multiple units on one lot, and use more of the front yard space for housing (if the property owner is interested in doing so, of course!)
- This is not great. Berkeley has many of these long, motel-style apartment buildings, and they provide much needed affordable housing. They also provide density with low height (I support height, but many don't). But this implementation is bad - completely cut off from the street, no engagement with the neighborhood. The same scale buildings just down the street (1811, 1815, 1819) are all much better. None of them are exactly beautiful, but they are more visually and functionally generous to the street and to their occupants.

3. *Would you like to provide any additional explanation or feedback?*

- Having actually walked by this property, the 2 large trees on the sidewalk median are very helpful in making this property compatible and less intrusive.
- I would like to see the building possibly add one more floor to the top and use more space in front as a yard.
- Horrid - a building of this size/massing/ placement could work in a lower-density residential neighborhood if it was detailed, articulated, and designed well. This survey should address design issues, not just massing/ placement. This is an eyesore form the street and from neighboring properties, which is 80-90% of its problem.
- This close to Berkeley's urban core, such a diminutive building sticks out horribly. The neighborhood character would be improved by construction of a taller, denser structure without off street parking.
- The poor building design is compounded by the building set back behind a parking area, common in these 1960s-70s designs. Is is not at all in sympathy with the neighborhood and no windows facing the street reduce street safety.
- Argh. Where's the infrastructure to support new housing?

5. 2124 MCKINLEY AVE.

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- This older building is really quite sweet.
- It has fun architectural elements, so even though it feels pretty close to sidewalk, it is still a decent scale to walk by, and not oppressive.
- Very nice bay windows. The facade has nice features.
- I appreciate that the parkings is in the back, and that the trash/recycling cans are not stored right up front.
- Surface articulation (bays, recesses, and parapet detail) and surface interest (texture, window divisions, stucco
- bands, panels). These are what make the three tall stories more acceptable for a single family residential neighborhood.
- Bays, arches and cornice bands are classic Berkeley elements...but should you mandate them on new buildings? I do think cornice bands helped the Trader Joe's building, and yet I would not mandate them. Perhaps there could be a list of features, and the requirement could be to provide at least one element of relief to flat façades, such as bays, cornice bands, OR visible roof treatments.
- While the building crowds the neighbors it is a traditional Berkeley multi unit building that fits into the overall fabric of the City.
- Attractive, old style design (1929 building). In and out movement of facade and elaborate entry adds to interest.
- These represent a good height and look for residential neighborhoods.
- This building is great. I love that it has 18 units but has bay windows and other features that signify classic bay area housing styles.
- Great old Berkeley building. This structure would be appropriate on ANY street in Berkeley. I would welcome it next to or across from my own house. It's not any taller than many of the larger peak roofed houses all over Berkeley, and provides much more housing, with a very beautiful and diverse facade. This is exactly the kind of building I have long imagined I might retire to, provided it has an elevator (I assume it doesn't, but a newer building of similar design might)

5 2124 McKinley Ave.

RESIDENTIAL 5+	
Zoning	R-2 Restricted 2-Family
Units	18
Year	1929
Height	3 stories
FAR	1.29
Density	84 units per acre
Coverage	51%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

☐ **Massing.** Overall building shape, size, and form
☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
☐ **Placement.** Building location on the lot and distance from the sidewalk
☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
☐ **Balconies/Terraces.** Upper-story open space used by residents
☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
☐ **Lot Coverage** ☐ **Stepbacks**
☐ **Placement** ☐ **Yard Space**
☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

2. *What features could be different to improve compatibility? (Other)*

- Driveway and parking area pure asphalt with no softening features. There is a bit of landscaping in the front which I favor but, like many other buildings, both single family and multunit, it is not well kept up.
- The building looks like it could use some love like new paint otherwise no criticism. It is a good fit in the neighborhood.
- I can't tell if it has any yard space for residents? -Given that it is on a back/side street, not a business street like

- Shattuck or University, I think it should have at least some parts of the street facade set back from the sidewalk a little bit more. The residential area should have more green spaces.
- While the tallest building on the block it has some very nice architectural features. It is massive on the lot. It is an older building with some charm.
- A little more landscaping in the front
- The blank side facades are the most problematic aspect, not the actual height. If the building was set back form the side property lines with a narrow yard, shadows would be lessened, and that as well as windows and articulation would remediate the oppressive side walls.
- Entire lot covered (building is very deep with parking in rear), leaving almost no space for plantings. More could be grown in available side space. -Tall for residential neighborhood. (How did it get built in an R2 zone?)
- Just a few feet farther back from street would have been better for neighborhood compatibility. THe lack of winows on much of the north and south sides is also a minus.
- Parking is needed

3. *Would you like to provide any additional explanation or feedback?*

- Since this bldg. was built in 1929 it is very compatible with the rest of the neighborhood and has an attractive design and aesthetic (though it appears to be a bit neglected.) I don't expect future construction in the 21st C. to be inspired by this building but I have noted on other properties, I like buildings to reflect something of the old character of Berkeley Having said that, I love the new parking structure between Center and Addison. It really makes the streets come alive and this is the best example of converting a parking giant to something fun!
- Good example of multifamily that integrates well with single-family and duplexes on a residential side street. Need to align incentives for this time of small infill--I'm not sure it pencils for most developers.
- The building doesn't really fit the aesthetic of the neighborhood and it looks out of place. The building is surrounded by single family homes or other apartments with a lot less units.
- The new standards need to address ALL sides of new buildings and their impact.
- While the building crowds the neighbors it is a traditional Berkeley multi unit building that fits into the overall fabric of the City. Much better than the new multi-family buildings being built now
- Restore
- The architecture is not great but much more pleasant than stops 3 and 4.
- Will the city insure that these multifamily units willbe be maintained? There are many rundown multifamily buildings in Berkeley.

6. 1950 ADDISON ST.

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Because this building is on a narrow street with other large multi unit apts. and retail at ground level, I find it's use of glass and steel appropriate and adds light and movement.
- I guess its good that they put bare minimum effort to not have an entirely flat facade, with the afterthought decorations on the facade, but it really feels like a half-finished afterthought to disguise its uncreative blockiness -I guess the step-down on the west is good.
- Theres'a lot of flat surface, but an overall idea of articulation makes the building more interesting. For this street in downtown the density and height are welcome.
- This fits in on this rather non-descript block of Addison. It's too bad the façade elements don't do anything. They don't provide shade. They aren't balconies. They provide a little relief, I guess. This building passes, but doesn't contribute, in my opinion.
- Moderne chic glass and silver metal facade is attractive
- Parking needed.
- Modern design! Very forward-looking which is great
- I imagine this building is controversial, but I

6 1950 Addison St.

The Addison Apartments

MIXED USE RESIDENTIAL 5+	
Zoning	C-DMU Downtown Buffer
Units	107 (4 BMR)
Year	2020
Height	7 stories, 74'11"
FAR	5.06
Density	227 units per acre
Coverage	97%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

This building earned Gold Certification from GreenPoint Rated.

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

53

support it. It's the right scale for the location right downtown, and the facade has the advantage of being coherent, even if it's probably too corporate for most peoples' taste. I wish the ground floor engaged with the street more - it has lots of windows which is good, but no retail or other public usage.

2. *What features could be different to improve compatibility? (Other)*

- The Placement of the building is OK but it would have worked much better, I think, if the ground floor (or maybe first two floors could have been recessed to provide more openess on the ground. (I don't know the mechanics of that suggestion but there cetainly are buildings designed that way. Yard space isn't too critical at this address because the back side of the building faces on Center St. right across the street from MLK Park. We noted that there appears to be a large terrace on the roof which is always a great idea, in my view.
- One less story would make this more pleasant on this narrow city street. The horizontal bars/ metal banners don't add anything to the design and make it look like an office. The glass is too reflective and really shouldn't be used. Bird safe glass needs to be required.
- Public art/mural on blank ground-floor wall
- Can't tell if there is any roof deck yard space type areas. -This type of reflective windows is prone to bird-strike death. I wish Berkeley would adopt an objective standard recommended by Audobon Society to reduce harm to bird populations by mandating measures to reduce/ prevent bird strikes on windows. -I put it in the positive features as well, but this building was obviously designed as a giant block, then had some superfluous bars hung on the front to give bare minimum interest to the front. Its better than nothing, but still really ugly. All I can say is that it's super fortunate that this building is on a smaller back street that gets less traffic and use because it would be an embarrassment on a major street like Shattuck or University. I don't hate contemporary design when its actually nice DESIGN, but this just screams low-effort.
- Pretty small sidewalk median strips. Even with the 4 trees planted, the stingy median strips means that these trees will be stressed, and have difficulty becoming health mature trees.
- More balconies would make this look less like a commercial building ad more like a place that people who need light and air would live.
- At least there is one bay.
- Just awful
- Wrong style
- Parking and traffic are already a problem in this area.

3. *Would you like to provide any additional explanation or feedback?*

- I've always enjoyed seeing the huge signs painted on the back of the building which can be seen from the park, with positive, upbeat messages and bright colors. I would love to see more artwork on the exterior of new buildings.
- It is essential that as we increase density, we

also provide for appropriate, commensurate green space.

- The building is beautiful and a great use of the building. It includes a gym for tenants and a parking garage.
- On the commercial streets of downtown, even another two stories, if set back a bit, would be welcome. The way the ground floor addresses people on the street (coldly) is a big missed opportunity.
- What's going on with the ground floor? Is that supposed to be retail? That isn't likely to work. The block is very quiet, totally unlikely to be competitive with other more active blocks or online shopping. Let's be realistic so that we don't have empty storefronts.
- Really ugly. This is a bad design and not compostible.
- This is a horrible incomparable design that makes people feel like widgets
- Apartment should keep with the same style of area.
- As with all the large, downtown apartment buildings on this walking tour, it is massive with no setback from the sidewalk and minimal plantings. Use this answer for all the following buildings....
- The balconies are interesting but I wonder how functional they are. The architecture is tolerable and I like the window design and the large area of the windows that bring in light (especially since they are on the north side)
- How about making this park safe and attractive for families? It's a filthy bum zone now.
- Without giving too much leeway to really dramatic "starkitects," I would love for zoning rules to allow for integrating new architecture and design styles into existing streets. Not every building has to look the same in order for a neighborhood to look and feel cohesive. Progress is good. :)

7. 1935 ADDISON STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- The use of color makes this building more interesting. Six stories is a height that works.
- I like that the full height is not totally visible on the front facade. -I like that it manages to not totally overshadow the little restaurant courtyard behind it. -Broken up facade is good, though dull. -Bay windows look like they would give the residents nicer interior light.
- 1. Ground floor articulation and texture make a difference. 2. Upper floor window detail reduces the apparent scale of the building, creating a more human scale that's easier to mentally project human life into.
- Bays
- The varied facade is good and makes it appear

7 1935 Addison St. Addison Arts

MIXED USE RESIDENTIAL 5+	
Zoning	C-DMU Downtown Buffer
Units	69 (7 BMR)
Year	2016
Height	6 stories, 60'
FAR	3.46
Density	207 units per acre
Coverage	97%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing**
- ☐ **Lot Coverage**
- ☐ **Placement**
- ☐ **Height**
- ☐ **Stepbacks**
- ☐ **Yard Space**
- ☐ **Balconies/Terraces**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

smaller than it really is

- Attractive paint job, interesting in and out facade and grillwork around roof.
- What I see herearw more housing without parking or grocery shops.
- Well done. Traditionally-inspired design, decent coloring (could be a bit more muted, to better replicate the copper cladding it's emulating), good variation in the massing. Masonry/tile on the ground floor is always an easy and popular choice, and lots of good retail space too. Would even say that the various setbacks and forms do not need to be so extreme, if that would help with costs.

2. *What features could be different to improve compatibility? (Other)*

- Just as mentioned previously, we should be thinking of wide sidewalks for the future.
- Feels tall for the area, looming over media building. -Overhanging the sidewalk feels way more intrusive on this little street compared to the one on University at Grant, which was ok because its a wide street with lots of sunlight. This one here is just looming, dark, and unfriendly.
- Planting, integrated or in large pots, would soften the streetscape. Even a few would create a sense of a street that's occupied, rather than barren. The 2010 Milvia St. pots are effective this way.
- Color
- There is not a decent public park in this area.

3. *Would you like to provide any additional explanation or feedback?*

- I like the way the facade is cut up with the two color schemes making it look like a series of smaller buildings.
- Also like that the ground level is distinct from the upper floors; more wood and recessed entrances. It seemed appropriate for its location along with the new Addison Apts. across the street.
- This street feels really small for such tall buildings on both sides of the street. The pedestrian experience feels like a cold dark tunnel. If it weren't for the neighboring smaller buildings, this street would be lousy, especially with no set-backs from the sidewalk from this and the one across the street. If there is some way to regulate that specific combinations of buildings on a street need to leave some kind of access to green/sky/sunlight in combination with each other. I realize it would be nearly impossible to regulate, but sandwiching these tall buildings all along both sides of a narrow street, with protruding facades overhanging sidewalks both sides of street, will be incredibly hostile and uninviting to pedestrians. Maybe have a bit of courtyardlike setback on street facing facade?
- This is just an ugly building. Not much of an aesthetic or design. The 2 tone colors are not attractive. Uglifies our city.
- Although it's not unusual or terribly creative, the building creates solid downtown infill.
- The colors are ghastly, but that does not mean that I would support the regulation of color in Berkeley. Who is the arbiter of taste?
- Ugly and not compatible.
- This is somewhat better than average
- Apartments are the wrong style. Their too high
- See #6
- There is a nice rhythm on the facade with the window bays. Too bad that only the top floor has decks. I guess the lack of windows on the front part of west and east sides is due to concern about future buildings being placed there.
- Are you building tomorrow's Tenderloin/ ghettos? Who's going to enforce maintenance and safety?

8 2055 Center St.

Berkeley Central Apartments

MIXED USE RESIDENTIAL 5+	
Zoning	C-DMU Downtown Core
Units	143 (23 BMR)
Year	2012
Height	10 stories
FAR	7.56
Density	277 units per acre
Coverage	96%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

51

8. 2055 CENTER STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- We thought the parking lot next door was way more attractive than the building and gave it a B-
- I like that it doesn't overhang the sidewalk -I like that the storefronts aren't empty -It managed to break up front massing/facade without just looking cheap like the other one down Addison; and it managed to do it without looking like faux 1890-1910 architecture.
- 1. Feels like a downtown building. 2. Balconies (just barely) make it feel residential rather than like a modern riff on old art deco office buildings.
- Balconies give facade some interest.
- No features make it attractive or complementary.
- I appreciate that parking is somewhat hidden, but would love to see less space devoted to off-street parking for such a centrally located building..

2. *What features could be different to improve compatibility? (Other)*

- Why is this building always advertising for tenants. What is wrong with the units.
- More color. A bit drab given the height and repetition of stories
- Still concerned with bird strike window design. -Could still maybe use a bit more step back from street, to make it feel less dark, and get a bit more sky access
- Needs more green space out front. The 3 trees planted - the one in the middle already looks deformed. Why pretend or just go through the motions. There needs to be sufficient care and space for trees really to grow rather than just die or become stunted half broken things. Awful.
- Articulation of the ground floor surface that pedestrians experience would help mold the streetscape more interestingly.
- These balconies fail to contribute to the aesthetics. They add no life, no welcome, no warmth because they are dark, flat, and deeply recessed. And is that more ground floor retail? Are offices at least allowed? That would be more promising. Anything is better than chronic vacancy.
- Massive, fills lot, no set back from sidewalk, 3 skinny street trees, otherwise no green - similar to other downtown apartment buildings. A blocky behemoth.
- Essentially you're making downtown inaccessible for shoppers and theatre/movie goers.
- This is mediocre. Size and massing is all good, and perfectly appropriate for the location. Facade is poor. The metal facade elements are good - clean, coherent, a few art deco nods towards the roof. The tile/masonry on ground floor and above look cheap - like bargain basement tile and cinderblock, even though I'm sure it was much more expensive. The balconies are also

terrible - uninhabited, uninhabitable, and ugly to look at - they give the whole building a cheap, uncaring feel. Better to not have balconies than to have these.

3. *Would you like to provide any additional explanation or feedback?*

- This was my least favorite building; cold, uninteresting design, not distinctive in any way. Looks more like an office building than a place where people live. On the other hand, the parking garage next door is one of my favorite structures in Berkeley. I never thought you could make a massive parking lot look beautiful and fun to look at both day and night
- Please adopt an objective standard recommended by Audobon Society to reduce harm to bird populations by mandating measures to reduce/ prevent bird strikes on windows
- Downtown buildings are not just their surfaces, bulk, and materials. They sculpt the sidewalk space which has a tremendous effect on pedestrians' experiences of the city. Had this building undulated in and out at the street level, even slightly, imagine the difference in the experience of walking down the street, in comparison with the straight shot of parallel lines of building, curb, and parked cars. It's almost more of a car-speedoriented design vs. a human-speed one. Even 12" to 18" of undulation can create a better rhythm for people.
- There is nothing to recommend this building; the balconies are too dark to be useful and so look like suicide platforms
- See #6
- Nice that many units have "balconies" but the inset balconies/terraces are somehow less attractive than the ones that are not inset. They give a look look to the building.
- Who'd want to live there? Yuck.

9. 2120 ALLSTON WAY

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- The sculptures on the front of the building are really attractive, but they get lost in the background.
- I love the tile at street level: much better pedestrian experience from sidewalk. Also love integration of arches. -I like the facade/massing STEPS BACK from sidewalk slightly; much better than the buildings which have overhangs over sidewalk. -looks like nice roof terraces. -I think I like this building the most out of the ones on the tour. Even though it is very large, it has lots of step backs on top. Lots of windows and roof terraces and looks like a nice place to be inside, as well as pleasant from the sidewalk.
- I know there was controversy when this building was approved but of all the buildings seen so far, this building is the least intrusive, maybe because of the architecture on the ground floor, that makes the face of the building more interesting, and the set-back right above the middle.

9 2120 Allston Way — Gaia Apartments

MIXED USE RESIDENTIAL 5+	
Zoning	C-DMU Downtown Core
Units	91
Year	2001
Height	10 stories
FAR	5.52
Density	267 units per acre
Coverage	97%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

☐ **Massing.** Overall building shape, size, and form
☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
☐ **Placement.** Building location on the lot and distance from the sidewalk
☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
☐ **Balconies/Terraces.** Upper-story open space used by residents
☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
☐ **Lot Coverage** ☐ **Stepbacks**
☐ **Placement** ☐ **Yard Space**
☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

- 1. I'm not a big fan of the fake historicism, but the level of detail at the sidewalk does feel like Berkeley. 2. Creating two tower elements on the street facade helps the pedestrian experience by emphasizing vertical lines rather than unrelenting horizontal lines - especially on such a big building.
- Tower element, window divisions, cornice bands, and arches are all very Berkeley. The landscaped terraces are wonderful.
- The design is much more compatible with Berkeley design than the more modern buildings
- Huge, artsy, new building. Attractive ground floor wrought iron, tile, sculpture. Central facade setback creates interest.
- Such congested living spaces are not good for humans.
- Wonderful. A testament to what assertive and coherent design can do. So much density, and still so welcoming and humane to passers-by. .

2. *What features could be different to improve compatibility? (Other)*

- I was in this building years ago and if I remember correctly there is a dreary dark courtyard in the center which wasn't inviting.
- I am concerned that the residents might soon have a view of the side of a building on Shattuck and Oxford faces of the building. Its a nice number of windows now, but how much setback would a new tall building put up on the lots immediately next door to this? Would those windows get any natural light anymore?
- More greenery and public space.
- The building could have been conceived as multiple buildings to break up the overall feeling of a large mass
- 2 trees in front, otherwise zero green
- This looks like an area to avoid. I guess the residents will shop nearby, but someone who doesn't live there will find it inaccessible and uninviting.

3. *Would you like to provide any additional explanation or feedback?*

- This is an iconic building; a good melding of old and new and fits well with the style of Berkeley. I had the opportunity to attend an event on the roof terrace of this building, where the view was stunning looking both east and west. I like the treatment of the ground floor and archways which separates commercial from living units.
- Arches are nice element. Not everything needs to be compatibility with whatever happens to be next door
- See #6.
- The step back helps but I still wonder if the height isn't just a bit much for such a narrow street. I do like the architecture.
- I love the tile and setbacks, but I don't think they should necessarily be required for every building. Straight roof lines and rectangular buildings are great too.

10. 2119 UNIVERSITY AVENUE

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- We liked this building, in fact we liked what was being done with the entire site, but the red tiles on the corner building don't work. The variations in style, structure, color when viewed with the entirety of the block all worked together. We felt there was real care in design.
- Looks decently set back on sides, so that even with new buildings next to it, its residents will still have a bit of natural light. I like the scale of this building, and that it manages to have a lot of architectural mix going on in such a small space
- This is a funny building, right where shattuck comes into University. For so long it looked empty and not well used.
- The capped tower element, visible roof overhangs, arched window recesses and ground floor are all very Berkeley, and I like them. But could you mandate these without winding up with a kitsch town? I don't think so.
- Attractive style and colors make it look sort of old tho it's a new building. Inset balconies add interest to the facade.
- Not as unattractive as other units shown in this survey.

10 2119 University Ave. Bachenheimer Apartments

MIXED USE RESIDENTIAL 5+	
Zoning	C-DMU Downtown Outer
Units	44 (9 BMR)
Year	2004
Height	6 stories
FAR	3.03
Density	145 units per acre
Coverage	97%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

49

- Beautiful first floor retail space
- Very nice. New buildings in Berkeley should not be forced to copy traditional design elements, but it's a fine approach and can be done very well, as here. The tower element is refreshing, and of course the windows are excellent. It references its neighbors, and fits in perfectly.

2. *What features could be different to improve compatibility? (Other)*

- I was in this building years ago and if I remember We really liked how the whole block is coming together.
- What is the purpose of the side yards? Building should be taller in this location
- Sad empty storefronts!!

3. *Would you like to provide any additional explanation or feedback?*

- This building, like 2120 Allston (#9) is distinctive and has all the elements of good design that 2120 Allston has. Also restful colors, melds the past and the present and has very nice ground level elements and arches which distinguish it from the upper residential levels. Good ratio of market rate and BMR.
- Affectatious.
- This is one of my favorite new buildings
- Building is too high
- See #6
- I still think this is the most distinctive and attractive building constructed downtown in the last 20 years.
- This style is more Berkeley-like and attractive.

11. 2101 UNIVERSITY AVENUE

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- We liked this whole complex.
- Tower element, visible roof overhangs, cornice bands, arched elements are all very Berkeley. I appreciate the preservation of the ground floor facade. Others may disagree, but that facade has been a navigational landmark for me since 1984, a real place-maker.
- This building is stylistically compatible with the location and adjacent buildings
- Nice styling of new upper building (tho it doesn't quite fit with the old ground floor).
- Not walls of glass and more attractive
- The break in the building a la the equitable building is a nice amenity for residents. I like that this building preserved the street design of the previous building, though i don't necessarily think developers should be required to do so if it will significantly slow housing construction or increase costs..

2. *What features could be different to improve compatibility? (Other)*

- The red on the tile at the bottom does not work,
- Color is very white

11 2101 University Ave. Acheson Commons

MIXED USE RESIDENTIAL 5+	
Zoning	C-DMU Downtown Outer
Units	205 (18 BMR)
Year	Under Construction
Height	6-stories, up to 75'
FAR	4.0
Density	182 units per acre
Coverage	84%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

- As a central downtown, corner building, if could have been another one or two stories higher.
- As always with the large, downtown, multistory buildings, no plantings.
- Scale and massing are fine for this one - very appropriate for the downtown location. Design is a bit ramshackle - no coherent vision, sort of slapdash. Both ugly and anonymous.

3. Would you like to provide any additional explanation or feedback?

- I understand that the developers were trying to retain the decorative elements of the original building while creating a modern 5 stories above. I don't like their solution. The color scheme doesn't work. It kind of looks like a mistake.
- Retention of facade is cool and ground-floor details are really beautiful
- More trees please!! More sidewalk planting!!
- 1. We need to take advantage of parcels that are not adjacent to single-family residential structures, and build even higher. 2. This is another slightly affectatious pseudo-historicist building that, although some details are interesting or done well, is revisionist rather than creative.
- This is my favorite of the new buildings
- Building height too high and too many units.
- All the large, downtown, multistory buildings fill their lots and leave no space for any plantings. I suggest you require roof gardens (including trees and milkweed) on all future buildings like these. This would fit with our desire and policy to go green in Berkeley.** -I didn't answer the individual questions on these large buildings. They are all compatible with a 'large, tall downtown' look, all fill their lots, none have setbacks from the sidewalk or upper story stepbacks, there are no yard spaces and few have balconies.
- This new development is helping complete a more harmonious, taller but still varied facade for the block on University Avenue. The architecture above the ground floor however is rather dull.
- Style-wise these are OK.

WEST BERKELEY TOUR

The West Berkeley Tour (map shown on right) received a total of 26 survey responses with 88% of respondents completing the entire survey. The West Berkeley tour included 12 tour stops with a range of "missing middle" housing types including multiple detached units on one lot, cottage court housing, and mixed-use projects.

When asked what features made the project compatible with the surrounding area, the most common answers across all tour stops were:

- Placement;
- Height;
- Massing;
- Lot coverage; and
- Other features (See Table C)

Common site features mentioned in the "Other" category included:

- Permeable pavement
- Open space and landscaping
- Shared driveways
- Overall scale of building(s)
- Architectural details
- Light access
- Roof form and facade variation

When asked what other features would create more compatability, respondents most frequently answered with:

- Other features;
- Yard space;
- Massing;
- Lot coverage; and
- Height (See Table D)

Common site features mentioned in the "Other" category included:

- Garage and driveway location and orientation
- Building separation
- Building orientation to street
- Landscaping, trees, and open space

Figure F-24 West Berkeley Walking Tour Pamphlet Cover & Map

- Privacy concerns
- Architectural style and building materials
- Density (increase)

Other Key Takeaways

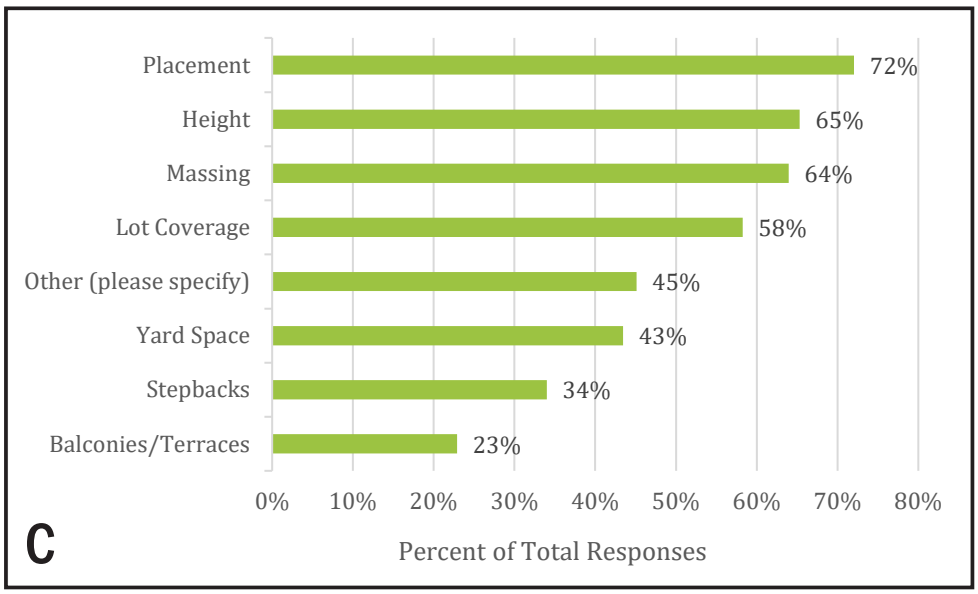
Looking at the collective results of both surveys, common themes in public comments included the following:

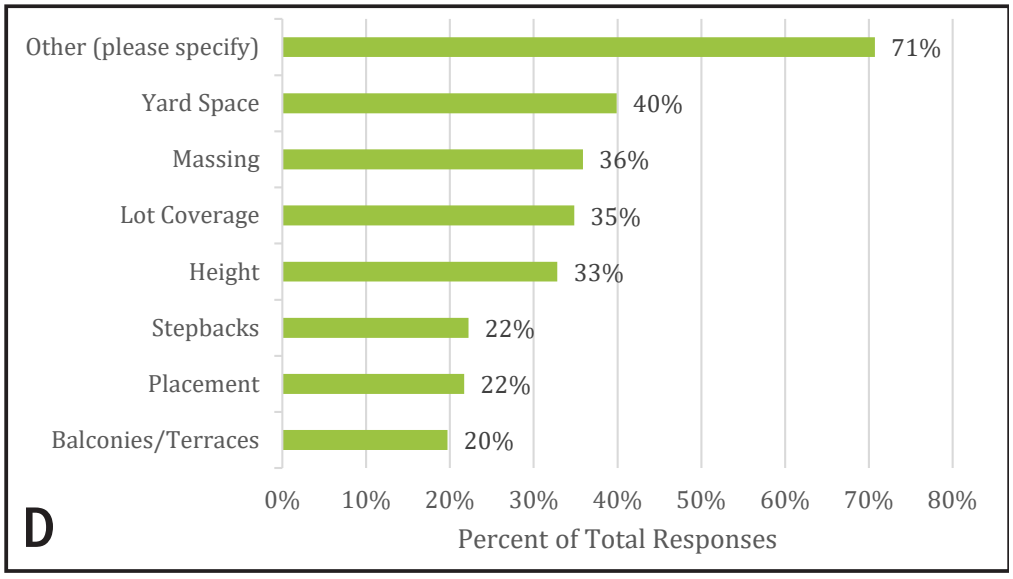
1. Architectural style: Individuals have different preferences for particular architectural styles which can affect what features they consider compatible.
2. Open space: The adequate provision and maintenance of landscaping, private or public open space, and other planting/greenery is integral in creating a compatible project.

3. Ground-floor design: For mixed-use projects, an active, human-scaled ground-floor can help lessen the visual impact and pedestrian experience of a taller and larger building.
4. Amenities: Residential amenities (proximity to transit, walkability, internal community spaces, parks, etc.) are particularly important to provide for projects with more than five units.
5. Storefronts: For mixed-use projects, active storefronts and a lack of vacancies contributes to the overall experience of the site.

In conjunction with being intended as a way for Berkeley residents to understand and experience the range of housing options in the City, all input received will be used by the project team to inform the City's Housing Element Update and Residential Objective Standards projects. The responses received will help the project team understand what features affect an individual's experience of particular housing types and where regulations can improve this experience.

Figure F-25 Responses to question "What features made the project compatible with the surrounding area?" (A) and "What other features would create more compatibility?" (B).





OPEN-ENDED RESPONSES - WEST BERKELEY

1. 1911 NINTH STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Stepbacks help, but it depends on the surroundings, right?
- Permeable paved areas
- I turned in hard-copy for most of the tour. Didn't get to this building on the walk. One thing I need to say: the overall context is of utmost importance - the whole area needs to be considered for walkability, crowdedness, peacefulness, not only one building or another. Two many massive buildings within a couple of blocks degrades the area. Ample open space is needed.
- This is a mixed street without a strong character. The building is tastefully done and generally improves the street.
- I'm wondering why you're asking about compatibility. Shouldn't we be talking about the future pattern of Berkeley, and what constitutes a beautiful street or neighborhood, rather than asking if this "matches" buildings of the past?
- Aesthetics fit in nicely with the neighborhood.
- Style of building .
- Successful design: -Although it is three stories, the entire building is not at maximum height; average building height is lower than the maximum of peak -Combining driveway with setback from fence property line -Permeable pavement in driveway enhances open space so driveway feels more garden-ish invites use for courtyard patio or gathering space -Private yard/green-space in front along the sidewalk seems more useable to residents than open to street -Massing is broken up: Facade of building is not single expanse. It makes it feel like a smaller house than it would if the front were all one single wall. -Use of wood-like siding, window frames and trim fits architectural styles of older houses in the neighborhood. -Looks like

1 1911 Ninth St.

3 DETACHED UNITS ON A LOT	
Zoning	R-3 Multiple-Family
Units	3
Year	2014
Height	3 stories, 34'11"
FAR	0.95
Density	20 units per acre
Coverage	39%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

☐ **Massing.** Overall building shape, size, and form
☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
☐ **Placement.** Building location on the lot and distance from the sidewalk
☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
☐ **Balconies/Terraces.** Upper-story open space used by residents
☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
☐ **Lot Coverage** ☐ **Stepbacks**
☐ **Placement** ☐ **Yard Space**
☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

they have nice number of windows for residents, but don't have giant invasive windows to look into the close-by neighbors on the north side. Maintains neighbor privacy without depriving residents of having good access to natural light

- Very nicely done!
- Architectural style, windows, & finishes.
- it is not a box, the 3rd story is a pitched roof which decreases the intrusion and is more visually compatable
- This is good. Not a lot of yard space for the occupants, but that's their choice, and will be reflected in the price. Does not impact the neighbors at all, and the building overall is of an appropriate scale (could be bigger, but it's fine as is). The two-tone board and batten on the front house is a bit awkward. Looks better in uniform blue with white accents on the second house.

2. *What features could be different to improve compatibility? (Other)*

- Could be taller in parts, but needs more paving - from unused Wells Fargo?
- Usable outdoor space, property trees, accessibility
- I turned in hard-copy for most of the tour. Didn't get to this building on the walk. One thing I need to say: the overall context is of utmost importance - the whole area needs to be considered for walkability, crowdedness, peacefulness, not only one building or another. Two many massive buildings within a couple of blocks degrades the area. Ample open space is needed.
- One could say this is compatible because of the gabled roof, but what does that mean? There are plenty of Berkeley buildings that have flat roofs or parapets that are perfectly compatible. What are you going to do with these survey results? It would be a mistake to mandate gabled roofs just because you showed a gabled roof next to other gabled roofs and people labeled it "compatible."
- Upper story set back is on the south side, which would perhaps allow sunlight to a house on the north, if one was there. However it completely block light to an actual house on the north, reducing the comfort and value of that home.
- Less lot coverage, more yard space. Overall good use of space - all neighborhood-appropriate style buildings that are not imposing.
- Vegetation (native plants)
- Its unclear if residents feel the open space meets their needs/interest. It would not be enough sunny yard for me, but not everyone cares about personal gardening space. If Berkeley is going to substantially infill all of our neighborhoods, we should have a plan to identify places for more public community gardens to offset the loss of private garden spaces.
- More yard space, more open space between buildings, buildings separated by green space/ trees

3. *Would you like to provide any additional explanation or feedback?*

- More height on San Pablo side appropriate if stepped back to retain open space in back or create new open space on side. North setback is too small. Small roof area there now could be improved to function as balcony.
- Placement of 3 buildings. A "dormitory usage." Buildings on steroids, massive and crowded. There are small courts between buildings which create relief spaces common in the area. The "Block" & Hearst + have mix of 1 to 3+ (one being built) structures, plus a church...
- I turned in hard-copy for most of the tour. Didn't get to this building on the walk. One thing I need to say: the overall context is of utmost importance - the whole area needs to be considered for walkability, crowdedness, peacefulness, not only one building or another. Two many massive buildings within a couple of blocks degrades the area. Ample open space is needed.
- Increase in massing and height compared to 1909 to the north appear to be minimal because of the building to building separation and 2-story predominant context in this block.
- Good example of denser infill. So much comes down to a well-proportioned building with good materials. This is a simple form, but the texture makes its scale feel smaller and clearly residential.
- What do we value besides "compatibility?"
- The building in the rear is out of scale with the other back yards adjoining it. If this is supposed to be family housing, I see no outdoor area available for children. Are driveways counted as yard space? If so, that misrepresents the coverage number. Green space is needed for habitat, climate protection, and human needs. This level of density is not appropriate to encroach on so much open land. The fact that is is not BMR makes it all that much worse.
- way too dense
- Existing area have 1-2 story homes and the style and height of this building is out place of place.
- Nice design including materials that fits well into the neighborhood.
- Plantings encroach on sidewalk. This hinders pedestrian movement.
- This was a well-done project.
- Style is attractive tho building is tall for

neighborhood. I think no backyard, tiny front yard, little green. Adequate off-street parking

2. 1810-1816 10TH STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Oniste outdoor space and trees
- Consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https:// inequality.org/ great-divide/tax-the-rich-global-wealth-report/ See my comments on the previous page.
- The openness creates a unique opportunity for landscaping, but this is a unique configuration that doesn't fit into the general density of the neighborhood. It's nice, but should not be a standard.
- This is a nondescript building with a lot of wasted space around it. Compatible? Perhaps. Good? Definitely not.
- I believe these are legacy one bedroom units. I have nieces and nephews (immigrants from Latin America) who grew up in a very similar complex on San Pablo near Delaware when their families were very low income. Four families with a total of eight children. The large space around the units allowed kids living in contained space to have play area.
- None it fit in the existing community.
- Great open space, and obviously great access to sunlight for residents, and for pedestrians on sidewalk. -While Massing is a dull solid block, it works because the scale of the building is very compact (not oversized on the lot) and very far from neighbors/property line/sidewalk -Shared driveway: excellent that so many units only have one driveway cut across the sidewalk out front, and it leaves most of the lot open, rather than taken up by paving and parking. -Older architecture fits neighborhood.
- Exterior stairs up to second floor - attractive and a nice touch.house.

2 1810-1816 10th St.

4 UNITS IN ONE BUILDING	
Zoning	R-1A Limited 2-Family
Units	4
Year	1943
Height	2 stories
FAR	0.26
Density	19 units per acre
Coverage	19%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

☐ **Massing.** Overall building shape, size, and form
☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
☐ **Placement.** Building location on the lot and distance from the sidewalk
☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
☐ **Balconies/Terraces.** Upper-story open space used by residents
☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
☐ **Lot Coverage** ☐ **Stepbacks**
☐ **Placement** ☐ **Yard Space**
☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

56

2. *What features could be different to improve compatibility? (Other)*

- Orientation to street and other houses.
- Kid-positive
- All over the country, houses sit empty because they are bought in large part by hedge funds and the very wealthy while the pretense continues that this new housing will benefit anyone except the super wealthy. Also, consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https://inequality.org/great-divide/tax-the-rich-global-wealth-report/ See my comments on the previous page.
- This block has some large boxes and so this building fits in, thought stepbacks and balconies

would improve the social aspects and outdoor opportunities for residents.

- Landscaping would help.
- If these units are BMR, leave them alone. If they are not, it would be OK to add another story and allot space to BMR.
- Could use landscaping, the large bark area does not provide a nice transition between public and private space.
- None
- Needs vegetation (native plants)
- -While this has a lot of open space, it provides little or no privacy for the tenants: how can anyone have patio furniture or a bbq without it getting stolen here? The size of open space is great, but it maybe more than the residents need, and not arranged in a way that is most useful to residents: I can't tell from looking if the whole apartment comes out and plays ball games, or fetch with dogs in their vast front lot or parking area or not, so I can't judge its utility. -Massing design is just a single block -uninteresting, but unoffensive because the building size doesn't overwhelm the lot. -My preference is for permeable pavers, but at least the driveway seems decently maintained. Again, given the open space on the lot, the driveway material is less important.
- Landscaping: Small bushed and a few tall trees.
- More density
- Make better use of the lot.
- Ugly from street tho good height (at only 2 stories). Needs more plants, especially in front.
- anything to make it less a box
- This is not great. The lot is huge, but you're ultimately not getting very much housing, and it also completely turns a cold shoulder to the street/neighbors. This would be much better with more and smarter lot coverage, like a generous green courtyard entrance to a single building, and smarter parking placement. More height would also be good - an extra story would go entirely unnoticed given the surrounding buildings, and assuming some more trees

3. *Would you like to provide any additional explanation or feedback?*

- Garden would be good in front as at 1802
- Gathered 4-plexes are my favorite local housing approach. The buildings may be arranged variously, as is seen throughout the area. This particular example shares a sizable lot with its twin with plenty of open surroundings - great for kids. However, it seems a bit under-utilized.
- I turned in a hard-copy for this building.
- This is a rare find in the R1A zone - to have 4 units and only .26 FAR - and has to do with the enormous amount of surrounding yard space. Also has an "enclosed" feel because of how far it's set back from the sidewalk and separated from neighboring buildings.
- Would fit better if the landscaping matched it's companion building next door.
- This is a suburban site development pattern, not a more urban one. Not a great example to ask about - I would think people will respond more about this very different typology rather than the "compatibility" you're asking about.
- This space needs some trees and other greenery. Landlord should be required to add them.
- Overall, thumbs up. Nice setback, off-street parking, lots of open space. Could probably add buildings/units (thoughtfully) to create more housing here.
- It's the right height and style for existing community.
- Pretty simple 1943 design but quite pleasant including the way the two buildings face each other across the landscaped drive area.
- In reviewing this project I kept in mind the period in which this was built. But, for today the property is wasted with yard space no one uses, the finishes are low quality, the FAR could be higher.
- Nice big lot with ample parking.
- It is a box devoid of architectural interestStyle is attractive tho building is tall for

3. 1080 DELAWARE STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding*

neighborhood? (Other)

- Best large building in san pablo corridor!
- All over the country, houses sit empty because they are bought in large part by hedge funds and the very wealthy while the pretense continues that this new housing will benefit anyone except the super wealthy. Also, consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https://inequality.org/great-divide/tax-the-rich-global-wealth-report/ See my comments on the previous page.
- At four stories, this is a large building for the area but doesn't loom over the adjacent buildings, and in fact steps back so as not to infringe on the house to the west. This is going to be the future of the San Pablo corridor and that is OK.
- Tower elements. Eaves visible from street level.
- Part of the building has good set back, allowing tree scape. The portion on Delaware just before San Pablo should have same setback and trees for human scale. The step backs for light access to adjacent buildings looks well done.
- I like the attempt to make it appear to be multiple buildings so that the massing is in scale with the neighborhood
- Color
- Overall style is compatible with neighborhood
- Great that there is no driveway cut along San Pablo sidewalk. -Great step downs to small neighboring house -Materials of wood, some decorative choices, arches, peaked roof...etc. match neighborhood. -The variation in massing on facade helps offset the overhanging parts over the sidewalk on San Pablo (small overhanging bay windows, rather than the entire facade overhanging the sidewalk).
- Excellent stepbacks from neighboring properties.
- Architectural style, windows, & finishes.
- Way too tall for Delaware St./neighborhood but very nice design, especially in and out facade.
- architectural interest, variations in height & color. 4 stories is ok for san pablo avenue but It

3 1080 Delaware St.

MIXED-USE 5+	
Zoning	C-W W. Berkeley Commercial
Units	51 (4 live/work)
Year	2012
Height	4 stories, 49'
FAR	2.15
Density	108 units per acre
Coverage	83%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing**
- ☐ **Lot Coverage**
- ☐ **Placement**
- ☐ **Height**
- ☐ **Stepbacks**
- ☐ **Yard Space**
- ☐ **Balconies/Terraces**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

overshadows the homes to its west

- Well done. San Pablo location warrants height and full lot coverage. The design has the randomness very typical of this kind of project, and is already looking dated, but that's fine - buildings aren't timeless until they're very old. The step down to neighboring houses is well done, but not necessary.

2. *What features could be different to improve compatibility? (Other)*

- Design Review: please no more faux traditional architecture.
- Open space on the street--include a break in the facade to provide a green space or a plaza for residents, neighbors, and people strolling by to enjoy
- I'm somewhat concerned about those on the 2nd floor dealing with noise and fumes. I can't tell

what the set-backs in the back are. .

- More height is OK for San Pablo
- This building is not "compatible" with the one story stucco commercial building across the street nor with the residence behind it on Delaware Street. Does that matter? Probably not. I would like to see the zones behind the major corridors up-zoned to create a transition, rather than asking buildings on the corridors to step down to R zone height.
- Most of the units have very little outdoor space for families.
- No public park/green space
- Needs landscaping (native plants)
- UNENGAGING STOREFRONT. Even if retail spaces are empty, or if they are live-work spaces, Berkeley needs to work on a way to match up local artists to fill the empty windows, or ANYTHING to make it more interesting. -can't tell if there is open space provided for residents. -Substantially larger than neighboring buildings
- No yards, some plantings packed into tiny green area in front.
- Decreasing height to the west more setbacks

3. *Would you like to provide any additional explanation or feedback?*

- Except for its height and utter lack of life presence, this side of this recent "sentinel" is easier to take than the San Pablo frontage. The street aspect from the 10th/Delaware + is rather impressive- at night. No evidence of street-level life, along a wide inviting sidewalk. Very gloomy. The facing shingles are a disgrace ["sentinet" = a prominent neighborhood landmark]
- All over the country, houses sit empty because they are bought in large part by hedge funds and the very wealthy while the pretense continues that this new housing will benefit anyone except the super wealthy. Also, consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https://inequality.org/great-divide/tax-the-rich-global-wealth-report/ See my comments on the previous page.
- This is an excellent example of stepbacks away from the commercial area into the R1A zone, which really reduces the feeling of "mass" from the west side.
- Good stepbacks/downs to blend with properties in back.
- It's more successful as a transitional building abutting the smaller-scale residences than as a San Pablo building. Zoning standards that would force this much fracturing of a facade could lead to chaotic-looking compositions. This one is verging on that.
- This survey is asking about architecture, not streetscape or urban pattern. Just keep that in mind when you try to make use of the "findings," because what you've found will be whether people can match shapes and features. I'm not sure how this will be helpful.
- We need family friendly BMR units. That is the "missing middle" we really need, since market rate is for upper income people.
- Nice transitions between public and private spaces. Good that highest walls face busiest street (San Pablo)
- Building's height is too high. Style is wrong style for existing community.
- If San Pablo Ave is going to mostly be built to 5+ stories, which currently doesn't fit the general neighborhood or street, there needs to be a plan to make the street levels engaging, support more retail, or arts, or nonprofits, or community uses... etc.
- Nice lively design in facade and use of materials and attractive garage entry (which is unusual). It steps down to the neighbor homes very well.
- SPA is where housing should be targeted. This is a great example of what can be done. This has great sidewalks, commercial space, and the garage entrance on a side street.
- This is a really well-done project and its size is appropriate for its location. The way it steps down toward theneighborhood works well. The Architectural style and finishes used relate well to the neighborhood.

4. 1744-1756 10TH STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- This apartment building is acceptable in the neighborhood.
- This building matches the scale of others on the block. Is that what you mean by "compatible?" Could taller be "compatible?" Sure it could. Must the building have the same setback all the way down the streetscape? I don't think so. It makes it flat and boring. It would be better to allow a 50% encroachment for a portion of the property line, for interest.
- Architectural style
- Nicely very little driveway cut across sidewalk
- OK but 1810-1816 10th from the same year is a much better design.
- Placement with street feels good for structures of this era.
- Pitched roof line, square interspersed with rectangle shapes.

2. *What features could be different to improve compatibility? (Other)*

- Site and street trees
- Blocky forms like this connote rental and multifamily 'plexes.
- Why would we want to increase the degree to which this building is 'compatible' with a very boring block that isn't dense enough to meet the needs of this community?
- This property could be improved if one units was removed and a third story added to the two units fronting 10th St. With a step back the unit fronting Delaware could also support a 3rd story. This would. These actions would improved density and add family friendly open space.
- Fits in nicely with the neighborhood, nicely set back with attractive plantings in front yards. Mini front porches facing street a nice touch. Giant parking lot kind of a bummer, would be nice if some of it were yard/recreation space for the dwellings.

4 1744-1756 10th St.

5 UNITS IN TWO BUILDINGS	
Zoning	R-1A Limited 2-Family
Units	5
Year	1943
Height	2 stories
FAR	0.67
Density	52 units per acre
Coverage	53%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

☐ **Massing.** Overall building shape, size, and form
☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
☐ **Placement.** Building location on the lot and distance from the sidewalk
☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
☐ **Balconies/Terraces.** Upper-story open space used by residents
☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
☐ **Lot Coverage** ☐ **Stepbacks**
☐ **Placement** ☐ **Yard Space**
☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

58

- None
- Needs landscaping with native plants
- Looks like yard space lacks privacy: no way to have patio furniture or bbq without it being stolen
- Improved landscaping to buffer the building from the street.
- More density
- Very plain and unattractive shape. No yard, skinny strip of green around outer perimeter.
- These buildings could be denser, and much more beautiful and welcoming for their occupants and the neighborhood. They're "appropriate" in so far as they match the scale of some neighboring structures, but there are taller buildings nearby. They could definitely use better differentiation between the units (e.g. better stoops/porches). It's nice that the parking is back away from the

sidewalk, and it could be improved by putting up a nice portico and gate/door over the driveway - nicer for residents, and nicer for the neighbors, as it would disrupt and hide the concrete expanse.

3. *Would you like to provide any additional explanation or feedback?*

- Superficially good, but really no usable common open space. Close to street okay now, but if large buildings/more traffic nearby, seems could be degraded livability. Stepback ok on north, but twin buildings in back shade yard next door to North.
- The "yard" space is the lawned green buffers between sidewalk and buildings. The interior spaces are all to the benefit of vehicle parking, however. There is one shaded passageway with some planting. This "walker-built" arrangement of gathered 4-plexes is found throughout West Berkeley/Oceanview. I love them...
- All over the country, houses sit empty because they are bought in large part by hedge funds and the very wealthy while the pretense continues that this new housing will benefit anyone except the super wealthy. Also, consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https://inequality.org/great-divide/tax-the-rich-global-wealth-report/ =See my comments on the first page.
- Though the lot coverage is 8-13% above what's permissible in this zone, it seems to not be noticeable because of the nice job of creating relative setback from the sidewalk and a front yard. The predominant context of this part of the block contains 2-story buildings.
- Like that parking is behind and doors, and small porch & overhang, open up to sidewalk
- Lack of thoughtful residential design elements that you'd find on single-family homes. People like those elements not just because they are single-family, but because they are more human-scale and interesting.
- The city should plant, or require landlords to provide street trees.
- Again, for the time in which this was built, it makes sense. But today's standards, it's a poor use of land. The FAR is too low. The pitched roof, windows, and siding are appropriate.
- Nice backdoors/steps decorated by tenants with flower pots. Altho backyard is a concrete parking area it has a 'communal' feel since all backdoors open onto this space.

5. 1611 & 1613 10TH STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- This back building seems to span two properties. How is that possible? Is it a single parcel despite appearances otherwise?
- Matched predominant 1 story context of that part of the block (with second stories occasionally set back from the sidewalk)
- Taller height in the rear, adjacent to CW zoning, is great.
- It's compatible because it's low density. Is that kind of compatible "good?"
- Only one driveway cut shared by two units -Highest part of back building is very tall, but at least not the entire footprint of building, so it isn't looming
- This works. Because of the color, it's nearly invisible from the street anyway. the only person impacted by the density here is the immediate neighbor in the gray house.

2. *What features could be different to improve compatibility? (Other)*

- No vehicle parking on site, high portion backs to San Pablo commercial, but NOT 2 stories! 3 story "observation tower" highly intrusive to western neighbors...
- This building works well in the neighborhood and doesn't affect the character at the street.
- Appears congested due to forced rear setback.
- Stylistically incomparable with existing house on property
- Strange access to back unit
- Driveway is not enough for occupants

5 1611 & 1613 10th St.

2 UNITS ON ONE LOT	
Zoning	R-1A Limited 2-Family
Units	2
Year	2007
Height	2 stories, 31'
FAR	0.45
Density	13 units per acre
Coverage	32%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

- Needs landscaping (native plants)
- Can't tell if massive windows of back unit interfere with privacy of either houses on the street?

3. Would you like to provide any additional explanation or feedback?

- Two small and dreary houses. No frontage appeal. Hills view to East is blocked by tall recent addition to a property on next block over. While in physical concert with the street, they are less-than-ideal representatives.
- Hard to tell how the rear building looks or is massed, etc. from these images.
- Nice way to integrate two story building in back with one-story buildings in the neighborhood.
- Missing Middle housing, and ADUs, need to be allowed to be AT the property line is situations like this, where a residential neighbor isn't affected. Be aware that people taking the survey may not go to Google's aerial view and see that there's a big unit in the rear.
- It's perfectly compatible with old Berkeley. Once again, is that good?
- The back building is really tall and very close to the back of the property. In this case it backs up on a commercial area so it's fine, but I'd be very concerned if there were private residences behind it. Strange lot shape with unclear access to back unit.
- Need drive for occupancy for street sweeper service. Also, to cut down parking issues on street.
- Rear unit does not respect front unit design and materials seem inferior as 5 years old and already looking dingy.
- Nicely done!
- Good mix of styles, like the use of porous materials for the driveway. This is a good example of adding additional housing without losing existing housing.
- Altho original house is quite attractive with a typical (for neighborhood) front yard, the words that immediately come to mind to describe the back house are modern monstrosity. I suppose no backyard due to second house back there.
- its cramped and the 2nd story addition looks like it was dropped on - out of place.

6. 1626 & 1628 10TH STREET

Comments

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)

- We can't see the yard, but this building is respectful of the neighborhood and doesn't alter the character at the street.
- Like the previous example, matched predominant 1-2 story form on this block.
- It's typical, therefore "compatible".
- Is that an ADU in the back? (The blue building with the shed roof.) It's not particularly compatible in terms of form, but I don't think that matters. It is compatible in scale with old

8 1444-1446 Fifth St.

8 DETACHED UNITS ON 2 LOTS	
Zoning	MUR Mixed-Use Residential
Units	8 total, 4 per lot
Year	2021
Height	3 stories, 33'
FAR	1.32
Density	30 units per acre
Coverage	42%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

Berkeley.

- Nicely maintains neighborhood character with new home WAY back
- Height feels lower because roof line isn't uniformly at maximum building height. -Good shared driveway and semipermeable pavement -looks like residents have small amount of private yard in middle
- This works - very typical all over Berkeley right now. They kept the exact scale of the street (which is VERY low - too low), and even ameliorated any noticeable height using that slanted roof. I think they should be free to build at least two full stories on any residential street, but this is fine. There's no yard, but that's a choice for the occupants, and does not impact anyone else.

2. *Would you like to provide any additional explanation or feedback?*

- Ruinous addition in back
- Trees
- With full driveways separating homes, there's plenty of opportunity for a higher building.
- What do you mean by "improve compatibility?" Make things match? Preserve the scale of a previous century?
- Make it more stylistically compatible with existing homes; color is awful
- Back unit VERY close to edge of property.
- Needs landscaping (native plants)

3. *Would you like to provide any additional explanation or feedback?*

- Can't see back - appears to be well-planned.
- The structure in back blocks the view of houses to its West.
- Good way to preserve one-story character of neighborhood, with stepback.
- Although this is obviously "compatible" with (the same as) the houses around it, it's too suburban for what Berkeley needs to be today and tomorrow.
- I wonder if the people behind the tall home on the next street over feel awful about a new, tall building pressed up against their back fence and looming over them. Hoping this kind of thing is accounted for when signing off on new buildings.
- Building is the wrong style for area. It do not fit in with existing community
- Rear unit a bit incongruous in design. Works as a way to increase density in single family neighborhood but not as compatible design. One doesn't have to do the same style, just respect what is there.
- Nicely done!
- Good mix of styles/old & new. I like the porous materials for the driveway. This is a good example of adding additional housing without losing existing housing.
- Original house very nice. Modern back house wouldn't fit character of neighborhood if it were seen. Probably no backyard but small front yard/plantings typical of neighborhood.

7. 908-914 CEDAR STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- This building is fine for the neighborhood. I don't like the buildings- they are clearly built by a developer for a profit, but they are acceptable from a planning perspective.
- Separation between front of subject building and adjoining 1 story building to the west (driveway goes to rear building and serves as separation barrier).
- Overall scale and residential detailing and materials.
- I do think these buildings are compatible, even though they are taller than their neighbors.
- Very attractive, integrates well, really nice setbacks
- Shared driveways; reduced driveway cuts across sidewalk -Achitecture styles vary from classic-isn to modernisn, but all compatible with neighborhood -Nicely set back from sidewalk with garden -Looks like residents have private garden space.
- Yard space front
- This is great. Cedar is a busy street, and has no business having so many single-story buildings. This development has nice diversity of textures and depths across the frontage, good materials and landscaping. It fits in perfectly with the neighborhood. They've even reduced the impact of their driveway/parking space by splitting it to both sides.

2. *Would you like to provide any additional explanation or feedback?*

- More open space. Why does the City not have residential open space/storm water management requirements?
- Landscaping, trees, street trees
- Nothing. They are compatible enough. Personally, I would like to see a third story and an extra unit.
- A traditional duplex would be better than shoving two SFH onto one lot
- More units in a space this size.
- None
- Needs landscaping (native plants)
- Buildings are bigger/bulkier and taller than other homes on block, don't fit with character of neighborhood. 2 more buildings in back, probably no back yard, small yard in front.

3. *Would you like to provide any additional explanation or feedback?*

- Appears to be well-planned. Could be wider setback on Cedar. Can't quite see back south set back. Appears to respect neighborhood.
- A rear (hidden here) building is huge; IT is the affront here. Although recent and rather brusque, they are not unsympathetic to that stretch of a changing Cedar St.

6 908-914 Cedar St.

4 DETACHED UNITS ON 2 LOTS	
Zoning	R-1A Limited 2-Family
Units	4 total, 2 per lot
Year	2020
Height	2-stories, 25'3"
FAR	0.69
Density	16 units per acre
Coverage	39%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

☐ **Massing.** Overall building shape, size, and form
☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
☐ **Placement.** Building location on the lot and distance from the sidewalk
☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
☐ **Balconies/Terraces.** Upper-story open space used by residents
☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
☐ **Lot Coverage** ☐ **Stepbacks**
☐ **Placement** ☐ **Yard Space**
☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

- This is a pretty low-key intervention of four units. Development like this throughout this neighborhood could maintain the general scale of buildings and overall experience of the neighborhood, while easily doubling the number of housing opportunities.
- Just the sort of yuppie buildings that are driving out diversity from historically diverse neighborhoods; the type of cars in the drive ways say it all.
- We need to increase density in Berkeley in general. These units are HUGE! I would like to see twice as many in a space this size. Otherwise, everything about this development is lovely.
- Building should be the style as existing community.
- Interesting how front units have varied design on similar floor plan (though back units kind of boring in design). Another good model for moving beyond single family residential zoning.
- Nicely balanced.
- A well-done project. I like these very much. I call houses on a lot like these "dualies". I like that we're seeing more and more of them. I feel it's a great use of our limited land. The architectural styles and the finishes here are very good.
- Two different styles which don't complement one another. Create a very dissonant effect since they are the same size, have a single front fence, strong horizontals and very similar colors.

8. 1461-1467 FIFTH STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Great site lanscaping in limited area, good street trees
- Conformity with transitional industrial-residential area. Though taller than confronting properties, it works because the nearest residential units are across the street.
- Ideal infill for a formerly industrial neighborhood with less concern about casting shadows on existing residential SF neighbors.

7 1461-1467 Fifth St.

4 DETACHED UNITS ON 1 LOT	
Zoning	MUR Mixed-Use Residential
Units	4
Year	2015
Height	3 stories, 33'
FAR	1.29
Density	34 units per acre
Coverage	43%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

☐ **Massing.** Overall building shape, size, and form
☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
☐ **Placement.** Building location on the lot and distance from the sidewalk
☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
☐ **Balconies/Terraces.** Upper-story open space used by residents
☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
☐ **Lot Coverage** ☐ **Stepbacks**
☐ **Placement** ☐ **Yard Space**
☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

61

- This is an eclectic neighborhood, so the fact that these homes introduce a new form is in fact "compatible." The materials relate more to the industrial building next store, and less to the other residential buildings on the block, but that's fine. This scale is more "compatible" to the future of Berkeley.
- This only fits the industrial aspects of neighborhood because of the faux-warehouse look cladding. -Distance from front sidewalk is good -Permeable pavement is good
- nod to quonset huts
- NOTHING! This is an ugly lazy corrugated tin eyesore!! Yuck!
- Haha, oh yes, this building. The technicolor silos. I'm actually surprised to learn this was built in 2015 - looks more like 1997 to me. Anyway, this design is awkward. The spacing between the

buildings seems incoherent, and they need more landscaping to really respect the surroundings. But the scale and facade materials are fine, given the semi-industrial character of the neighborhood.s.

2. *Would you like to provide any additional explanation or feedback?*

- Too close together.
- Design. I know it's a matter of taste... Also, windows for the people who live there.
- At three stories, these new developments in this neighborhood (this is one of three) change the area and I question whether this substantial change is intentional. There is limited outdoor space and the building creates excessive shade. To me is not an improvement.
- Stylistically these don't intend to be compatible; the "trees" out front are a joke. Looks like we are putting people in tire shops
- Needs landscaping (native plants)
- Too many driveway cuts across sidewalk. -Barely any private yard space. -Massing too monolithic. Even though it is the same height as 1446 Fifth St., this one *feels* taller because there is no break in the facade. -For three stories, this seems substantially taller than the three story townhouses on tenth (part of Jones development).
- -Height with no stepback/stepdown overpowers neighborhood
- A dramatic design that overwhelmed the neighborhood. It should have been set back or upper story stepped back to take away from thence of them towering over the sidewalk and neighborhood. Perhaps one less unit would reduced the enormous impact this development has.
- Great use of space. Great design, but could use more useable outdoor space (larger balconies).
- Driveways are too small and difficult to use.
- Everything! This belongs in Emeryville!

3. *Would you like to provide any additional explanation or feedback?*

- As long as shorter commercial building is on North, setback is maybe okay. First floor units looked cramped and dreary. Offset somewhat by still peaceful location.
- Very sympathetic predictors of rising seas. "Dormitory" housing - recreate elsewhere. No relation to transitorientation meaning all residents drive.
- Using color stripes to break up a monolithic facade isn't effective.
- Fits in with other buildings on that block. One block down though are smaller Victorians so shouldn't be there.
- You can't divorce the discussion of industrial materials and stark forms like these from the massing, open space, etc.; these tall buildings would be inappropriate towering over long-time single-family yards a few blocks east, but for this corner, in this block, in this neighborhood, they are channeling both residential and industrial expression, so work well. This neighborhood offers more opportunities for this sort of innovation than others do.
- I hope people can adjust their eyes to this density quickly, because it really is the absolute minimum we should be thinking about.
- What was the design review commission thinking
- Not enough outdoor-yard space. Would be too tall and imposing on similar residential blocks with 1-2 story homes but seems to work here. Again, could probably fit more units in buildings of this size.
- It doesn't fit with existing community
- Unattractive, stands out as ugly
- I felt the third floor makes it seem a bit high but perhaps the neighborhood is moving that way. A shame that the front is so much taken with parking. I know it is in a kind of industrial district and trying to be hip but I don't care for the corrugated metal siding.
- More housing supply is the goal; any design that meets existing code (primarily life/safety/ sustainability vs aesthetic) is fine; Berkeley aesthetic is eclectic
- I've liked these since there were built. Unique look, single-family homes without the land waste. I like the finishes. As I was studying the site, an occupant came out on the balcony. I ask how he liked living there and he said he loved it,

5 1626 & 1628 10th St.

2 UNITS ON ONE LOT	
Zoning	R-1A Limited 2-Family
Units	2
Year	2021
Height	2 stories, 25'
FAR	0.43
Density	17 units per acre
Coverage	39%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

60

and the neighborhood.

- Crazy architecture (tho I like it) which doesn't fit character of neighborhood (except the other new building across the street). Much taller than original homes on block. No backyard, small central front yard. Clever off-street parking (angled so as not to overlap sidewalk).

9. 1444-1446 FIFTH STREET

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Design, especially the street facades, is better than the previous example.
- The stepbacks and balconies help. The large mass is broken by the building form, which is appreciated.
- Same comments as previous around separation from nearest residential properties. Units under construction to the north are the same developer's so residents can anticipate additional buildings with similar height next door.
- Lovely, rich materials.
- Nice aesthetics, landscaping, setback
- Great that driveways are shared, and provide setbacks from neighboring property line; fewer driveway cuts across sidewalk, and parked cars/ garage doors are hidden from sidewalk -Good broken up facade, so it doesn't feel overwhelming. -Front greenspace along sidewalk looks small, but because it is well landscaped, it doesn't feel insufficient -driveways look like they could double as gathering spaces for residents.
- Nod to industrial quonset huts (and neighboring buildings)
- NOTHING!
- Better than the last one. Acknowledges that it's in a mostly residential area, with some industrial hints.

2. *Would you like to provide any additional explanation or feedback?*

- This type of building signifies a new neighborhood in the making
- Trees used too close to property lines and buildings, rooftop and balconies intrusive to neighbors, inaccessible
- At three stories, these new developments in this neighborhood (this is one of three) change the area and I question whether this substantial change is intentional. There is no yard.
- Better modulation of the side facades could have made these less imposing to the SF neighbors.
- Replace the older single family homes on the block with this level of density, minimum.
- Materials! Cheap faux wood is not a proper exterior material. Makes the whole thing look like it came from IKEA
- Better density than #7
- Needs landscaping (native plants)
- Also, there is so little ground (soil) left on these

lots. Better use of semipermeable surfaces would make this a more earth-friendly development.

3. *Would you like to provide any additional explanation or feedback?*

- Okay for people who only want private/semi private common space. Otherwise, not enough open space.
- Wadlund did great on these.
- That "yard" space from sidewalk to building unit easy to render appealing. This will help - with 7 and 9 - determine the future appearance of West Berkeley. They do nothing to help with the greater housing problem. "Neighborhood folk" are unlikely to be found here.
- Fits well with other buildings on the block.
- Although these are on the edge of being too imposing to the smaller neighbors, this mixed-use block needs this sort of infill.
- Yes, please. Build these everywhere. They are a very nice half step between single family residential and a multifamily building.
- These are out of scale and have the worst sort of exterior materials. I don't mind aluminum, just not with the wood/faux wood veneer.
- Wrong style
- Same question on height as 1461-67 Fifth. Maybe it is OK but I still find it higher than the historic homes. At least the parking is handled better than 1461-67 Fifth. There is some playfulness in the design which I also like better here. Not much garden space but it does achieve fairly high density.
- Updated/better version of the prior example; same comment: more housing supply is the goal; any design that meets existing code (primarily life/safety/sustainability vs aesthetic) is fine; Berkeley aesthetic is eclectic
- Beautiful design. Great rooftop space.
- Another new and great project. Architectural style, finishes, and big windows are a plus. Nice articulation and different rooflines.
- Too tall, too bulky, too massive, too modern for neighborhood. (I like the architecture but you asked about compatibility). No yard, tiny front strip with plantings.
- Yuck!

9 802-808, 812 Page St.

4 DETACHED UNITS, 1 OFFICE	
Zoning	MUR Mixed-Use Residential
Units	4
Year	2017
Height	3 stories, 35'
FAR	1.3
Density	27 units per acre
Coverage	54%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

59

9. 802-808, 812 PAGE ST.

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Permeable driveway with accessible walking path
- Conformity with existing transitional residential industrial boundary, relative separation from adjoining residential buildings.
- Parking hidden, not in front.
- Yard in front, albeit small, is important for a residential character and, for the residents, at least a suggestion of privacy.
- Compatible? No. Progress? Yes! These blocks are so underutilized. These new houses are an

inspiration toward the rich life we could have if we actually thought of Berkeley as a 21st century city rather than a 20th century bedroom community.

- Unattractive
- I like single driveway for multiple units
- Nod to sawtooth building
- Really like the mix of uses. Would really like to see a science base business or other commercial use in the one unit.
- NOTHING!
- Scale is fine for the neighborhood, which is just filled with weird buildings. They could probably be improved by being less blocky, and having more windows and other engagement with the street.

2. *Would you like to provide any additional explanation or feedback?*

- Accommodation is clearly not the idea here!
- Height is fine, but the design could be improved. Where's the creativity? It'd be nice to have a balance between increased units (good) and a beautiful place to live and relax. More green space.
- Site landscaping
- These are just big boxes with parking and are depressing. They might as well be a huge building with two more units and parking underneath. Not well done.
- Side facade modulation and interest is missing.
- Up-zone everything around them.
- Looks like it should be in the modern part of Copenhagen, not Berkeley
- Needs landscaping (native plants)
- -This only fits industrial parts of neighborhood, not the residential parts of the neighborhood; except that the industrial parts aren't usually this tall. -Facade is single unbroken plane. Same problem as 1461 Fifth St. It *feels* taller because it is one flat surface. -No open space for residents? Driveway parking area doesn't look like an inviting substitute for open space. -Barely any step back from sidewalk
- This is going from bad to worse. if this is Berkeley's vision for the future - corrugated tin boxes with awful curves and angles - I'm moving!t.

3. *Would you like to provide any additional explanation or feedback?*

- Appears to need open space other than driveway.
- Alas, this 7 and 8 are representative of a new brave residential architecture for notables who choose not to relate to city outdoor life (backyard, front yard) The well-proportioned drive/passage has few windows facing it. Overall, businesslike, closed-off. But not all that awful. (The atelier, top left!)
- Integration with alley is poor. Don't like the courtyard driveway that bisects the buildings. It's car-centric and not ped-friendly.
- A huge industrial-looking monster! Blocks sunshine from neighbors. Who would want to live next door to oversized shipping containers?
- Design and parking layout is less successful than 1444-46 Fifth.
- More housing supply is the goal; any design that meets existing code (primarily life/safety/ sustainability vs aesthetic) is fine; Berkeley aesthetic is eclectic
- Great layout for guest parking.
- Overall, a well-done project. Like the dense use of the property.
- I guess these go with the semi-industrial nature of West Berkeley. (They're nice but bigger & taller than single family homes in neighborhood.) No yards, just tiny green spot with plantings in front. Good 0ff-street parking

10. 870-880 Jones S 10 t., 1500-1504 Seventh St.

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Light can penetrate all units as well as adjacent properties
- These are acceptable.
- Though taller than surrounding buildings, pitched roof design makes it fit in.
- I want to say the gables are compatible with

10 870-880 Jones St., 1500-1504 Seventh St.

5 ATTACHED TOWNHOMES	
Zoning	R-1A Limited 2-Family
Units	5
Year	1989
Height	2 stories
FAR	0.48
Density	18 units per acre
Coverage	28%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

the single-family typology in terms of massing, but the overall building's blunt-ness is not compatible. The questions you're asking are not allowing for the nuances of what REALLY make buildings work or not.

- These are compatible in many ways, which is why I checked the boxes. But are they good? No. The are boring and ugly. The facades are so flat despite the breaks in roofline and massing, and the window proportions are mismatched and senseless. Is bad architecture "compatible?" In this case, yes. Is that good? No.
- Unattractive
- Livable scale -Nice private yard space for residents -Good setbacks on all sides -Peaked roof matches older neighborhood buildings.
- Not much to like.
- Yard space is minimal - little backyards, front bit of lawn and plantings..

2. *Would you like to provide any additional explanation or feedback?*

- Less driveway, more green space.
- Needs street trees
- This building is clearly low income housing and making that designation so apparent does not seem necessary or dignified for the residents. Some landscaping and stepbacks would make this building more appealing.
- Don't like parking spaces in front.
- These are blunt, the big swath of parking is ugly, and the screen walls create a brutal feel.
- That big wide driveway is ghastly. I don't think that you should force parking to the rear of Berkeley's small residential lots because long driveways waste so much space, and backyards should be for people, not cars, however I do object to this swath of concrete.
- Could be taller, larger units
- Needs landscaping (native plants)
- Lots of Driveway cuts across sidewalk
- More density
- Set too far back from street. Doesn't use lot space well. Grass in front of structures is a waste of space.
- Just build an apartment building instead of these. The residents don't benefit from something that looks like a house but doesn't function like one, and neither do the neighbors. Build an apartment building, with three stories and a flat roof, just a tiny bit taller than these, with better materials and a more creative design, and better, more
- hidden parking management. that will yield more housing, with a more coherent and honest design.

3. *Would you like to provide any additional explanation or feedback?*

- Severe appearance will be mitigated by that one tree's growth. The parking apron could be permeably paved, and the trash/"yard" space re-designed.
- These are good example of having open space available.
- All over the country, houses sit empty because

they are bought in large part by hedge funds and the very wealthy while the pretense continues that this new housing will benefit anyone except the super wealthy. Also, consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https://inequality.org/great-divide/tax-the-rich-global-wealth-report/ See my comments on the first page.

- These questions, throughout both surveys, are missing the point. Why ask about "compatibility"? That's not a useful gauge of what the future of Berkeley should be; most people will interpret that to mean matching, and that's not useful in thinking about the future cityscape of Berkeley. Think about it: A building that's larger than its neighbors, and different than its neighborhood may be "appropriate" in the immediate context of architectural "fit" and our high demand for more housing, and not be "compatible" / "similar" to what's there now. I wish this survey had more of a preamble to get people in the right frame of mind. As it is, I don't think the checkbox selections will be meaningful. I also REALLY wish you'd asked people, once they're done with reviewing all the building examples, to step back and think about their responses and impressions in the aggregate, and express their thoughts on each of the seven categories you're asking them to box each project into. In my many years of creating surveys and questionnaires, those opportunities for big-picture feedback are often the most valuable part of a survey like this.
- Placement is poor – despite large setbacks, it doesn't transition smoothly from street to building. Buildings feel disconnected.
- This building blends better in the community then newer buildings
- By stepping back the upper floor 4 feet or so, a balcony could have provided some additional outdoor space on the 2nd floor. Residents cold then "oversee" their neighborhood, thus adding to the security and visual enjoyment of the street.
- These scattered site public housing developments are holding up fairly well with proper maintenance and the sort of generic traditional design goes well with the neighborhood. As always parking is difficult to deal with but at least there is some yard space.
- Very little land available for residential; more density per parcel = more sustainable development
- These look cheap and uninteresting.
- A very uninspiring project. Front are all about parking cars. Wasted lot use. Large, unused yards, poor design, and cheap finishes. One of the poorest projects on the tour.
- Simple, nice design. Only 2 stories but with the peaks appear taller and a little out of sync with surrounding single story homes.

11. 1508 10th St.

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- I didn't get this one completed on walk. I do think these convivial shared paths can be wonderful - especially if they're not just driveways. Please see below.
- These fit in the neighborhood but they seem like a missed opportunity for improving the block.
- Like that parking is hidden, not in front.
- 1. Scale on the street, window detail, and materials create a low-impact facade. 2. Six units on a smaller lot is great, but these are clearly small units, so not a great reference point. 3. Yes, they are "compatible" with the neighbors, but twice the unit count, as a 2-story building, could be just as "compatible".
- This complex is perfectly compatible, but is that good? I vote for change. Not radical change, but a steady, meaningful increase in density. It's a city.
- Stylistically fits into existing neighborhood.
- Aesthetics really fit in with this neighborhood
- Nice shared driveway that feels like a courtyard for gathering space. -Noticed that unit is easily converted to ADA accessible with ramp -Nice garden spaces
- They did it right! Low visual impact, fairly earth friendly landscaping and hardscaping.

11 1508 10th St.

6 UNIT COTTAGE COURT	
Zoning	R-1A Limited 2-Family
Units	6
Year	1926
Height	1 story
FAR	0.37
Density	30 units per acre
Coverage	46%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

57

- Low, single story units like original homes in neighborhood.
- This grouping invites neighborly interaction..

2. *Would you like to provide any additional explanation or feedback?*

- These older 'garden court' complexes add character to our neighborhoods. They could certainly be more than one story, say, a mix of one, two and three story units.
- Trees
- I would like to see these buildings with some two story areas- taller would be better! That would allow for more open space rather than just a driveway down the middle.
- Solid walls are uninviting and a security concern.
- Why do we want to increase compatibility with a low density boring neighborhood? We need to let the pattern change. Not radically, but steadily.
- If a remodel were to be done, these could all be 2-story and increase density quite a bit.
- None
- Needs landscaping (native plants)
- More density/height
- Teensiest of 'yards'.
- I love these, and there are several examples all over Berkeley, but they're just too short. Creating density on scarce land without height by covering the whole lot is the worst best option. The overall layout is charming though.

3. *Would you like to provide any additional explanation or feedback?*

- This is a very cute example, but not something that translates to building today.
- The overall relation to the west side of 10th and nearby streets is sound. A replacement structure(s) wouldn't hurt (m)any more than this very cozy attractive set of cottages. It is dominated by an anachronistic driveway, useful also as a play area. All over the country, houses sit empty because they are bought in large part by hedge funds and the very wealthy while the pretense continues that this new housing will benefit anyone except the super wealthy. Also, consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https://inequality.org/great-divide/tax-the-rich-global-wealth-report/ See my comments on the first page.
- While it fits that side of the street, the Jones St development overwhelms this.
- Why do you want to know how something that's already matching exactly the pattern of a neighborhood, could be changed to "improve compatibility"? I don't see what that can teach us in tis exercise about where to go. I think a lot of people would agree that doubling the height of these buildings would be just as compatible. Many of these 7 aspects would be better asked as a sliding scale, like whether a project should be less dense, is just right, or should be more dense. Or have more or less yard space, or be taller or shorter.
- This is what should be built

- Should be updated to 2-story units.
- A OK example of the cottage compound though the parking drive seems non-functional compared to 1810-16 10th
- These were great for their day and add to the diversity of housing types.
- Very indicative of the time built. Charming cottage look. For today's needs, this is too low in density. But adds to the charm of the neighborhood.

12. 1080 12 Jones St. - Along San Pablo Ave.

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- Being along a busy corridor makes this feel compatible. It's got some character to the design. Perhaps not all of the first floor needs to be retail? First floor units are great for people who need wheelchair or other accessibility.
- This isn't particularly compatible today, but I hope it will be compatible with where we are headed. It's certainly an appropriate site for this scale of development.
- The varied facade is the buildings only redeeming quality
- Unattractive
- Good break up of facade into multiple surfaces
- I go by this building all the time. It's great. San Pablo can accommodate any height, and of course the trees humanize the whole thing. We don't need to force developers to use 19 different facade materials, but it's fine here.

2. *Would you like to provide any additional explanation or feedback?*

- Again, creating open space, green space, a small plaza on the street front would be VERY welcome. Look at these kinds of complexes in other countries -- South America, Europe, some places in Asian countries.
- Trees, privacy for western neighbors, direction of traffic from building to San Pablo v increased neighborhood traffic
- The fifth story seems too big for the street. That's a big jump and there is nothing nearby over four stories. Too tall.
- Step backs on the 10th side were as thoughtful as possible to maintain feasibility but nevertheless somewhat dwarf the 1- and 2-story buildings across the street.
- Height on the backside is too much. Should have more of a stepback to blend in with the part on 10th st and with the houses across the street. It effectively makes the lower height part on the 10th St. seem taller when viewed from across the street. the 1080 Delaware St building does it much better.
- Could be taller along San Pablo
- Why do we still have little residences on San Pablo Ave? If we want this new development to be compatible, then make sure that the zoning encourages redevelopment of those underutilized parcels.

12 1080 Jones St. - Along San Pablo Ave.

MIXED-USE 5+	
Zoning	C-W W. Berkeley Commercial
Units	170 (16 BMR)
Year	2020
Height	5 stories, 60'6"
FAR	3.55
Density	99 units per acre
Coverage	70%

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

- OMG: no more wood/faux wood veneer on buildings.
- We need to fill that commercial space when possible!
- Needs landscaping (native plants)
- Really dislike driveway cut across sidewalk on San Pablo. Not sure why the driveway on Jones was insufficient. -EMPTY, UNENGAGING STORE FRONTS on San Pablo AGAIN. -Dislike the amount of overhang over sidewalk. Some is ok, this is too much
- Do not put garage entrances on San Pablo Avenue! This hinders the development of future bike and bus lanes.

3. *Would you like to provide any additional explanation or feedback?*

- Hard to see some from street. From Delaware, house next door has adequate setback that improves the west setback on 1080 Jones - otherwise it might be too small. Seems to need open space.
- Those sapling trees will eventually mask much of the brutal effect. This is after all a major housing addition. The really sad part of this and TOC residential construction in general is the utter gloominess of the ground floor's (empty) tenancies. The San Pablo sidewalk width is very considerate for a major street's foot traffic!
- All over the country, houses sit empty because they are bought in large part by hedge funds and the very wealthy while the pretense continues that this new housing will benefit anyone except the super wealthy. Also, consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https://inequality.org/great-divide/tax-the-rich-global-wealth-report/ See my comments on the first page.
- Shows the continuing challenge of maintaining conformity with 2 very different zoning districts (C-W and R1A in this case).
- 1. Planter boxes are a definite plus for the pedestrian experience. 2. Overall building is okay-ish, but far from imaginative. With the exception of the odd triangular terraces it's yet another piling up of Lego blocks.
- Yet another IKEA box for yuppies. thanks berkeley city council
- Wrong style and too high.
- I really notice how much this building shades San Pablo Avenue sidewalk FROM ACROSS THE STREET. If we are building up San Pablo Avenue to this height, please make a plan for improved street lighting starting at 3pm.
- A solid wall on San Pablo Avenue that casts a huge shadow. Stepping back from San Pablo, like the other side of the development would have made it less Manhattanesque.
- It steps down to the 10th St side and goes to townhome style to interface with the neighborhood there but unfortunately on the Cedar Street side it looms menacingly over its neighbors. Less successful than 1080 Delaware.
- Appropriate for location
- With the exception of the garage entrance on SPA, this is a great example of what I would like to see on transit rich corridors.
- Rather plain and uninspired architecture. Overall, makes sense as it's right along San Pablo Av. Like the large windows and active ground floor space.
- What can I say, it's an apartment house. But it's on a commercial corridor so altho huge for Berkeley (by the old standards), it's ok.

13.1080 Jones St. - T 12 ownhomes Along 10th St.

Comments

1. *For a building of this scale, what are the features that make it compatible with the surrounding neighborhood? (Other)*

- This building is appealing at street level and the massing works well by increasing density without challenging the existing character of the neighborhood.
- It's compatible with the future of Berkeley. You can't fault this building for expressing new conditions, while the parcels around it reflect the conditions of 60 years ago.
- The varied facade again is better than a flat plane, but that is the only redeeming quality

- Good placement of driveways
- Unattractive
- Great stepping down from massive San Pablo side to 10th St. side. -This three stories in front feels far lower than the other three story building in this tour near/on fifth. Maybe it is? If it is much lower than the other three story buildings, could we encourage more three stories at this height? Maybe relate lot coverage to story height (like average roof height?) -Despite many driveway cuts across sidewalk, these have been arranged to feel less obtrusive across sidewalk. -
- I love the change in height from SPA to 10th Street.
- Overall, well done. I like how the building steps down here, toward the neighborhood. I like the townhouse look to these eastern units. I like how the project is tied together on the northern side with the community space and parking entrance.
- Nice metal-work balconies but small and not private.
- Yes, very well done. The stepbacks in particular enable high density while keeping everything at a human scale for the neighborhood. As do the individual parking/entrance allotments. Every "house" is distinguishable by its facade design, without trying to pretend that these are any kind of traditional row house. Some neighboring houses are one story, but there are two and three story buildings in every direction within one or two lots.

2. *Would you like to provide any additional explanation or feedback?*

- Better design
- These same building heights could be executed in a gentler, more sensitive way, that would fit with the SF residential neighborhood they are confronting. The harsh boxes, despite being "broken up", are harsh.
- Needs landscaping (native plants)
- Looks a little sparse in landscaping and trees.
- Massive and massively long (almost entire block); bigger and taller than older buildings in neighborhood. Ugly blank wall (garage) and small front yards on Jones..

3. *Would you like to provide any additional explanation or feedback?*

- A crowded row as compared to structures on the west side of the street. No "relief" sidewalk area trees will help shield the brutal effect.
- All over the country, houses sit empty because they are bought in large part by hedge funds and the very wealthy while the pretense continues that this new housing will benefit anyone except the super wealthy. Also, consider whole area, not only house by house. Did you know a great percentage of new housing is bought by hedge fund companies, not individuals? Maybe over 50%. See Aaron Glantz's book and Chuck Collins: https://inequality.org/great-divide/tax-the-rich-global-wealth-report/ See my comments on the first page.
- See comment for the San Pablo side of building
- Dwarfs buildings across the street.

12 1080 Jones St. - Townhomes Along 10th St.

(Same development information as table on pg. 14)

1. For a building of this scale, what are the features that make it compatible with the surrounding neighborhood?

- ☐ **Massing.** Overall building shape, size, and form
- ☐ **Lot Coverage.** Percentage of the lot that is occupied by building(s)
- ☐ **Placement.** Building location on the lot and distance from the sidewalk
- ☐ **Height.** Vertical distance from sidewalk to top of roof or parapet
- ☐ **Stepbacks.** Upper stories pushed back from the sidewalk or adjacent buildings
- ☐ **Yard Space.** Ground area not occupied by building(s), including landscaped areas
- ☐ **Balconies/Terraces.** Upper-story open space used by residents
- ☐ **Other.** Please Specify _____

2. What features could be different to improve compatibility?

- ☐ **Massing** ☐ **Height** ☐ **Balconies/Terraces**
- ☐ **Lot Coverage** ☐ **Stepbacks**
- ☐ **Placement** ☐ **Yard Space**
- ☐ **Other.** Please Specify _____

3. Would you like to provide any additional explanation or feedback?

BMR = Below Market Rate, affordable to households that are moderate income or below
FAR = Floor Area Ratio, calculated as gross floor area divided by lot area

55

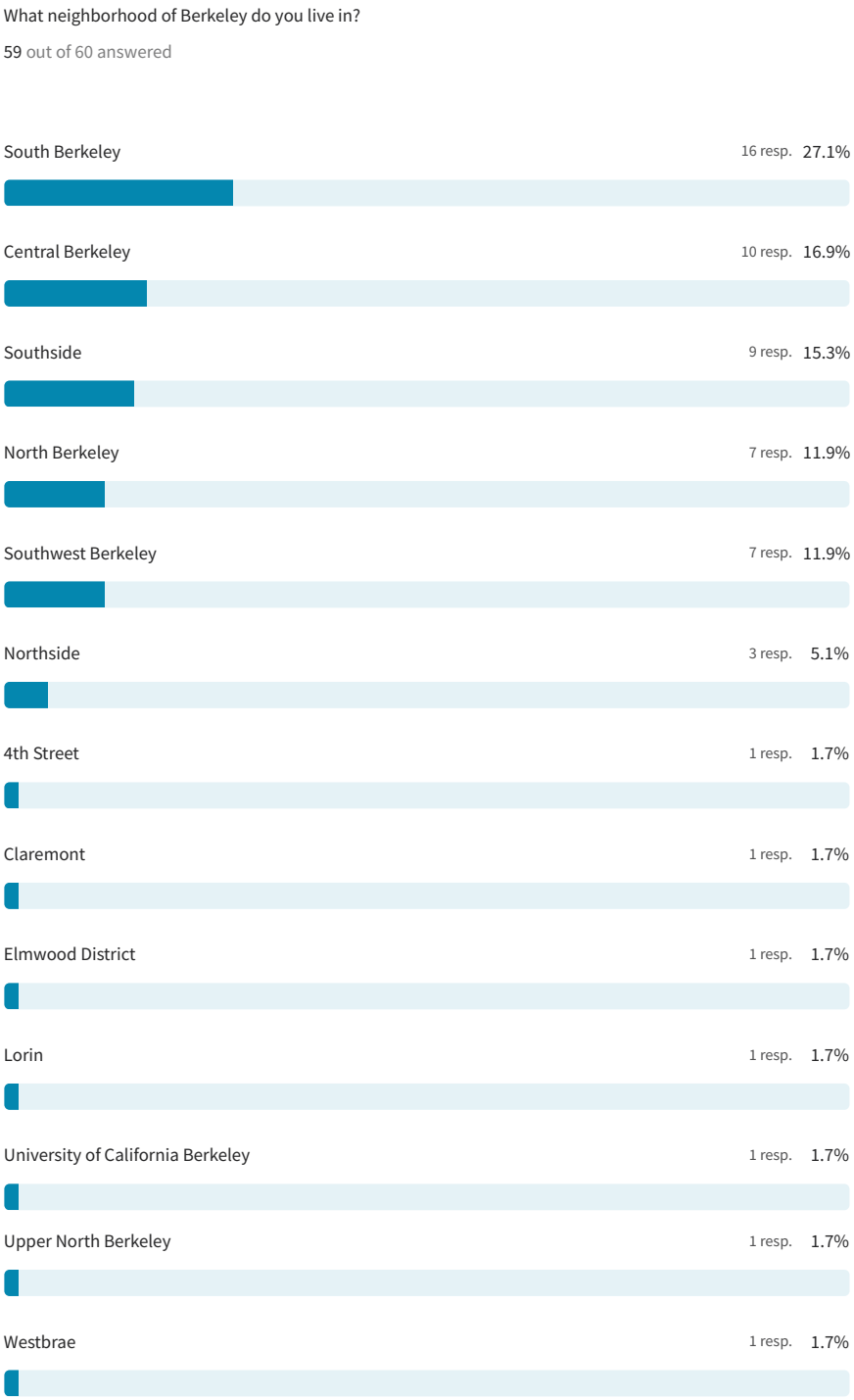
- I know that you're trying to control the responses here to solicit information on your first phase of "massing" work, but the success of any given massing is SO tied up with the materials, details, colors, and other factors, that these check-box responses really can't provide useful, dimensional, contextual feedback.
- Another Ikea box for yuppies.
- The style need to keep with existing homes in the community.
- Bunching the driveways/parking is helpful. Otherwise see comment on previous part of number 12
- Good use of space
- This is a beautifully executed project. I love how most of the block was redeveloped to create more housing.
- A well-done project, overall.
- Since this is the end, I'd like to add a couple of additional comments: For a city that claims to be environmentally progressive, none of the new buildings have enough actual green stuff, as in trees and other plants. And if the standard is compatibility, none of the new structures are compatible with the original 1 and 2 story homes in West Berkeley. Thank you for this opportunity to give input.

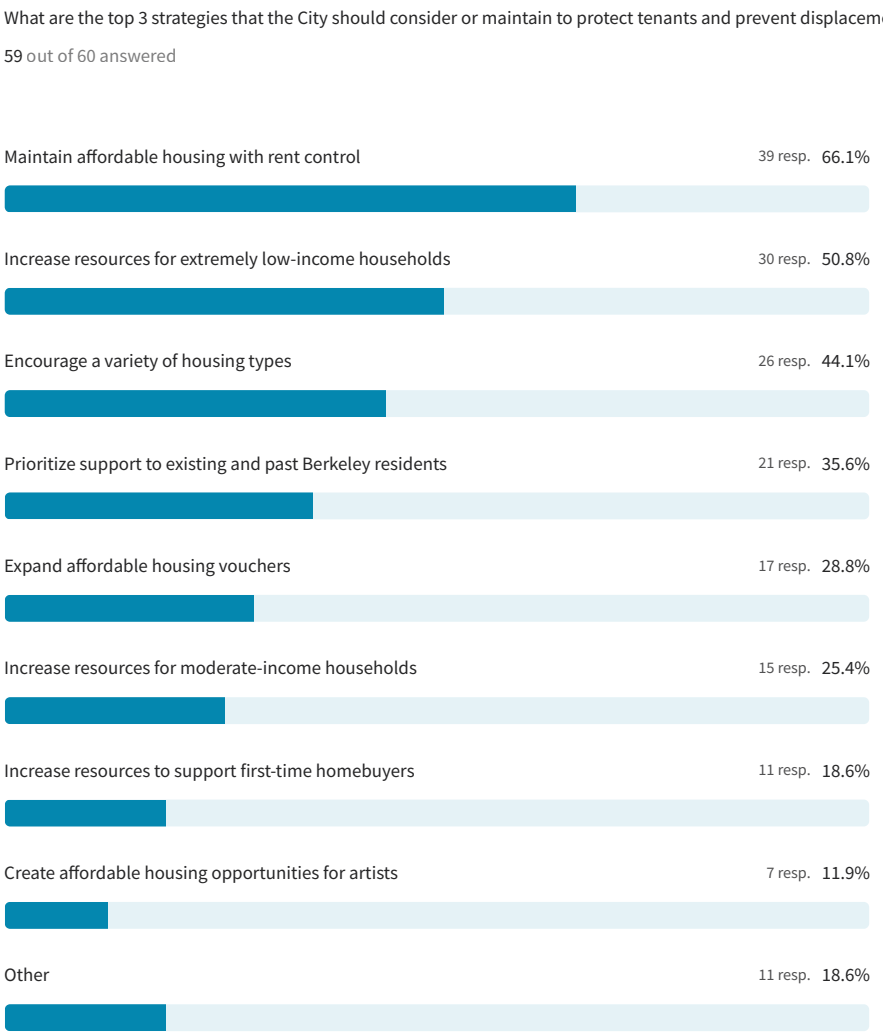
F5.3 RENTER SURVEY

OVERVIEW

In order to collect feedback directly from renters, a flyer was handed out to people, requesting they fill out a four minute survey on renting in Berkeley. The survey received 195 views and 59 individuals filled out the survey. The results are included below.

Figure F-26 Renter Survey Results





Other:

- Upzone neighborhoods across the city
- Focus on creating more rental units at all levels of income. Encourage new construction
- 1. Increase funding for Section 8 Vouchers and 2. Include resources for low income renters and home buyers
- Build more transit oriented multifamily housing
- More affordable housing
- Streamline approval for market-rate housing projects
- Returning the land back to natives
- Same as H (affordable housing opportunities for artists) expanded to local teachers as well
- Encourage the development of more affordable housing.
- Allow much more housing to be built, and make approvals quick and predictable with by-right ministerial review
- Stop flipping w programs such as land trust

What tenant programs are working well in the City of Berkeley?

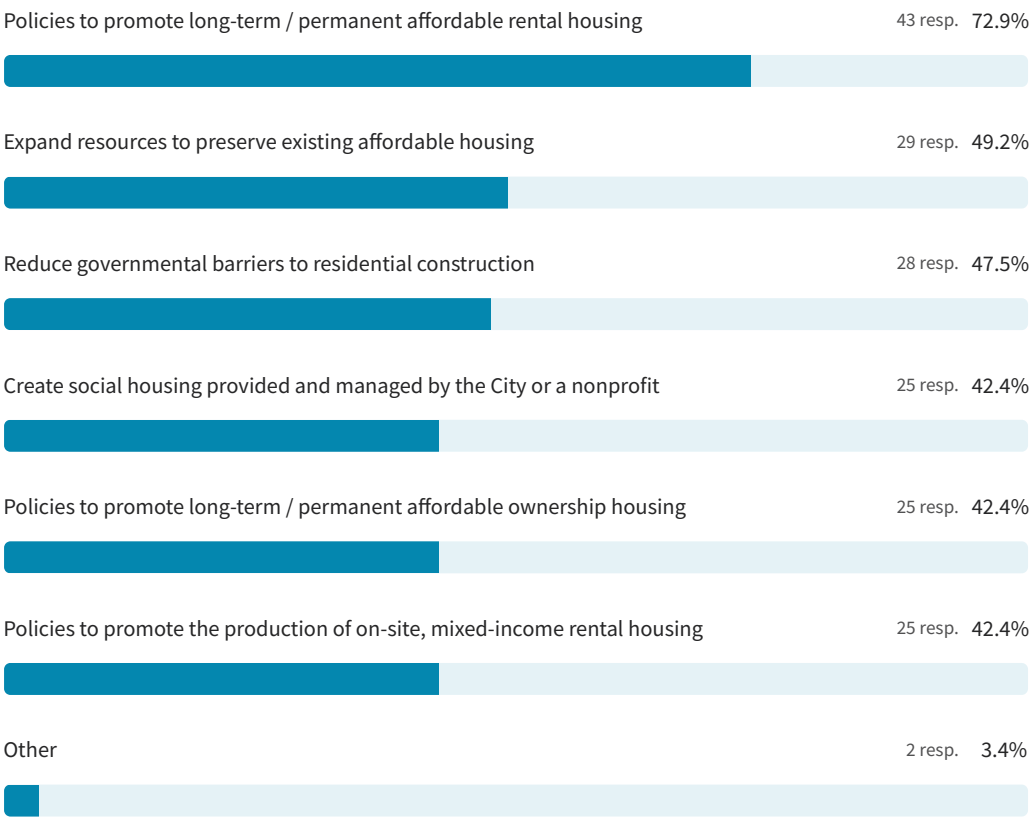
- Berkeley Tenants' Union
- I don't know any
- I have no idea
- Not sure what are available
- None
- Rent Board, HHCS, BHA (mostly)
- "Rent Control Just Cause eviction law tenant financial assistance programs"
- I don’t know of any.
- None. The BMR program is a fat mess that’s constantly abused by the landlord. They made us live with roaches, tried to charge us $180 for water(city pays this) and jack our rent up over a hundred dollars every year.
- I haven't used any. Rent transparency is useful via the city website.
- I’m not aware of specific tenant programs.
- No idea
- i dont know of any
- rent board
- Rent board
- Shelter Plus Care
- Rent Control
- I'm not sure what this question is asking. Examples would be nice. Do you mean things like rent control?
- Shelter + Care
- none
- For me absolutely nothing!
- I’ve lived in and rented in Berkeley for 6 years, and I can honestly say I have no idea about any tenant programs besides rent control. I don’t feel like rent control is succeeding in the goal of making renting more affordable—there are just too many people who need to live here and not enough housing. Perhaps rent control is preventing abuses like super high and sudden rent increases? I’m not sure
- Rent control, I guess
- rent control
- Project Base Vouchers
- Berkeley Rent Board - Moni Law
- I don’t know
- Not aware of any
- I appreciate rent control because it allows me to continue to live here.
- I do not know of any of the tenant programs and thus cannot comment on their efficacy
- Just Cause Eviction
- I don't know of any, that will help people from becoming homeless.
- Rent stabilization
- I don't engage with any
- Rent control
- I don't know any of them
- I don’t know what are them
- None that I know of
- I am not sure
- I am unsure
- rent control
- Shelter Plus Care
- Tenants Together, Rent Board (to degree its understaffing allows it)
- It's difficult for me to express judgments about specific tenant programs (which were designed to protect low-income tenants like me), because I recognize a failure of the overall system. Ironically, Berkeley's system discourages investment in and development of affordable housing >> producing economic conditions that are leading to the displacement of longstanding population of renters (people I love). The situation is becoming tragic.
- Rent control
- Rent control, security deposit interest
- Berkeley Housing Board
- NONE. For example, the City has no enforcement teeth and refuses to enforce cases of toxic mold, which drove me out of my rent control department of 30 years to a place where my rent quadrupled and where I am starving to death literally. if I want to know what is happening to support tenants in the city of Berkeley, I go to the Berkeley

Tenants Union website. Increasingly the mayor and the City Council are obviously apathetic and hostile to the needs and plight of disabled renters like me who are falling more and more behind. Berkeley needs a better rent control and expanded rent control to address the housing crisis faced by low income folks, homeless folks, and students. Also, as an immunocompromised person, when we interact with City of Berkeley officials, it is mandatory that they wear high-quality masks. They won't. The City has no provision to protect immunocompromised tenants from landlords who take advantage of this and terrorize us by refusing to mask up, by workers, etc. WE NEED PROTECTION AND ACCOMMODATIONS PUT INTO LAW NOW TO PROTECT IMMUNOCOMPROMISED TENANTS LIKE ME.

- Berkeley's Rent Board and it's policies is what enables us to live in the city we love.
- Rent Stabilization
- Rent protection, but my apartment doesn't qualify for it.
- The program that makes the landlord do inspections.
- Berkeley Rent Board, as far as I know.
- rent board, rent control
- Baclt
- I haven't accessed any specific tenant programs but the snail mail communication has always been helpful (e.g., notifications about lawful rent increases). It would be great if you could sign up for e-communication but I understand that the letters are tied to the units, not to individuals.
- Hud vouchers, land trust coops, housing first programs, rent control
- Housing Trust Fund, Housing Retention monies

What are the top 3 strategies that the City should consider to facilitate the construction of affordable housing?

59 out of 60 answered

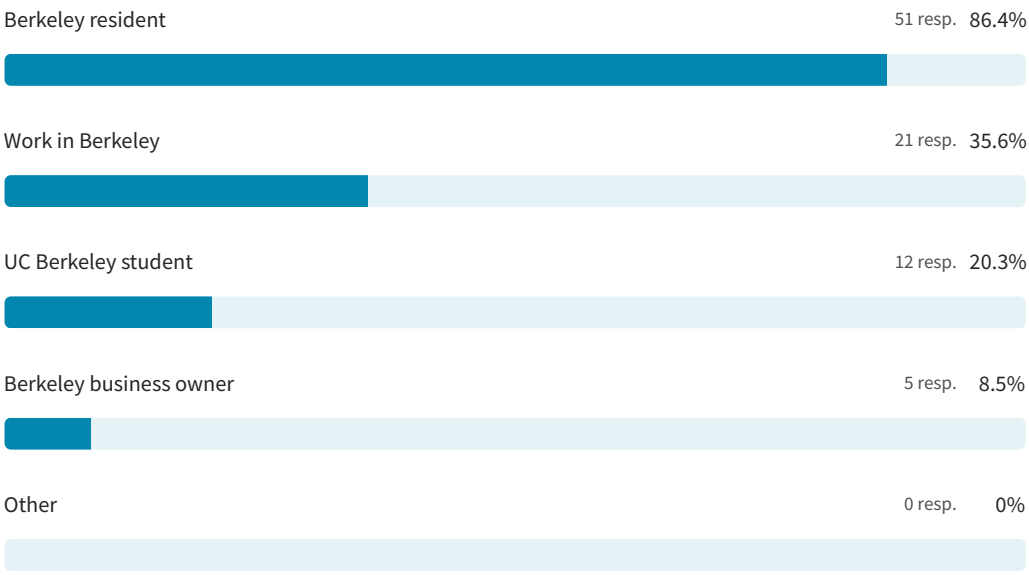


Other

- Do not monetize public property for private gain
- Stop caving in to developers and Cal!

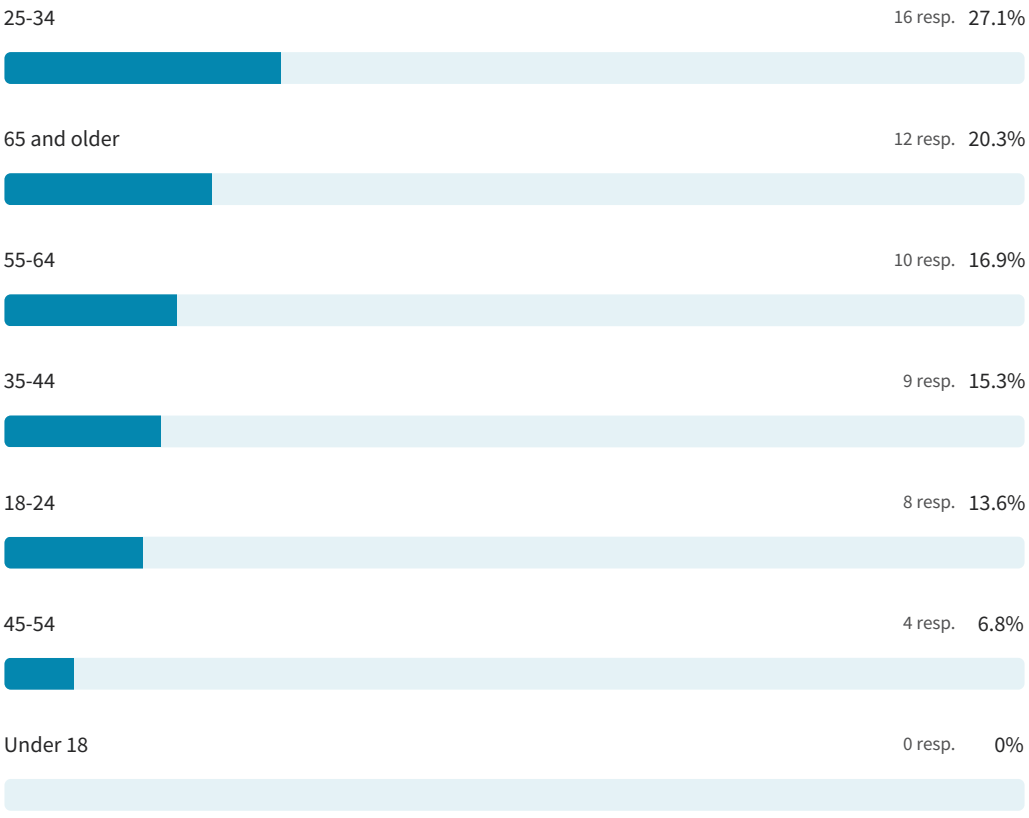
What is your affiliation to Berkeley?

59 out of 60 answered



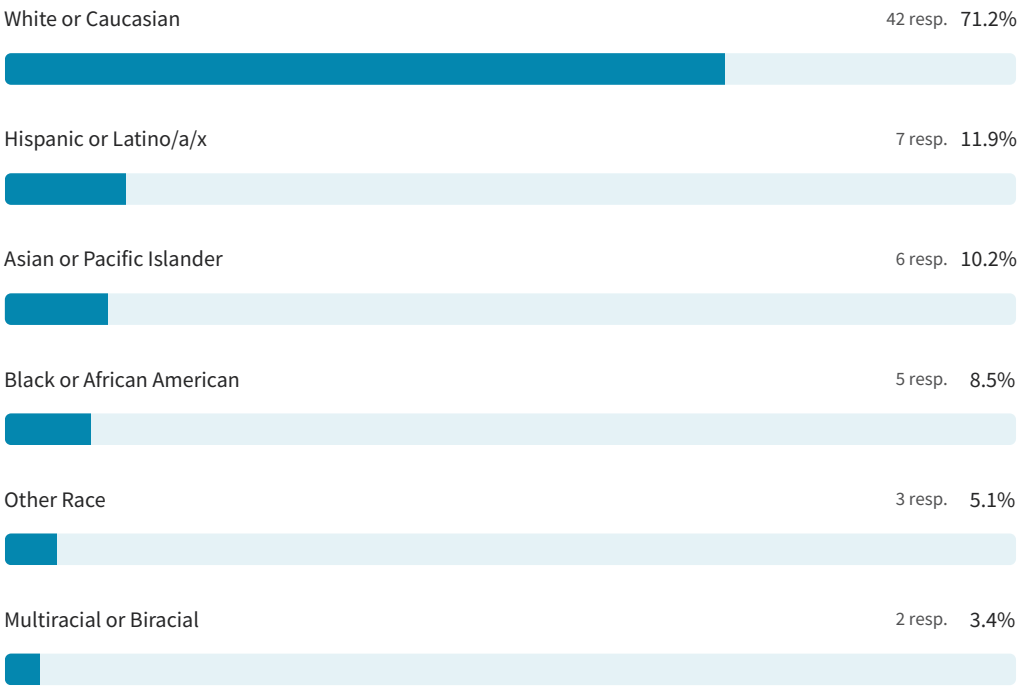
What is your age?

59 out of 60 answered



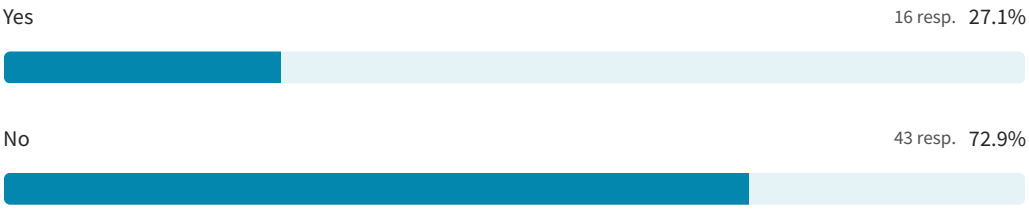
How do you identify?

59 out of 60 answered



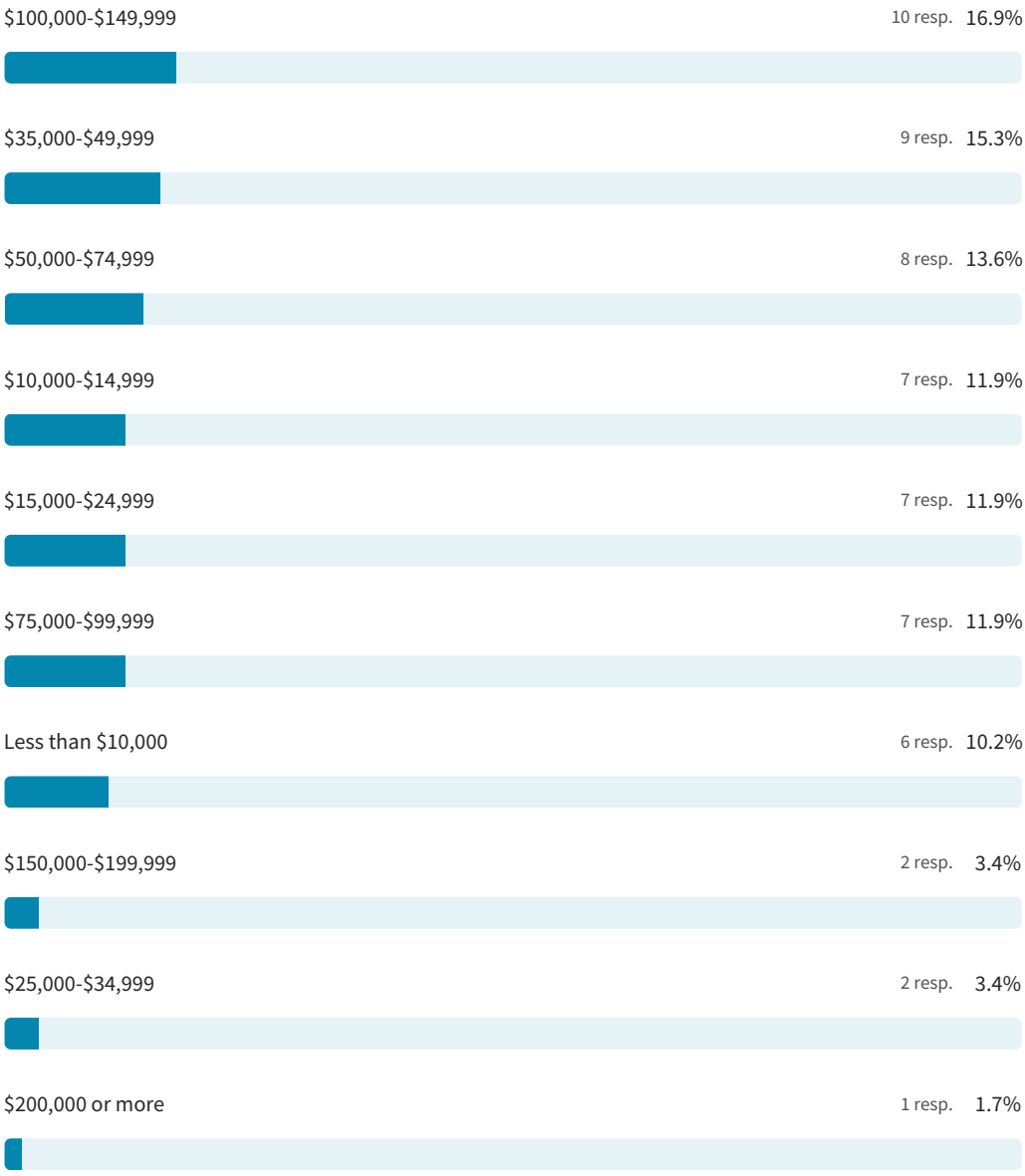
Do you have a disability? (e.g. hearing, sight, physical, mental)

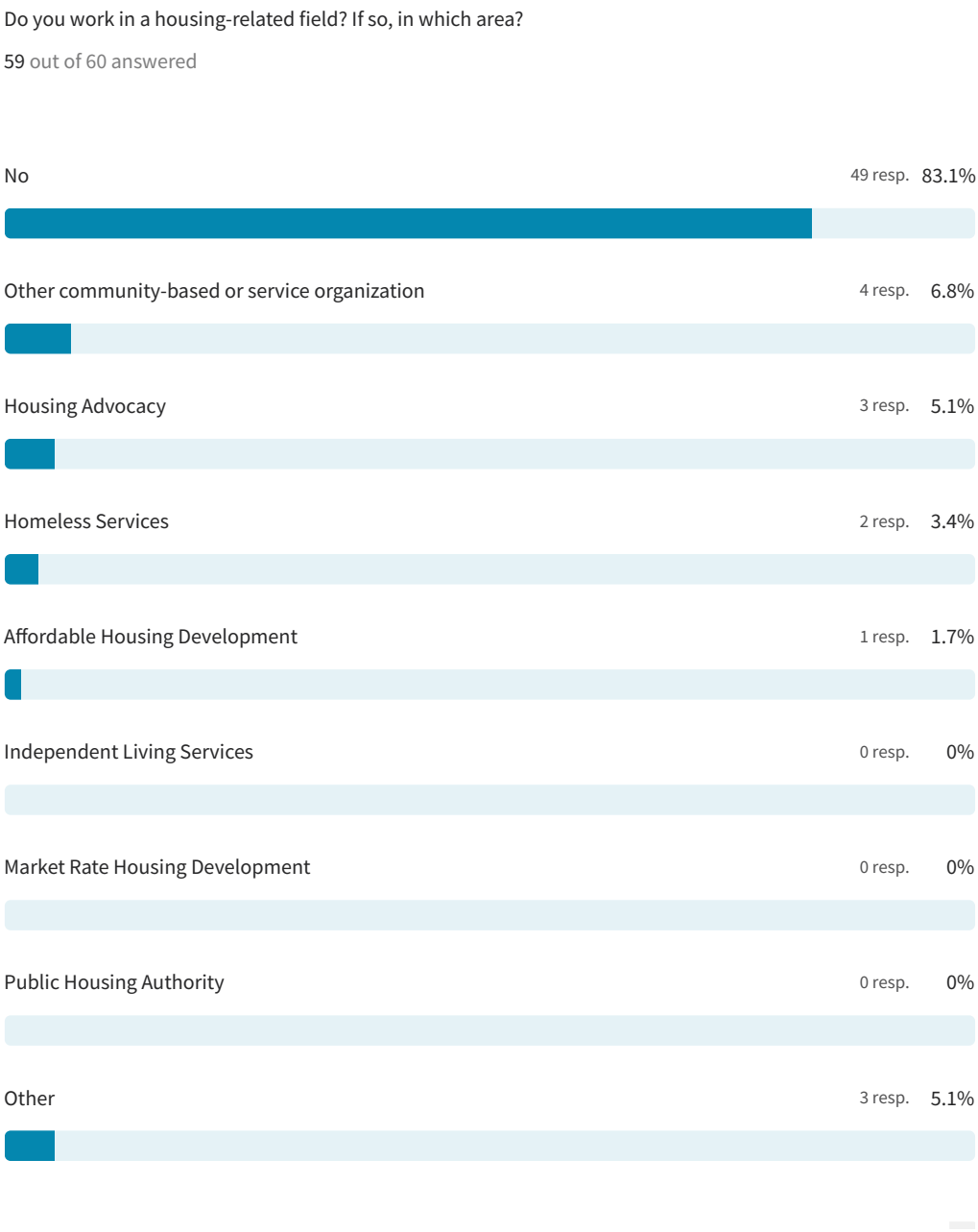
59 out of 60 answered



What is your annual income?

59 out of 60 answered





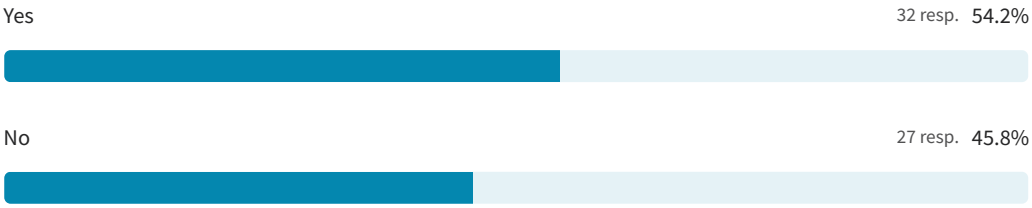
Other

- Construction
- Evaluation for social services and programs, including non-profit community development corporations
- City commissions-it is work but don't know if you consider it such.

Would you be interested in participating in a small group Zoom meeting to discuss your housing experience?

We are seeking 10 participants and the meeting will be held on **Wednesday, May 25th at 12pm** and will last for 90 minutes. Participants will receive a $20 gift card to Berkeley Bowl after the meeting.

59 out of 60 answered



F6 STAKEHOLDER MEETINGS

The City of Berkeley held stakeholder interviews between the Fall of 2021 and the Spring of 2022 with individuals and groups that have insight into or a critical stake in local housing. The goal was to establish a baseline understanding of the community's housing needs, historical and current housing production, housing constraints, housing opportunity sites, and goals, priorities, and desired outcomes for the updated Housing Element. The interviewees also provided guidance for future community outreach and engagement.

This report briefly summarizes key themes and insights shared during the interviews.

F6.1 OVERVIEW OF STAKEHOLDERS INTERVIEWED

Interviewees included representatives from housing advocacy groups, community organizations, organizations representing special needs, market-rate housing developers, affordable housing developers, and real estate professionals.

- **Housing Advocacy:** Housing advocacy groups advance housing justice by organizing, building coalitions, providing resources, and empowering communities. While housing advocacy organizations can cover many topics, those interviewed specifically focused on the three Ps: Preservation, production, and (tenant) protection.
- **Community Organizations:** Community organizations aim to serve the community's needs, with housing being a primary concern. Members work with other organizations, local government, and individuals to address housing insecurity and homelessness. These organizations advocate for and support their members, which often represent specific populations such as Latinx or African American members.
- **Organizations Representing Special Needs:** These organizations offer support services tailored to the needs of the groups they serve, including seniors, disabled, and homeless. In addition to providing assistance in securing housing, these organizations often offer a safe space to go and a wide array of other community resources, such as meals and transportation.
- **Institutional Representatives:** Both UC Berkeley and the Berkeley Unified School District (BUSD) are involved in housing planning and development that impact the needs of Berkeley's workforce and significant University population.
- **Market-Rate Housing Developers:** Market-rate developers build housing and mixed-use projects to meet market demand -- to be rented or sold without income restrictions.
- **Affordable Housing Developers:** Affordable housing developers build and preserve housing for low-income and special needs populations. These organizations create affordable housing that are deed-restricted for households who meet certain income criteria.
- **Real Estate Professionals:** Real estate professionals include brokers, property managers, and leasing agents. Working with both residents and property owners, they are knowledgeable about the housing needs, real estate market, and demands of the local community.

INTERVIEW THEMES

GENERAL COMMENTS

Berkeley stakeholders highlighted the following as examples of housing success in the City:

- **Diversity of housing options and amenities.** Berkeley provides a variety of housing options and local amenities. Amenities identified include: street trees, good schools, mixed-use corridors, and a sense of identity.
- **Proximity of housing to campus.** Students, faculty, and staff are generally able to live in the city and close to campus.
- **Tenant-landlord relations.** The Ellis Act is not an issue and tenants abide by lease terms.

HOUSING DEVELOPMENTS

Stakeholders also identified the following housing developments as successes:

Specific Projects

- **Maudelle Miller Shirek Community a**ffordable housing development near the Ashby BART station.
- **Harper Crossing** affordable housing development for middle- and low-income seniors, located close to the Ashby BART station.
- **Berkeley Way** affordable housing development, including a homeless shelter and on-site supportive services. Additionally, this project's use of funds from the City's Housing Funding Trust Fund was highlighted as a success.

General Development Successes

- **Development along Shattuck.** Participants identified recent increase in multi-family and denser housing throughout the city, but particularly downtown along Shattuck.
- **Transit-oriented development projects near BART.** Participants highlighted the plan for housing near both the North Berkeley and Ashby BART stations, and in particular efforts to provide affordable housing near these sites.
- **Market rate development projects.** The success of for-profit development and the contributions to both the Housing Trust Fund and the provision of inclusionary housing.
- **Non-profit development projects.** The nonprofit sector's ability to work with limited sites.

CITY PROGRAMS AND INITIATIVES

General

- Provision of a broad mix of programs, including both housing and complementary programs demonstrate and support City priorities of creating more affordable housing, protecting tenants, preserving existing housing stock, and making it easier and more affordable for residents to stay in the city.
- Successful communication and leadership from the Mayor and City Council.

Tenant support and services

- City's support of the Tenant Opportunity to Purchase Act (TOPA).
- Rent control allowing residents to stay in their homes and is the most well-known form of support amongst renters.
- Rent subsidies.

Affordable housing policies and funding

- Effort to get a policy passed for residents to stay in the city and not lose "naturally occurring affordable housing" (term for housing in the market that is still available for low income)
- Passage of Measure O (2018) to fund housing for low-, very-low, median-, and middle-income individuals and working families.
- Funding for limited equity coops.

University relations

- Negotiations with the University of California to keep rents down and ensure that it does not continue to increase enrollment without providing additional housing.

Housing for people with disabilities

- Efforts to keep residents in their homes via the loan program for disabled property owners to upgrade their homes and ensure continued home access.

CONCERNS WITH HOUSING IN BERKELEY

Homelessness

- Serious concern about people who are sleeping outside and on the streets - there is a need for better support of support services by the County and City.
- Service providers and nonprofits lack of capacity and resources.

Lack of Housing (especially Affordable Housing)

- There is a general lack of supply across the whole city.
- Too few affordable housing units available. Wait lists are too long and it is not meeting the needs of low- and moderate-income residents.
- Lack of housing diversity when it comes to affordable and subsidized housing. There is a need for more Section 8 housing.
- Unbalanced provision of market rate housing as compared to affordable housing.
- ADU's are market rate rentals, and should not be considered affordable.
- You have to have preservation of existing housing alongside production of new housing to ensure there is enough, affordable housing.

Affirmatively Furthering Fair Housing

- Making sure that a city is affirmatively doing fair housing. Need a strong needs analysis that will support policies to address the needs and robust community engagement process in that work.
- Need to include disability, low-income people in these efforts.

Lack of Affordable Ownership Units

- Non-profit affordable housing is all rental; little opportunity for ownership and building equity.
- Need a plan that distributes affordable housing across the whole city.

Lack of Family Housing Options

- There's not enough affordable housing provided for families – most new developments appear to target young professionals and students.
- Section 8 family housing in close proximity to green space , recreation centers, and outdoor activities is needed.
- Lack of housing options for families. Many families are priced out of homes and there aren't enough apartments large enough or affordable enough for families.
- Berkeley has a "Missing Middle" problem and is especially lacking affordable missing middle housing.

Lack of Accessible Housing

- Would be helpful if everyone applied principles of universal design to ensure that housing benefits and is accessible to the widest possible range of people.
- There should be incentives to make ADUs (and all types of housing units) accessible.
- Low-income, disabled housing needs are not being met. There is a need for subsidized housing for the disabled.
- Need more affordable and accessible housing for the growing older adult population.
- Accessible housing that allows communities to age in place should is not provided to the Black community.
- Disconnect between housing developers and the needs (both affordability and accessibility) for the disabled -- particularly for affordable, low-income housing (both nonprofit and for profit)
- There are too many constraints making it difficult for non-profits to make housing more accessible. For example, non-profits needs permissions from owners/managers before it can start work (e.g., adding ramp or handrail).

Parking Need for People with Disabilities

- People with disabilities need their cars because of their disability, so the increasingly common calls for less parking raise concerns.

Unhealthy Homes

- It is challenging to find an acceptable home to live in, making finding housing a taxing process.
- Mold is increasingly a problem, as homes age – sometimes it exacerbates disabilities. Need mold abatement (and avoidance) strategies.

Vacant Homes & Buildings

- The City should penalize owners of housing units that sit vacant for too long.
- There are many vacant buildings and storefronts along major arterials - there is an opportunity to reimagine these spaces as housing units.

Displacement and Loss of Diversity

- Housing unit production is not keeping pace with the significant increase of jobs in the Bay Area.
- Berkeley residents are getting priced out of homes by Silicon Valley tech employees, out-of-state investors, and corporations, leading to gentrification and cost of living increases.
- Fears of changing neighborhoods.
- Lack of transparency around who is buying homes.
- Need for a tax on foreign investors.
- Lack of affordable housing options is forcing people to move out of the area (often only to commute into the city for work and to maintain social ties) and contributing to a lack of resident diversity.
- Racial inequality in housing. Low income and communities of color are often displaced and have a more difficult time finding housing in Berkeley or staying in Berkeley. There is a need for a right to return policy to maintain ethnic and economic diversity in the City.
- There needs to be a Right to Return policy, specifically so renters pushed out due to gentrification have the option to return.

Employer-Assisted Housing

- Concern over whether teach housing as it is currently proposed in the city is the right policy. Teachers should be given agency to decide if they want to live in Berkeley and how they want to live.

Lack of Live/Work Opportunities

- Would like to see more, affordable live/work opportunities, particularly geared towards artists.

Lack of Funding for Housing

- The 20% affordable requirement and option to pay into the Housing Trust Fund is not enough.

Safety for Bicyclists, Pedestrians, and Transit Users

- Walking and biking should be made safer through bike lanes, street lights, and other accommodations.

RHNA and Housing Element Site Inventory

- When the city identifies a site for affordable development, they should do so across the city in high resourced neighborhoods and real sites.
- The City should also consider if a site could realistically be developed within 8 years. There is a shell game of identifying sites and not building anything. If supported by adequate zoning, then that would influence how competitive sites would be for LIHTC (Low Income Housing Tax Credits). If it is out of the area and not conducive to Tax Credits, then it should not be a site.

Tenant Protections

- Would like to see the restriction of owner move-ins and Ellis Act evictions.
- Rent-controlled tenants may feel too precarious to report landlords, there should be anonymized or automatic quality inspections.
- There needs to eb stronger rent regulations in general.

MARKET TRENDS

Retail and Office Markets are Declining

- Government constraints and the cost of tenant improvements make it hard for small businesses to survive.
- Declining uses, like single-story retail on arterials
- Retail is in decline – there are many brand-new buildings with vacant retail. We should convert retail into residential or live/work, allowing for more flexible uses of the spaces.
- Offices are also in decline. Not likely to have a lot of new office construction. Making conversions of upper floor office space to housing easier and less expensive should be considered.

Institutional Impacts on the Local Housing Market

- Churches with parking lots are an opportunity, especially if parking requirements for the new housing can be reduced.
- UC Berkeley housing more students on campus, which frees up housing for other residents and reduces issues related to move-in and move-out (which is a pain point for the community)
- Berkeley Unified School District (BUSD) is building staff/faculty housing (workforce housing)

BARRIERS AND CONSTRAINTS TO HOUSING PRODUCTION

Hazard Mitigation

- Don't reduce permitted housing in hazard zones. Focus on hazard mitigation.

Historical and Landmark Sites

- Historical and landmark sites (local, state, and federal) create challenges, e.g., usually not possible to put a second story on top

Site Constraints

- Small sites
- Best parcels are in retail, but most have existing tenants. Hard enough to get one to sell, let alone more than one.

Permitted Uses and Zoning

- R1 and R2, especially along the corridors, should be rezoned
- Bring back the 1970s zoning – Berkeley was downzoned. Any block with a building over 10 units should be rezoned to allow the same density.
- Height limits should be increased well beyond 35' - especially in areas near campus.
- Look at zoning. COVID and downfall of retail, and a lot of industries have moved. City could facilitate conversion of the industrial space to housing units by providing incentives.
- Not a lot of large of opportunity sites in Berkeley under the current zoning.
- The City should consider building on a per bed basis for student housing.

Permitted Densities and Heights

- Land use laws and ordinances that prevent development density and height
- Need to be able to develop in excess of 100 units – ideal is 150 units. This is mostly mid-rise (5-8 stories)
- Height is the biggest constraint
- The density bonus allows for greater flexibility with building higher; however, if a building goes above 8 stories, the construction type changes and costs increase, creating additional barriers.
- Lack of political will to relax development standards. Housing is very expensive to build.
- The City should encourage greater density along major arterial streets.

Development Standards

- Open space as calculated in some neighborhoods is a bit high

Use Specific Plans with a Master EIR

- Recommend using Specific Plans with Master EIR so as to to streamline approach to design the project

Entitlement and Permitting Delays

- Design review and the permitting process takes too long
- More predictability is always better for developers
- Cost continues to go up due to the amount of time to get entitled

Lack of Funding for Affordable Housing

- Lack of funding
- Need for a local match to be available. Measure O was helpful, but three years later, most of the funding is committed to projects online or coming online. No new money needed for new projects.
- Need subsidies and/or density bonuses for market-rate student housing. The market economics do not work. Need incentives for building student housing by private market.
- Use of housing choice vouchers is hard for owners due to onerous processes, such as the HQS inspection.

Workforce Housing Funding

- Institutions have land but no funding (for what is subsidized housing). Successful projects depend on local bond to provide financing.

Community Resistance

- Lack of consensus about housing amongst leadership with some in support of housing and other opposing density.
- City has 33 committees; there is only one that is pro-business, so a lot of resistance from a lot of fronts.
- Community organization pushback to development makes it difficult to build anything. Some housing projects downsized because of pressure.

Community Benefits Agreements (CBAs)

- CBAs are a black box process – there needs to be more certainty, predictability.

BEST HOUSING TYPES AND LOCATIONS

Key Locations

- Close to transit, amenities, schools, restaurants, cultural resources – developers interested in four block proximity.

On-site Services

- Affordable housing with on-site services, such as social workers or medical support, to better serve tenants with special housing needs.

Tiny Houses and ADUs

- Tiny houses and ADUs will be some help in terms of increasing the amount of available housing and allowing for increased density in single-family neighborhoods.
- Would be helpful if there were incentives to make ADUs (and all types of housing units) accessible

BART Stations

- BART housing at Ashby and North Berkeley is a huge opportunity for the neighborhoods they're in, but are facing pushback from residents who want to maintain their single-family home neighborhoods.

Corridors

- Shattuck
- San Pablo
- Sacramento
- Telegraph
- College
- Solano

Downtown

- Downtown area still provides different opportunities
- Some of the best sites are anywhere within 5-6 blocks of downtown Berkeley.
- The 12 blocks south of Campus (Bancroft, College, Dana, Dwight) could be a great opportunity to build higher, but is currently limited to four stories right now.

Higher Density in Residential Neighborhoods

- Density and height are increasing in neighborhoods, but there is a need to focus on retaining scale. 2-3 story, 4-6 unit seems to have worked. When you get much bigger than that, it gets more impersonal & out of scale.

South Berkeley

- There is a general need for development in South Berkeley.
- South Berkeley Senior Center. The site is currently two stories with lots of activities for seniors; it could be developed to have more housing above it.

West Berkeley

- There is a general need for development in West Berkeley
- Industrial sites in West Berkeley. If designed correctly, people are willing to live in industrial area.

Ground Floor Housing

- Security and privacy concerns
- Want to keep it active use
- Can also be an opportunity - there's a lot of commercial vacancy right now. Consider using ground floor spaces for affordable housing for artists who would be better able to activate the space via live/work designations.

Site Amenities Needed

- Bike storage

COMMUNITY ENGAGEMENT RECOMMENDATIONS

Recommended Channels for Outreach

- Email – top preference although noted students don't read email actively
- City emails/City website (although can be overwhelming with all competing city initiatives/meetings)
- Text/phone calls – varying individual preferences
- Existing organizational listservs
- Inconsistent / unreliable use of social media
- Through school district (day care the great equalizer)
- Door knocking/ on the ground
- School-based partnerships - send information home to families, set up referral channels between community-based organizations and counselors, etc.
- Community bulletin boards
  - South Berkeley Senior Center bulletin board (outside now because of Covid)
  - Bulletin board outside City Hall

For the disabled population

- The more the modes of communication the better
- Communication in large print
- Mail
- Email
- Keep in mind that for deaf residents closed caption is not perfect – some automated systems don't translate perfectly; English is second language for those born deaf; need sign interpreter.
- YouTube videos (including ASL) work well
- Center for Independent Living (CIL) could help distribute info about the planning process (and via its partners)

For the homeless population

- Improved engagement with the homeless population
- Can distribute information/surveys at resource centers like Women's Drop in Center

For students & renters

- More education on what renter rights are

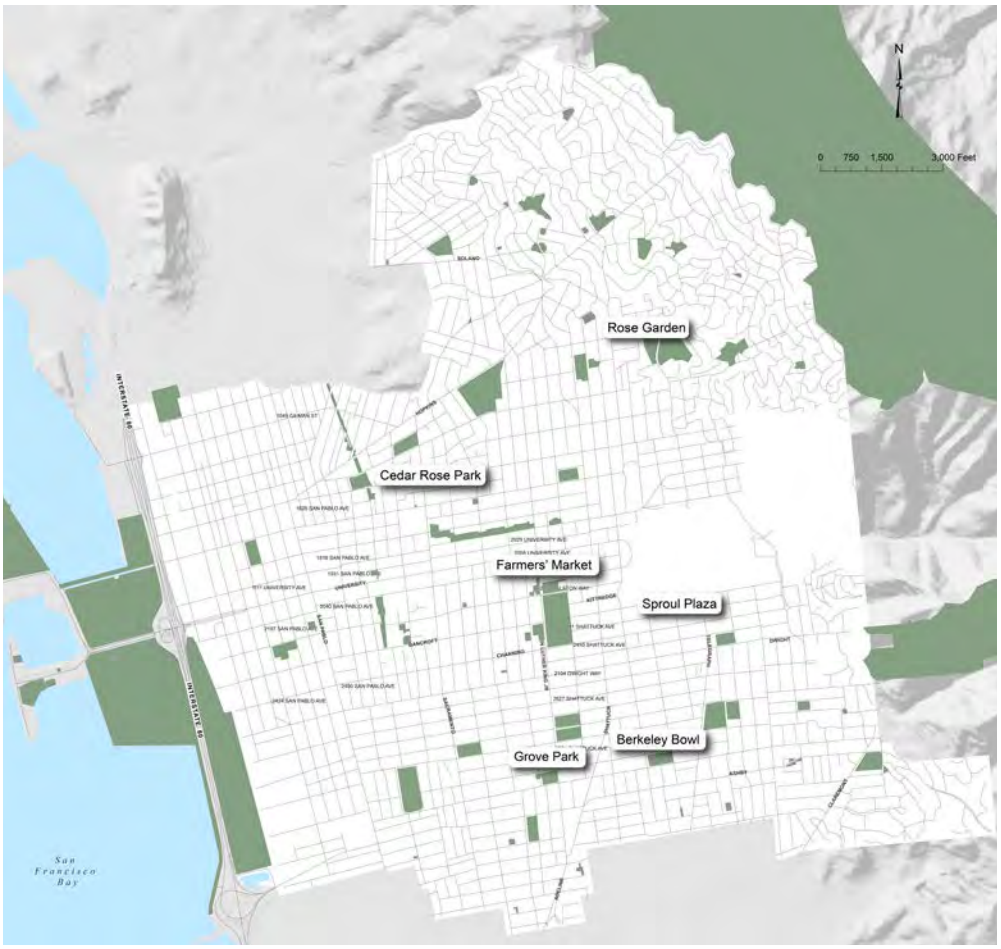
Locations for Potential In-Person Meetings

- Local institutions, such as churches and other faith-based locations, parks, libraries, fire stations, elementary schools, the university
- Senior centers and recreation centers
- Nonprofits, like the Ed Roberts Center

F7 COMMUNITY OUTREACH EVENTS

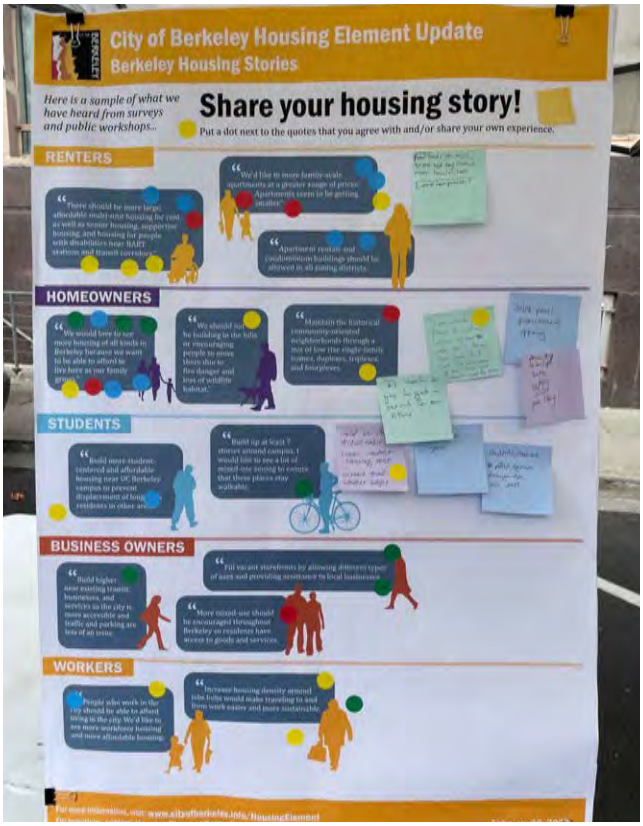
In the Spring of 2022, four community outreach events were conducted at community gathering locations, including local businesses, farmers' markets, and recreation events to receive input on housing. Interactive poster boards, flyers, QR codes linking to online surveys, and other informational items were provided to interested participants. A total of 14 hours were spent engaging with the public at these events and 55 written public comments were collected.

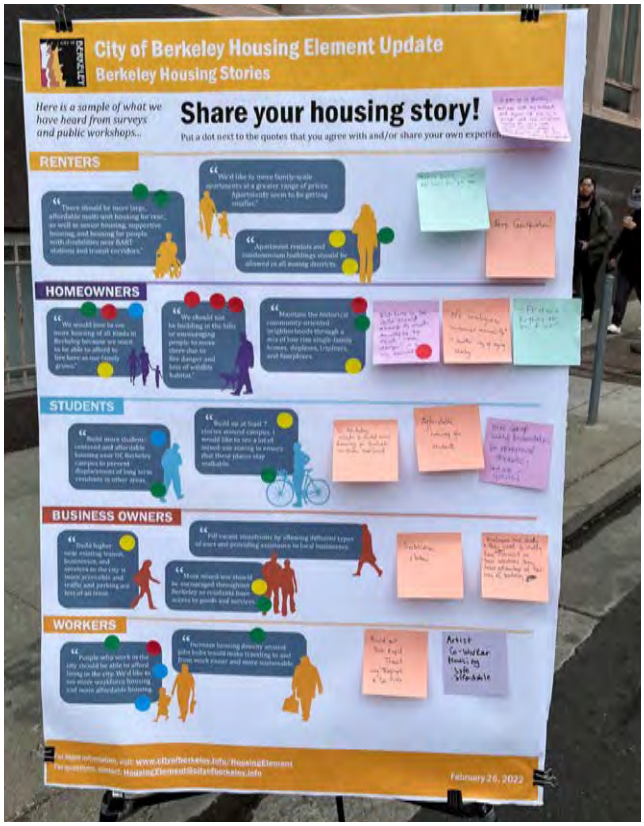
Figure F-27 Housing Element Update Community Outreach Locations



F7.1 DOWNTOWN BERKELEY FARMERS' MARKET - FEBRUARY 26, 2022

Figure F-28 Downtown Berkeley Farmers' Market Board Results





What We Heard

"I grew up in Berkeley but now with my husband and 2 year old live in a agrage and see ourselves leaving the area soon..."

"More rent funds for crisis so one bad day doesn't mean homelessness."

"Expand rent protections!!"

"Maximize density"

"Stop gentrification"

"Permits to build takes way too long."

"No NIMBYism - "historical community" is another way of saying NIMBY."

"Protect rights to sun and solar"

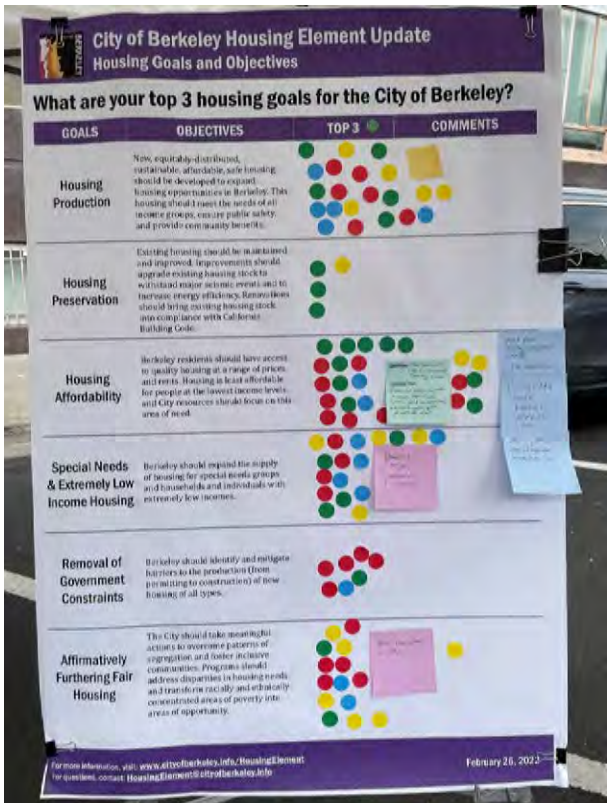
"UC Berkeley needs to build more housing for students on their own land."

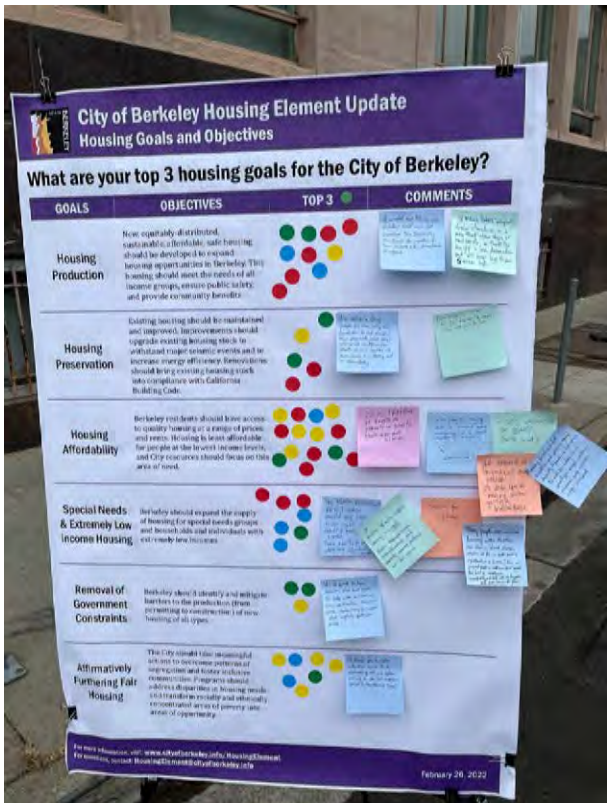
"Affordable housing for students."

"More Group Living Accommodations for international students + students in general."

"...They really need to have better oversight on their [developer] intentions. They take advantage of the City of Berkeley."

"Artist co-worker housing - safe and affordable."





What We Heard

"The amount of housing isn't the problem - it's the type of housing we're getting. Unaffordable housing."

"N Berkeley BART project - design structure in a way that stair steps or has levels so that the height is less dramatic and still keep less than 5 stories high."

"Solve problem of people on streets in tents. Tents are not housing."

"More affordable senior housing that is around more amenities (w/in house services)."

"Rent protection and caps on commercial properties please."

"Please put community needs in empty storefronts (clinics, childcare, bath-rooms) and imrove quality of life and walkable cities."

"Need public housing transation tax and tax speculation."

"Vacancy tax - tax if you have more than 5 units."

"More low income in hills."

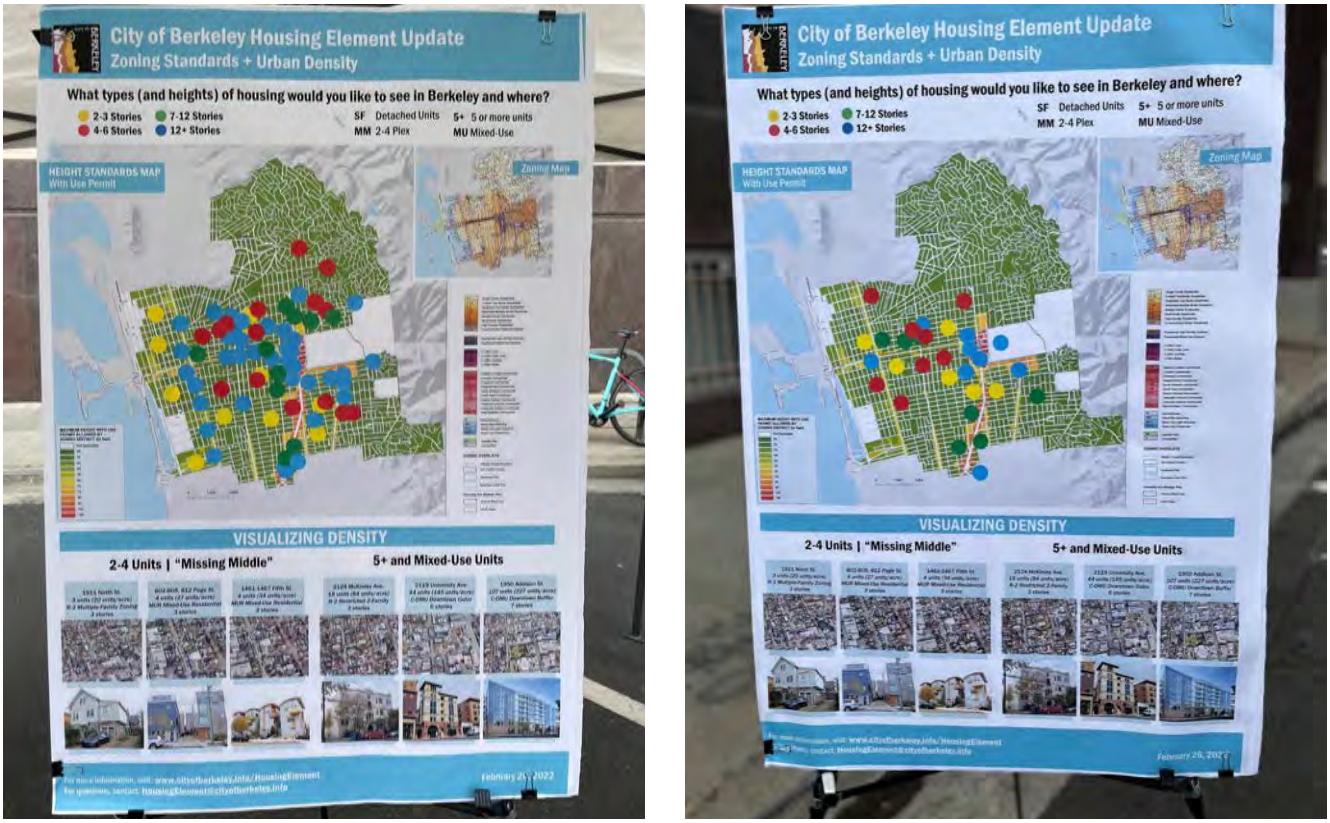
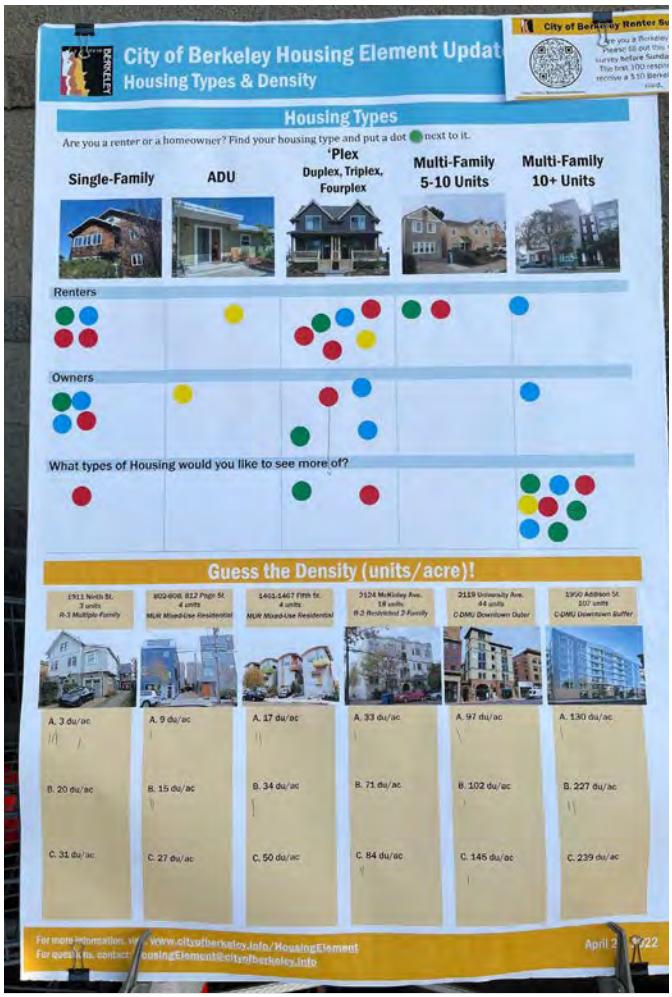
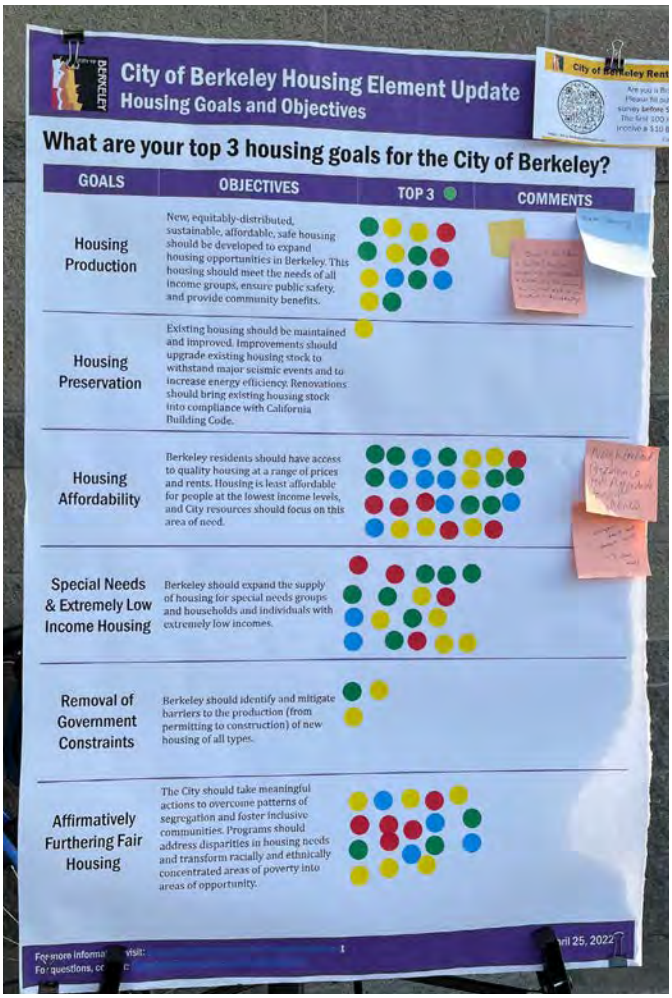


Figure F-29 Downtown Berkeley Farmers' Market Photos

F7.2 BERKELEY BOWL RENTER OUTREACH - APRIL 25, 2022

Figure F-30 Berkeley Bowl Renter Outreach Board Results





What We Heard

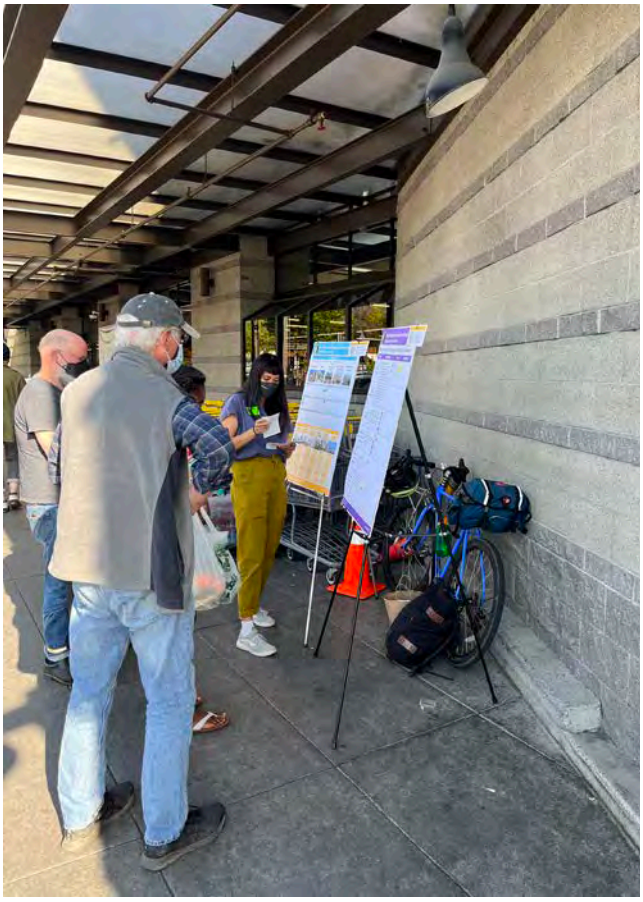
"More housing."

"Don't be like E-'ville (the sun never hits the sidewalk and nobody walks anyway). The big ones are ok (on Shattuck and University)."

"Neighborhoood preference for Affordable Housing Lotteries."

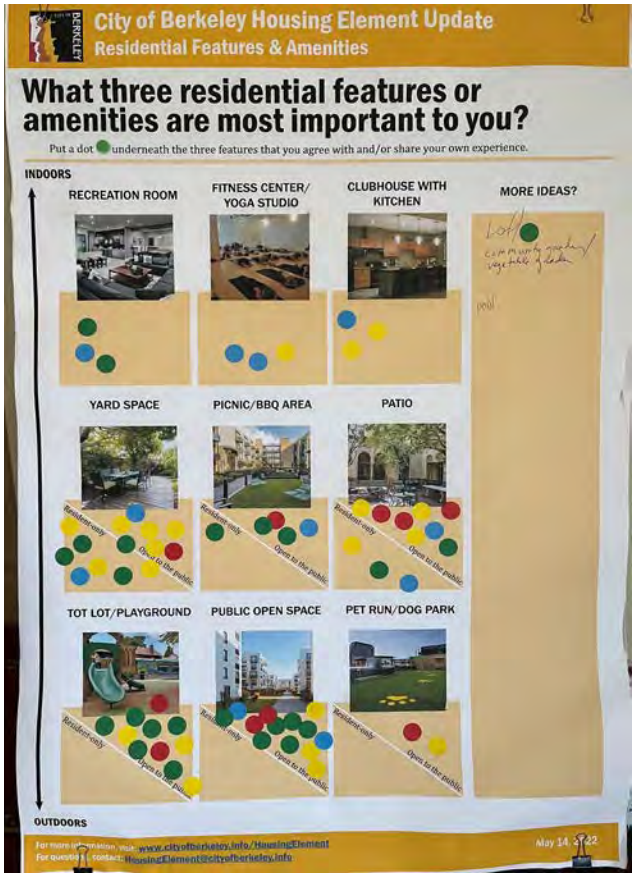
"Everyone should have affordable hosuing --> social housing."

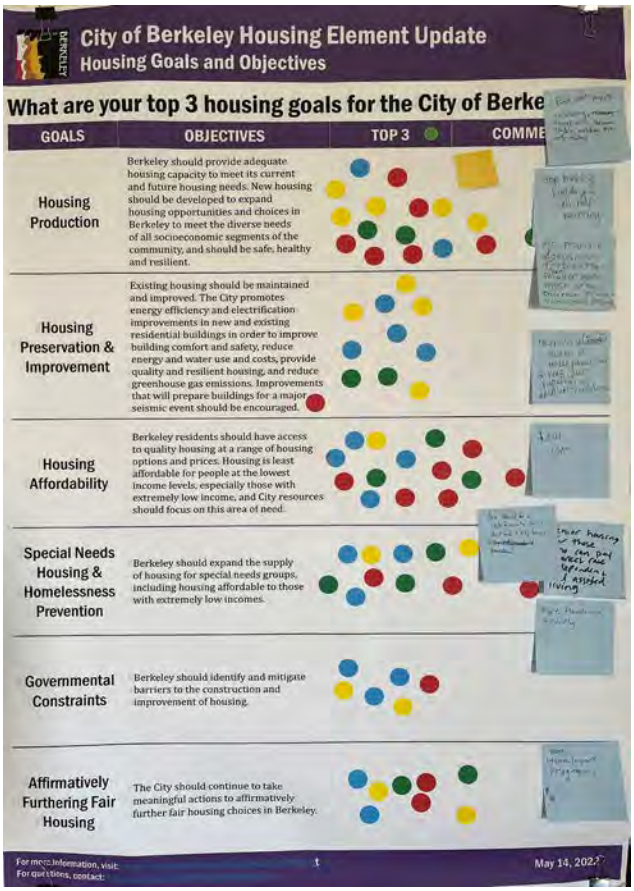
Figure F-31 Berkeley Bowl Renter Outreach Photos



F7.3 ROSES IN BLOOM YOUTH OUTREACH - MAY 14, 2022

Figure F-32 Roses in Bloom Youth Outreach Board Results





What We Heard

"Fund pilot projects - co-housing, shared units, bedroom rentals, matching ADUs with renters."

"stop building buildings all over Berkeley."

"Increase transit with increased density."

"Incentivize (or assist) owners of rental properties to keep their properties in excellent conditions."

"Low cost."

"This should be a state and county focus and not a city focus."

"Senior housing for those who acn pay market rate independent and assisted living."

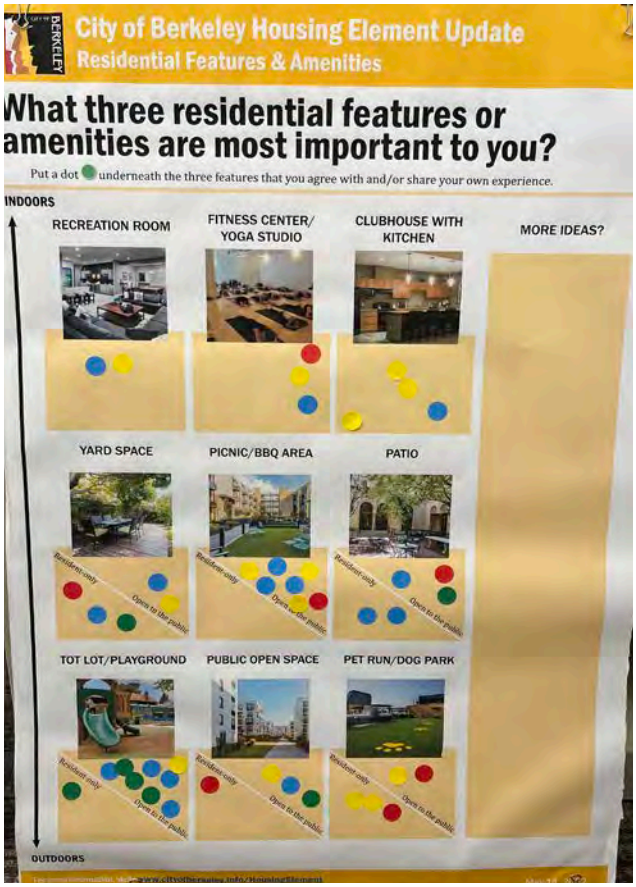
"More handicap friendly."

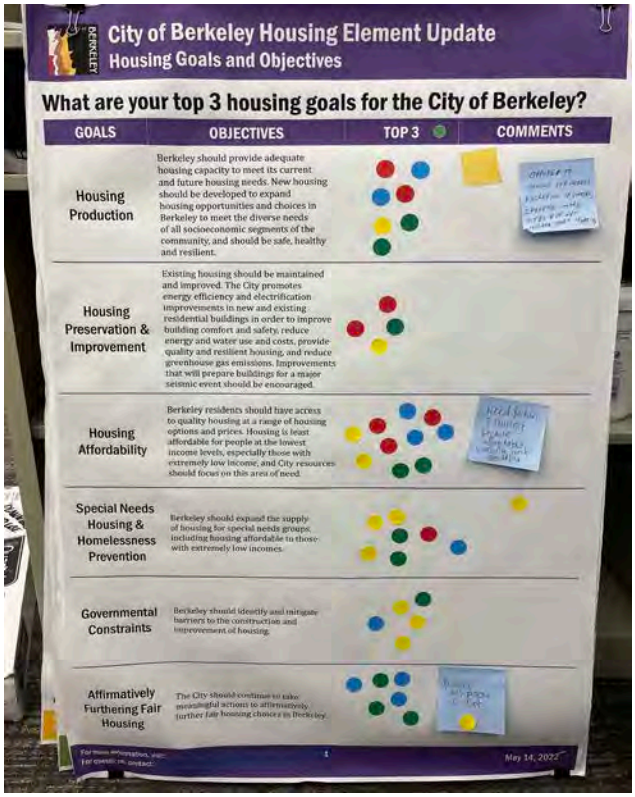
"More homebuyers programs."

Figure F-33 Roses in Bloom Youth Outreach Photos

F7.4 POPPIN' THURSDAY ALL AGES SKATE PARTY YOUTH OUTREACH

Figure F-34 Poppin' Thursday All Ages Skate Party Youth Outreach Board Results





What We Heard

"Opposed to housing structures exceeding 4 stories. I propose more sites but not higher than 4 stories."

"Need Section 8 housing because affordable housing isn't affordable."

"Top concern: Pushing out people of color."

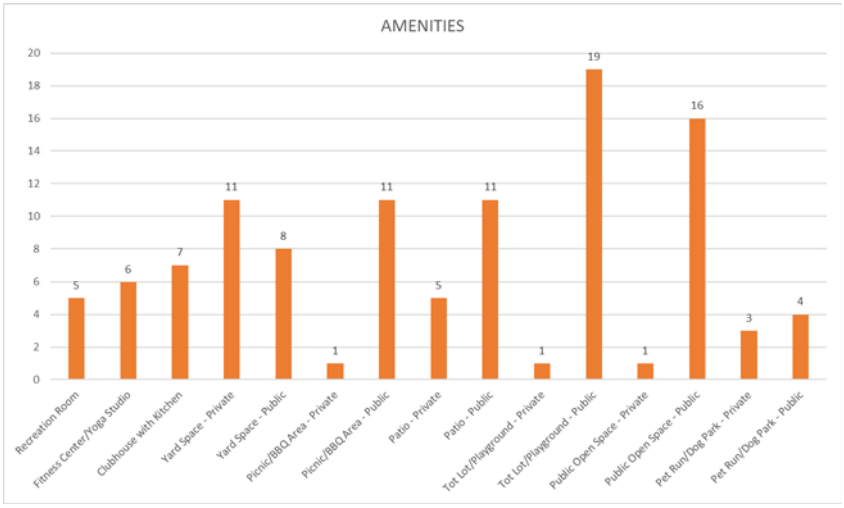
Figure F-35 Poppin' Thursday All Ages Skate Party Youth Outreach Photos

Figure F-36 Graphs showing the breakdown of responses to the questions on each board.

Events
Farmers' Market
Berkeley Bowl
Roses in Bloom
Poppin' Thursday

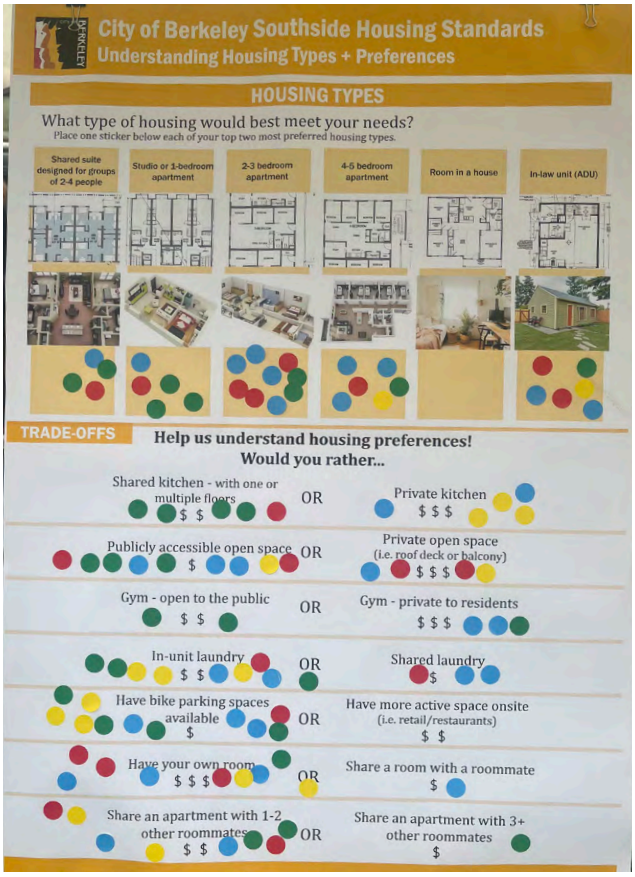
Events
Berkeley Bowl
Roses in Bloom
Poppin' Thursday

Events
Roses in Bloom
Poppin' Thursday



F7.5 HARVEST FESTIVAL OUTREACH

Figure F-37 Harvest Festival Outreach Board Results



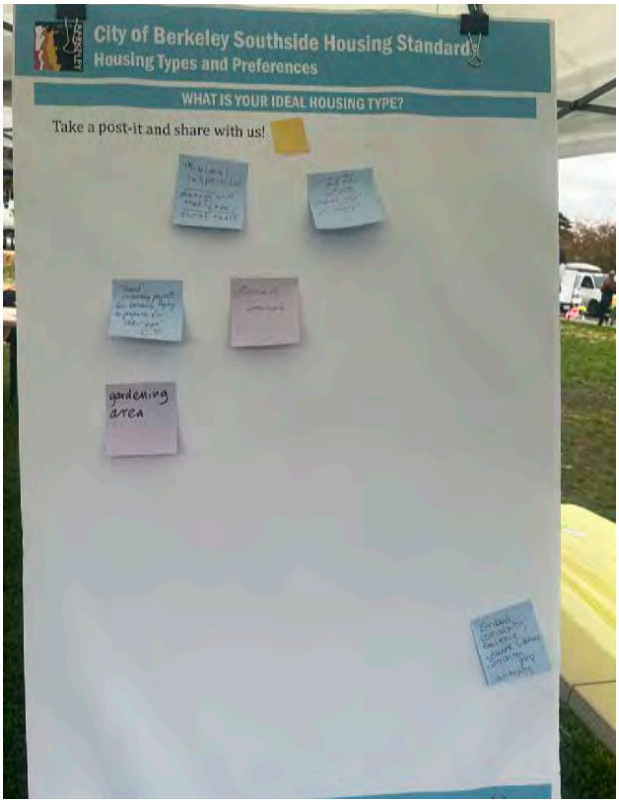
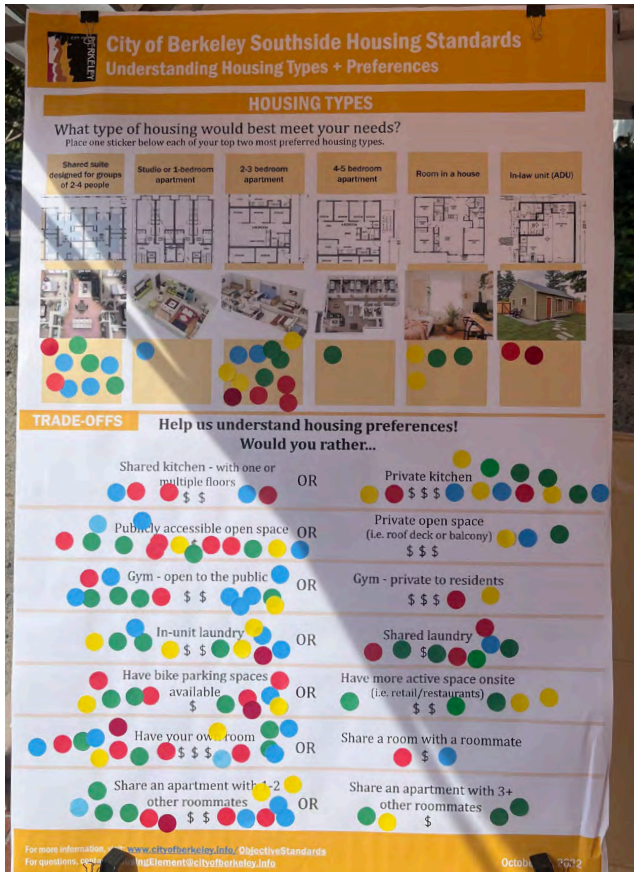


Figure F-38 Harvest Festival Outreach Photos

F7.6 SPROUL PLAZA SOUTHSIDE OUTREACH

Figure F-39 Sproul Plaza Southside Outreach Board Results



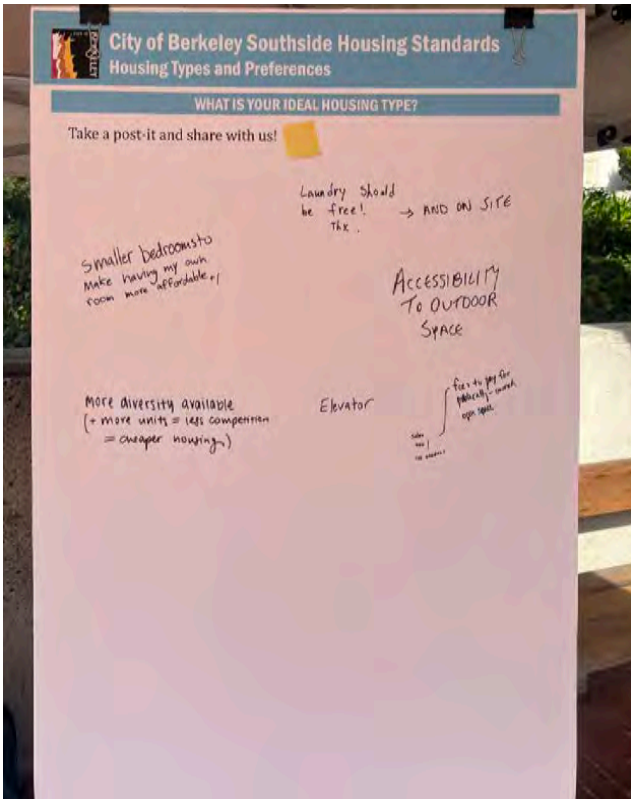


Figure F-40 Sproul Plaza Southside Outreach Photos


What three residential features or amenities are most important to you?

RESOLUTION NO. ##,###-N.S

A RESOLUTION TO (A) CERTIFY THE ENVIRONMENTAL IMPACT REPORT (SCH# 2022010331) AND ADOPT RELATED CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) FINDINGS, A STATEMENT OF OVERRIDING CONSIDERATIONS, MITIGATION MEASURES, AND A MITIGATION MONITORING AND REPORTING PROGRAM; AND (B) APPROVE AND ADOPT A GENERAL PLAN AMENDMENT TO UPDATE THE HOUSING ELEMENT OF THE GENERAL PLAN FOR THE PERIOD OF 2023-2031.

WHEREAS, California Government Code Section 65300 et seq. requires every city and county in California to adopt a General Plan for its long-range development, and further, to periodically update that plan to reflect current conditions and issues; and

WHEREAS, California Government Code Section 65302(c) mandates that each City shall include a Housing Element in its General Plan, and that the Housing Element be updated regularly on a schedule set forth in the law to reflect current conditions and legal requirements; and

WHEREAS, the City of Berkeley (“City”) adopted the 2015-2023 Housing Element Update of the Berkeley General Plan on April 28, 2015 with Resolution No. 67,008-N.S.; and

WHEREAS, pursuant to the provisions and requirements of the California Environmental Quality Act (Public Resources Code section 21000 et seq.) (“CEQA”) and the State CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations (“CEQA Guidelines”), the City of Berkeley, as lead agency, prepared an Environmental Impact Report for the City of Berkeley 2023-2031 Housing Element Update (SCH No. 2022010331) (“EIR” or “Final EIR”); and

WHEREAS, on January 14, 2022, the City issued a Notice of Preparation of a Draft Environmental Impact Report (“Draft EIR”) to analyze the environmental effects of the Housing Element Update; and

WHEREAS, a duly noticed Draft EIR scoping hearing was held by the Planning Commission on February 9, 2022, to receive comments on the scope and content of the Draft EIR; and

WHEREAS, a Notice of Availability/Release of a Draft EIR was issued on August 30, 2022 along with the publication of the Draft EIR itself, both of which were made available to the general public and governmental agencies for review and comment; and

WHEREAS, on September 7, 2022, the Planning Commission held a duly noticed public hearing and took public testimony, which was preceded by the distribution of notices in accordance with State and local noticing requirements; and

WHEREAS, a Notice of Availability/Release of a Final EIR was issued and a Final EIR was published on November 30, 2022; and

WHEREAS, the Final EIR consists of the August 2022 Draft EIR and the November 2022 Final EIR; and

WHEREAS, all documents constituting the record of this proceeding are and shall be retained by the City of Berkeley Planning and Development Department, Land Use Planning Division, at 1947 Center Street, Berkeley, California; and

WHEREAS, the California legislature has found that "California has a housing supply and affordability crisis of historic proportions. The consequences of failing to effectively and aggressively confront this crisis are hurting millions of Californians, robbing future generations of the chance to call California home, stifling economic opportunities for workers and businesses, worsening poverty and homelessness, and undermining the state's environmental and climate objectives." (Gov. Code Section 65589.5.); and

WHEREAS, the legislature has further found that "Among the consequences of those actions are discrimination against low-income and minority households, lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration." (Gov. Code Section 65589.5.); and

WHEREAS, the legislature recently adopted the Housing Crisis Act of 2019 (SB 330) which states that "In 2018, California ranked 49th out of the 50 states in housing units per capita… California needs an estimated 180,000 additional homes annually to keep up with population growth, and the Governor has called for 3.5 million new homes to be built over 7 years"; and

WHEREAS, State Housing Element Law (Article 10.6 of Gov. Code) requires that the City Council adopt a Housing Element for the eight-year period 2023-2031 to accommodate the City's regional housing need allocation (RHNA) of 8,943 housing units, comprised of 2,446 very-low income units, 1,408 low-income units, 1,416 moderate-income units, and 3,664 above moderate-income units; and

WHEREAS, the Housing Element must be adopted to comply with State law, accommodate the RHNA, affirmatively further fair housing (Gov. Code Section 65583(c)(5)), and facilitate and encourage a variety of housing types for all income levels, including multifamily housing (Gov. Code Sections 65583.2 and 65583(c)); and

WHEREAS, the City prepared the 2023-2031 Housing Element in conformance with State and local planning law and practices, considering local conditions and context, including economic, environmental, and fiscal factors; and

WHEREAS, State law generally states that the Housing Element and the City's zoning must support housing for all income levels, and residential densities under 30 units per

acre do not support construction of housing for lower income households (Gov. Code Section 65583.2(c)(3)(B)(iv)); and

WHEREAS, the Housing Element includes an inventory of sites that can accommodate new housing sufficient to meet the City's RHNA obligation at each income level; and

WHEREAS, more than fifty-percent (50%) of the sites identified to accommodate the City's low-income RHNA obligation are non-vacant. However, the City specifically finds that the existing uses on such non-vacant parcels will not constrain development or redevelopment during the 2023-2031 planning period, and so such sites can meet their development potential; and

WHEREAS, the preparation, adoption, and implementation of the Housing Element requires a diligent effort to include all economic segments of the community; and

WHEREAS, the City conducted extensive community outreach over the last 17 months, including three public workshops, six outreach events, three online surveys, two walking tours, approximately 28 stakeholder interviews and meetings, four City Council work sessions, five Planning Commission meetings, and presentations before the Homeless Services Panel of Experts, Commission on Disability, Landmarks Preservation Commission, Zoning Adjustments Board, Commission on Aging, Energy Commission, Children, Youth and Recreation Commission, Housing Advisory Commission, Rent Stabilization Board, Civic Arts Commission, and the City/UC/Student Relations Committee; and

WHEREAS, public input influenced the development of the housing goals and policies, housing opportunity sites, and housing program of the Housing Element; and

WHEREAS, on August 10, 2022, the City submitted the draft Housing Element to the State Department of Housing and Community Development (HCD) for its initial review, following 30-day public review between June 13 and July 14, 2022, and incorporating revisions over the course of 18 business days between July 15 and August 10, 2022 (Gov. Code Section 65585); and

WHEREAS, on September 23, 2022 and October 10, 2022, HCD provided the City with a number of preliminary comments about the draft Housing Element. City staff revised the draft Housing Element to include additional information and analysis based on preliminary comments and a revised draft was made available for public comment from October 18 through October 25, 2022 and City staff held office hours on October 24, 2022. On November 1, 2022, the City submitted a revised draft Housing Element to HCD for follow-up review; and

WHEREAS, on November 8, 2022, the City received a letter from HCD stating that while the draft Housing Element addresses many statutory requirements, revisions will be necessary to comply with State Housing Element Law (Article 10.6 of the Government

Code). The letter noted that the Housing Element would meet the statutory requirements of State Housing Element Law once it has been revised and adopted to comply with the letter's requirements. On November 23, 2022, the City published a revised draft Housing Element with the additional descriptions, analysis, and clarifications requested by HCD and sought public comment on the draft; and

WHEREAS, on December 1, 2022, the City submitted the revised draft Housing Element to HCD for subsequent review with a cover letter listing in detail the City's response and revisions to address HCD's comment letter in order to bring the draft Housing Element in substantial compliance with State Housing Element Law; and

WHEREAS, notice of public hearing was prepared pursuant to Zoning Ordinance Section 22.04.020, *Amendment-Procedures required-Planning Commission and City Council*, and Gov. Code Section 65355; and

WHEREAS, on December 7, 2022, the Planning Commission conducted a public hearing, reviewed the revised 2023-2031 Housing Element and its six appendices, including the findings and changes recommended by HCD, the City's response to HCD's findings, and public comments, and recommended that the City Council adopt a General Plan Amendment to update the Housing Element; and

NOW THEREFORE, BE IT RESOLVED that the Council of the City of Berkeley, as the final decision-making body for the lead agency, hereby certifies that the Final EIR has been completed in compliance with CEQA and reflects the independent judgment and analysis of the City.

BE IT FURTHER RESOLVED, that no recirculation of the EIR is required.

BE IT FURTHER RESOLVED, that the City Council adopts and incorporates into the Project all of the mitigation measures that are within the responsibility and jurisdiction of the City and that are identified in the CEQA Findings.

BE IT FURTHER RESOLVED, that the City Council adopts and incorporates by reference into this Resolution the Mitigation Monitoring and Reporting Program (Exhibit A to Attachment 3, in the January 18, 2023 report to the Berkeley City Council recommending adoption of this Resolution).

BE IT FURTHER RESOLVED, that the City Council as the final decision-making body for the lead agency, hereby adopts and incorporates by reference into this Resolution the CEQA Findings and Statement of Overriding Considerations with regard to the significant environmental effects of the Project (Exhibit B to Attachment 3, in the January 18, 2023 report to the Berkeley City Council recommending adoption of this Resolution).

BE IT FURTHER RESOLVED that the City Council makes the following findings pursuant to the General Plan Amendment to update the Housing Element of the General Plan:

1. The 2023-2031 Housing Element and its FEIR comply with the provisions of CEQA.

2. The 2023-2031 Housing Element is internally consistent, and is consistent with the rest of the City's General Plan.

3. The 2023-2031 Housing Element process was developed through diligent effort by City staff to achieve public participation of all economic segments of the community (Gov. Code Section 65583(c)(9)).

4. The 2023-2031 Housing Element consists of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. Furthermore, the Housing Element identifies adequate sites for housing, including rental housing, factory-built housing, mobile homes, and emergency shelters, and makes adequate provision for the existing and projected needs of all economic segments of the community (Gov. Code Section 65583).

5. The 2023-2031 Housing Element affirmatively furthers fair housing by analyzing and taking action to overcome patterns of segregation and foster inclusive communities (Gov. Code Section 65583(c)(10) and 65584.0). The Housing Element provides an analysis of barriers that restrict access to opportunity, and a commitment to specific meaningful actions to affirmatively further fair housing. In particular:

    a. The Housing Element proposes to allow for multi-unit development in all residential zones, including R-1;

    b. The RHNA strategy reflects the overall composition of Berkeley and does not exacerbate existing segregation conditions related to race or ethnicity;

    c. The RHNA strategy does not exacerbate existing low and middle income ("LMI") household trends by disproportionately placing lower income units in LMI areas at a higher rate. A larger proportion of moderate and above moderate income units are in LMI areas compared to lower income units;

    d. The RHNA strategy does not disproportionately place lower income units in Racially or Ethnically Concentrated Areas ("R/ECAPs"). Of the units included in the sites inventory, 26.6% are located in R/ECAPs. A significantly smaller proportion of lower income units are located in R/ECAPs compared to moderate and above moderate income units;

e. The RHNA strategy helps fair housing conditions by placing future lower income households in high resource areas. Approximately 60% of RHNA units, including 67.3% of lower income units, are in highest or high resource tracts. There is only one low resource tract (Southside), and the City allocated a mix of units of various income levels in this tract;

f. Appendix E identifies goals and actions to address four identified fair housing issues, including expanding fair housing testing and outreach, pursuing strategies to produce more affordable housing and protect tenants from displacement in cost-burdened neighborhoods, seeking grants to fund affordable housing, establishing a development arm of the Berkeley Housing Authority to develop new affordable units, funding home modifications for lower income households, creating opportunity for infill middle housing in single-family districts, and developing a housing preference policy to assist residents at risk of displacement;

g. In response to HCD's feedback, the Housing Element now evaluates programs relative to specific neighborhoods for purposes of AFFH, such as targeting fair housing outreach and enforcement, rental housing safety programs, and rental assistance programs in Central and South Berkeley where there are higher proportions of lower income households and cost-burdened renters.

h. Program 36 – *Adequate Sites for RHNA and Monitoring* includes a mid-term evaluation of the RHNA strategy and development progress, including a commitment to make adjustments as appropriate to achieve the City's goals, including AFFH.

6. HCD staff reviewed the City's Draft Housing Element as required by Section 65585(b) of the Government Code, and the City's responses, described in the staff report, have been included as part of the adopted 2023-2031 Housing Element.

7. Based upon the comments from HCD and the City's responses to those comments, the 2023-2031 Housing Element is in substantial compliance with State Housing Element Law.

BE IT FURTHER RESOLVED, that the City Council hereby adopts the 2023-2031 Housing Element and its appendices, which has addressed and has incorporated findings from HCD, as shown in Attachment 1 to the January 18, 2023 report to the Berkeley City Council recommending adoption of this Resolution.

BE IT FURTHER RESOLVED, that the 2023-2031 Housing Element supersedes and replaces the 2015-2023 Housing Element.

BE IT FURTHER RESOLVED that the City Council intends to complete the HCD review process to obtain their finding of substantial compliance and certification and hereby authorizes the City Manager to make non-substantive changes to the 2023 – 2031 Housing Element in response to comments received from HCD to achieve certification.

BE IT FURTHER RESOLVED, that the City Clerk is hereby directed to distribute copies of the Housing Element in the manner provided in Gov. Code Section 65357.

City of Berkeley 2023-2031 Housing Element Update

Responses to Comments on the Draft Environmental Impact Report SCH# 2022010331

prepared by

City of Berkeley
Land Use Planning Division
1947 Center Street, 2nd Floor
Berkeley, California 94704
Contact: Grace Wu, Principal Planner

prepared with the assistance of

Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612

December 2022

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

Table of Contents

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1 Introduction

1.1 Purpose of the Response to Comments Document

This document has been prepared to respond to comments received on the Draft Environmental Impact Report (Draft EIR) prepared for the proposed 2023-2031 Berkeley Housing Element Update (proposed HEU). The Draft EIR identifies the likely environmental consequences associated with development of the project and recommends mitigation measures to reduce potentially significant impacts. This Response to Comments (RTC) document provides responses to comments on the Draft EIR and identifies text revisions to the Draft EIR, as necessary, in response to those comments or to clarify, amplify, or make insignificant modifications to the text of the Draft EIR (CEQA Guidelines Section 15088.5(b)). This document, together with the Draft EIR, constitutes the Final EIR for the proposed project.

1.2 Environmental Review Process

Pursuant to the California Environmental Quality Act (CEQA), lead agencies are required to consult with public agencies having jurisdiction over a proposed project and to provide the general public with an opportunity to comment on the Draft EIR.

On January 14, 2022, the City of Berkeley issued a Notice of Preparation (NOP) for a 30-day comment period to receive input on the scope and content of the EIR and help identify the types of impacts that could result from the project as well as potential areas of controversy. The NOP was filed with the County Clerk, published in a local newspaper, and mailed to public agencies (including the State Clearinghouse), organizations, and individuals considered likely to be interested in the project and its potential impacts. The City received written responses to the NOP regarding the scope and content of the EIR. The City also held an EIR scoping meeting as part of the regularly scheduled Planning Commission meeting on February 9, 2022. No members of the public provided verbal comments at the scoping hearing, but several Planning Commissioners provided verbal comments.

The Draft EIR was made available for public review on August 30, 2022. The Notice of Availability of a Draft EIR was posted with the County Clerk, filed with the State Clearinghouse for distribution to state agencies, published in a local newspaper, and mailed to local agencies and interested organizations. A Notice of Completion was also filed with the State Clearinghouse. The Draft EIR and an announcement of its availability were posted electronically on the City's website. The Draft EIR comment period closed on October 17, 2022. During the comment period, the City Planning Commission held a hearing to receive comments on the Draft EIR on September 7, 2022. The City received 16 comment letters (including emails) on the Draft EIR during the public comment period. Copies of those written comments are included in Chapter 3, *Comments and Responses – Letters and Emails,* of this document. Verbal comments made at the September 7, 2022, Planning Commission hearing are transcribed in Chapter 4, *Comments and Responses – Public Hearing Comments*.

1.3 Document Organization

This RTC document consists of the following chapters:

- *Chapter 1: Introduction*. This chapter discusses the purpose and organization of this RTC document and the Final EIR and summarizes the environmental review process for the project.
- *Chapter 2: List of Commenters*. Chapter 2 contains a list of the agencies, individuals, and organizations that submitted written comments during the public review period on the Draft EIR.
- *Chapter 3: Comments and Responses – Letters and Emails*. Chapter 3 contains reproductions of comment letters and e-mails received on the Draft EIR. Written responses to comments raising significant environmental issues received during the public review period are provided. Each response is keyed to the corresponding comment.
- *Chapter 4: Comments and Responses – Public Hearing Comments.* Chapter 4 contains a transcription of the verbal comments received at the public hearing held on the Draft EIR (Planning Commission, September 7, 2022). Written responses to verbal comments raising significant environmental issues received at the hearing are provided.
- *Chapter 5: Draft EIR Text Revisions*. Clarifications, amplifications, and insignificant modifications to the text of the Draft EIR including modifications made in response to comments received are contained in Chapter 5. Underlined text represents language that has been added to the Draft EIR; text with ~~strikeout~~ formatting has been deleted from the Draft EIR.
- *Chapter 6*: *CEQA Implications for Changes to the Housing Element.* Chapter 6 contains a discussion of CEQA implications resulting from potential changes to the proposed Housing Element that have been made after circulation of the Draft EIR.

2 List of Commenters

This chapter presents a list of comment letters (including emails) received during the public review period and describes the organization by type of commenter and number of the letters and comments for which responses are provided in Chapter 3 of this document.

2.1 Organization of Comment Letters and Responses

The comment letters and e-mails are listed in Table 1 below. Letters are grouped into three categories: letters from public agencies (Group A), letters from organizations (Group B), and letters from individuals (Group C). Each comment letter has been numbered sequentially and each separate issue raised by the commenter has been assigned a number. The responses to each comment identify first the letter assigned to the group of the comment letter, and then the number assigned to each issue (Response A1.1, for example, indicates that the response is for the first issue raised in comment letter A1).

2.2 Public and Agency Comments Received

The following written comments were submitted to the City during the public review period.

Table 1 List of Letter Numbers and Commenters

Letter Number and Commenter		Page Number
Public Agencies		
A1	Department of Toxic Substances Control	5
A2	Alameda County Transportation Commission	10
Organizations		
B1	Berkeley Neighborhoods Council	13
B2	YIMBY Law	17
B3	Berkeley Architectural Heritage Association	20
Individuals		
C1	Adolfo Cabral	32
C2	Laura Klein	35
C3	Eric Johnson	37
C4	Walter Wood	39
C5	Shirley Dean	41
C6	Toni Mester	50
C7	Kelly Hamargren	56
C8	Virginia Browning	74
C9	Anthony Campana	79
C10	Virginia Browning	81
C11	Virginia Browning	83
C12	Barbara Robben	85

3 Comments and Responses

Written responses to written comments received on the Draft EIR are provided in this chapter. Comment letters are provided in their entirety.

Revisions to the Draft EIR in response to the comments received and responses provided, or necessary to amplify or clarify material in the Draft EIR, are included in the responses. Underlined text represents language that has been added to the Draft EIR; text with ~~strikeout~~ has been deleted from the Draft EIR. All revisions are then compiled in the order in which they would appear in the Draft EIR (by page number) in Chapter 5, Draft EIR Text Revisions, of this document.

Many comment letters included comments related to the merits or features of the proposed project itself which do not specifically raise environmental issues or relate directly to the adequacy of the information or analysis within the Draft EIR. In those cases, the comment is acknowledged, but no response is required, according to CEQA Guidelines Section 15088 and 15132. As stated in Section 15088 of the CEQA Guidelines, "The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall respond to comments raising significant environmental issues received during the noticed comment period…" As stated in the Guidelines, the lead agency is only required to evaluate comments on environmental issues. Nonetheless, all comments will be forwarded to the City of Berkeley Planning Commission and City Council for their consideration.

Letter A1

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

October 14, 2022

Mr. Justin Horner
City of Berkeley
1947 Center Street, 2nd Floor
Berkeley, CA 94704
JHorner@cityofberkeley.info

DRAFT ENVIRONMENTAL IMPACT REPORT FOR CITY OF BERKELEY 2023-2031 HOUSING ELEMENT UPDATE – DATED AUGUST 2022 (STATE CLEARINGHOUSE NUMBER: 2022010331)

Dear Mr. Horner:

The Department of Toxic Substances Control (DTSC) received a Draft Environmental Impact Report (EIR) for the City of Berkeley 2023-2031 Housing Element Update (Project). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site.

DTSC recommends that the following issues be evaluated in the Hazards and Hazardous Materials section of the EIR:

1. A State of California environmental regulatory agency such as DTSC, a Regional Water Quality Control Board (RWQCB), or a local agency that meets the requirements of Health and Safety Code section 101480 should provide regulatory concurrence that proposed project sites are safe for construction and the proposed use.

2. The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on

1

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2, cont.

the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.

3

3. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.

4

4. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the EIR. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook.

5

5. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition, and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers*.

6

6. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to DTSC's 2001 *Information Advisory Clean Imported Fill Material*.

7. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)*. 7

DTSC appreciates the opportunity to comment on the EIR. Should you choose DTSC to provide oversight for any environmental investigations, please visit DTSC's Site Mitigation and Restoration Program page to apply for lead agency oversight. Additional information regarding voluntary agreements with DTSC can be found at DTSC's Brownfield website.

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Letter A1

COMMENTER: Gavin McCreary, Project Manager, Site Evaluation and Remediation Unit, Site Mitigation and Restoration Program, Department of Toxic Substances Control

DATE: October 14, 2022

Response A1.1N

This comment does not address the adequacy or content of the Draft EIR. Adoption of the proposed Housing Element Update (HEU) would not approve any physical development (e.g., construction of housing or infrastructure). However, the EIR assumes that such actions are reasonably foreseeable future outcomes of the proposed HEU and therefore analyzes potential physical environmental effects that may result from implementation of the proposed HEU. As discussed in Section 4.8, *Hazards and Hazardous Materials,* of the Draft EIR, it is acknowledged that future development under the proposed HEU may involve development on sites with existing contamination. As explained in Section 4.8, future development would be subject to regulatory programs such as those overseen by the Regional Water Quality Control Board (RWQCB) and the DTSC. These agencies require applicants for development of potentially contaminated properties to perform site investigation and cleanup if the properties are contaminated with hazardous substances. In addition, development in the City's Environmental Management Areas require project review by the City's Toxics Management Division (TMD) prior to issuance of permits. Further, all projects requiring discretionary review would be subject to a City of Berkeley Standard Condition of Approval to prepare environmental site assessments and implement soil and groundwater management plans as appropriate. Therefore, the Draft EIR acknowledges that the review process for future development would be required to ensure that sites are safe for construction and operation in accordance with applicable agency requirements and oversight.

Response A1.2

The comment does not address the adequacy or content of the Draft EIR. The discussions in Impact HAZ-1 and Impact HAZ-3 in Section 4.8, *Hazards and Hazardous Materials,* of the Draft EIR acknowledge that future development under the proposed HEU could involve grading or excavation on sites with existing contamination. There are 361 documented open sites containing or potentially containing hazardous materials contamination in underlying soil and/or groundwater in Berkeley and contamination may be present on other sites not yet documented or listed on a regulatory database. However, as described in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR (pages 4.8-21 to 4.8-22), future development would be subject to numerous regulations and the City of Berkeley's Standard Conditions of Approval such that development on or near these locations would be preceded by investigation, remediation, and cleanup under the supervision of the City's TMD or the RWQCB or DTSC before construction activities could begin. The City's Standard Conditions of Approval and the City's TMD would require the evaluation of projects to determine if Phase I/Phase II Environmental Site Assessments are required to characterize potential contamination and if so the applicant would develop a soil and groundwater management plan to address hazards during construction and operation. Therefore, the sites would be remediated in accordance with State and regional standards.

Response A1.3

The comment does not address the adequacy or content of the Draft EIR. As discussed in responses A1.1 and A1.2, future development would be subject to the City's Standard Conditions of Approval and the City's TMD would evaluate projects to determine if Phase I/Phase II Environmental Site Assessments are required to characterize potential contamination, including ADL, and develop a soil and groundwater management plan to address hazards during construction and operation.

Response A1.4

The comment does not address the adequacy or content of the Draft EIR. There are no current or former mining operations sites in Berkeley; therefore, issues associated with mine waste would not occur with future development under the proposed HEU.

Response A1.5

The comment does not address the adequacy or content of the Draft EIR. As discussed in Impact HAZ-1 in Section 4.8, *Hazards and Hazardous Materials,* of the Draft EIR, future projects in Berkeley would be subject to the regulations, standards, and guidelines established by the United States Environmental Protection Agency (EPA), the State of California, and City of Berkeley related to hazardous materials which include a Building Materials Survey prior to approval of permits for complete or partial demolition. The survey must include, but not be limited to, identification of lead-based paint, asbestos, polychlorinated biphenyl (PBC) containing equipment, hydraulic fluids in elevators or lifts, refrigeration systems, treated wood and mercury containing devices (including fluorescent light bulbs and mercury switches). The condition of approval requires that a building materials survey be conducted by a qualified professional. The survey must include plans on hazardous waste or hazardous materials removal, reuse or disposal procedures to be implemented that fully comply with state hazardous waste generator requirements.

Response A1.6

The comment does not address the adequacy or content of the Draft EIR. As discussed under Impact HAZ-1 in Section 4.8, *Hazards and Hazardous Materials,* of the Draft EIR, future projects in Berkeley would be subject to the City of Berkeley Standard Conditions of Approval, which include preparation of a Soil and Groundwater Management Plan (SGMP) for residential projects that meet certain criteria. The SGMP requires notification to the City's TMD of hazardous materials found in soils and groundwater during development and the TMD may impose additional conditions as determined to be necessary.

Response A1.7

The comment does not address the adequacy or content of the Draft EIR. There are no active agricultural operations in Berkeley that use substantial amounts of pesticides. Due to its long-established urbanized character, Berkeley has no active timber harvesting, agricultural, or fish and game industries. Agriculture in Berkeley is limited to personal and community gardens and research at the University of California, Berkeley. Therefore, substantial organochlorinated pesticide contamination is not anticipated to be present on future housing sites. Nonetheless, as discussed in responses A1.2 and A1.6, future development would be subject to numerous regulations and the City's Standard Conditions of Approval to address potential on-site contamination.

Letter A2

ALAMEDA County Transportation Commission

1111 Broadway, Suite 800, Oakland, CA 94607 • 510.208.7400 • www.AlamedaCTC.org

October 17, 2022

Justin Horner, Associate Planner
City of Berkeley, Land Use Planning Division
1947 Center St, 2nd Floor
Berkeley, CA, 94704

SUBJECT: Response to the Draft Environmental Impact Report (DEIR) for the City of Berkeley Housing Element Update

Dear Justin,

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the City of Berkeley Housing Element Update. The project will encompass the entirety of the City of Berkeley in northern Alameda County. Interstate 80/580, State Route 24, State Route 13/Ashby Avenue, and State Route 123/San Pablo Avenue provide major roadway access to the 17.2 square-mile city, which is comprised of a combination of residential, commercial, and industrial development. The proposed comprehensive Housing Element Update is based on the City's latest Regional Housing Needs Allocation (RHNA), which requires the City's zoning and other land use regulations to accommodate between approximately 10,274 and 11,614 new units. The Housing Element Update identifies suitable sites for 15,153 housing units in addition to the 1,200 units to be constructed at the Ashby and North Berkeley BART stations and includes rezoning and implementation programs to support the development of affordable housing which will accommodate an additional 2,745 units, for a total projected buildout of 19,098 units.

The Alameda County Transportation Commission (Alameda CTC) respectfully submits the following comments:

1
- Alameda CTC appreciates the use of the Countywide Travel Demand Model to determine the project's impacts to Vehicle Miles Traveled (VMT).

2
- On page 4.14-2, the DEIR states that the methodology for transportation impact analysis is based on VMT in accordance with Senate Bill 743. SB 743, which states that Level Of Service (LOS) shall not be the sole basis for determining transportation impacts, conflicts with current Congestion Management Program (CMP) legislation, which requires the use of a delay-based metric, such as LOS, to analyze project impacts on roadway performance. As a result, Alameda CTC is still required by CMP legislation to request delay-based analysis of project impacts, but will not subject the results to significance thresholds or use them to determine environmental impacts. The 2022 CMP does not require this analysis to be published as part of the California Environmental Quality Act process, and instead allows it to be sent directly to Alameda CTC. Please make this legislatively required document available to Alameda CTC as soon as possible.

3
- In Appendix G, Citywide VMT per capita is forecasted to estimate the impacts of a full buildout of 19,098 new housing units by 2031. Alameda CTC recognizes this methodology may overestimate the pace at which units are constructed, as RHNA requires these units to be planned for, not

3, cont.

necessarily constructed, by 2031. This discrepancy does not raise significant concerns regarding the project's impact.

4

- On page 4.14-17, the discussion of project impacts and mitigation measures is limited due to the DEIR's finding that the project will have less than significant impacts without mitigation. Alameda CTC encourages greater consideration of coordination with transit agencies and the implementation of existing citywide policies such as the Complete Streets and Vision Zero to support mode shift as the City of Berkeley experiences household growth.

Thank you for the opportunity to comment on this DEIR. Please contact me at (510) 208-7400 or Shannon McCarthy at (510) 208-7489 if you have any questions.

Sincerely,

Colin Dentel-Post
Principal Planner

cc: Shannon McCarthy, Associate Transportation Planner
Chris G. Marks, Associate Transportation Planner

Letter A2

COMMENTER: Colin Dentel-Post, Principal Planner, Alameda County Transportation Commission

DATE: October 17, 2022

Response A2.1

The commenter is correct that the VMT analysis in Section 4.16, *Transportation,* of the Draft EIR uses the regional travel demand model maintained by Alameda County Transportation Commission (Alameda CTC) to identify the VMT generated by land uses in Berkeley as well as the entire county.

Response A2.2

As discussed in Section 4.14, *Transportation,* pursuant to California Public Resources Code section 21099(b)(2) and CEQA Guidelines Section 15064.3, "a project's effect on automobile delay shall not constitute a significant environmental impact." Therefore, the transportation analysis uses the metric of VMT to analyze transportation-related impacts consistent with Senate Bill 743 and the CEQA Guidelines. While the commenter expresses a desire for the City to prepare a CMP analysis, the commenter is correct that this analysis is not required as part of the CEQA process and therefore it has not been included in the EIR. The City is currently preparing a CMP analysis separately from the CEQA environmental review process and will submit it to the ACTC in compliance with their request.

Response A2.3

The commenter is correct that the buildout assumptions in the Draft EIR are conservative and assume full implementation and completion of development under the proposed HEU within the housing element cycle.

Response A2.4

The Draft EIR includes a city-wide and programmatic analysis of impacts associated with potential buildout under the proposed HEU. The commenters suggestions are noted and are included for the decisionmakers' considerations.

Letter B1

Berkeley Neighborhoods Council
P.O. Box 5108
Berkeley, CA 94705

Dedicated to improving the quality of life for all by creating
a unified neighborhood voice for promoting livability and resolving problems

Website:www.berkeleyneighborhoodscouncil.com
E-mail: bnc50@berkeleyneighborhoodscouncil.com

October 15/2022

To Justin Horner
Associate Planner
Land Use Planning Division
City of Berkeley

Subject: DEIR for 2023-2031 Housing Element

Dear Mr. Horner:

The leadership of the Berkeley Neighborhoods Council (BNC) is concerned about the DEIR for the 2023-2031 Housing Element.

Our primary complaint is with the DEIR Impact POP-1 (Page ES-19): "*This EIR assumes full buildout of 19,098 residential units in Berkeley through 2031, which equates to a population increase of an estimated 47,443 residents compared to the existing population. However, growth resulting from the project is anticipated and would not constitute substantial unplanned population growth. This impact would be less than significant*."

1

These statements contradict the Housing Element Update itself, which shows that Berkeley's population is estimated to increase by 8,160 people from 2020 to 2030 (page 20). The EIR figure of 47,443 far exceeds the city's own projection and will strain our infrastructure. How is it possible that building for a 37% increase in population in an 8-year span will have "less than significant" impact? Do we have the water, electrical and sewer infrastructure to support this increased population?

Secondly, section 5.2.1 of the DEIR states that the 19,098 additional housing units will be built on "*vacant and/or underutilized sites within Berkeley's urban footprint and mostly near transit corridors, BART stations, and Priority Development Areas such as the Southside area, which would reduce the usage of single-occupancy vehicles and vehicle miles traveled (VMT).*" Current data show that mass transit ridership decreased sharply during the pandemic and has not returned to pre-pandemic levels. Your report also does not take into account the VMT of ride-shares and deliveries of meals and goods, which are widely used by those without cars. Nor does it include any mitigation for the urban heat island that will be created by replacing yards and other "underutilized sites" with 19,098 housing units.

2

Berkeley is already one of the most dense Bay Area cities. Our high fire zones, liquefaction zones and shoreline zones subject to sea level rise limits suitable areas to build. BNC advocated for the City Council to appeal our RHNA allocation because it does not count University housing nor vacant properties that are brought back onto the market. We cannot support a DEIR that more than doubles this number.

3

Steering Committee
Dean Metzger
Shirley Dean
Janis Battles
David Ushijima
Meryl Siegal
Amiee Baldwin
Paola Laverda
Willie Phillips

Letter B1

COMMENTER: Berkeley Neighborhoods Council

DATE: October 15, 2022

Response B1.1

As discussed in Section 4.12, *Population and Housing,* of the Draft EIR, while the proposed project would not directly result in the construction of specific development projects and would not result in direct physical changes to population or housing, the proposed HEU would promote and facilitate such development. Therefore, reasonably foreseeable effects on population and housing could occur as a result of the proposed zoning changes and these effects are analyzed throughout the EIR. In accordance with Appendix G, Section XIV of the CEQA Guidelines, Impact POP-1 evaluates whether the proposed HEU would result in substantial *unplanned* population growth in an area. The analysis in the Draft EIR acknowledges that the assumed buildout of up to19,098 additional units could result in population growth of an estimated 47,443 residents. The Draft EIR acknowledges that this analysis is conservative because it assumes a maximum buildout scenario and includes sites already planned for development and sites that could be developed even if the proposed HEU is not adopted. In addition, the State requires that all local governments adequately plan to meet the housing needs of their communities and that the proposed HEU be designed to meet the City's Regional Housing Needs Allocation (RHNA) in accordance with State law. A Housing Element is a plan for housing that is intending to plan for growth; adopting the proposed HEU would not result in *unplanned* population growth. The regional planning agency, the Association of Bay Area Governments accounts for growth in accordance with the RHNA, which is incorporated into regional plans and planning efforts, such as the Regional Transportation Plan/Sustainable Communities Strategy. In addition, as discussed in Section 4.13, *Public Services and Recreation*, and Section 4.16, *Utilities and Service Systems*, the proposed HEU would not result in significant impacts related to water, electrical, and sewer infrastructure for the reasons described in those sections.

Response B1.2

Ridership is expected to return to normal levels by the end of the proposed HEU planning cycle, as stated in Section 4.14, *Transportation*, of the Draft EIR (Pages 4.14-17 to 4.14-18). Further, the Alameda County Transportation Commissions VMT tool, which was used to analyze VMT impacts associated with the project, takes into consideration all vehicle modes, including ride shares and delivery of goods and services. Please refer to response A2.1.

Pursuant to the City's criteria for determining significant environmental impacts under CEQA (which are based on Appendix G of the *CEQA Guidelines*), increased temperature and heat island effects are not criteria of analysis for consideration in an EIR and are not studied in this EIR. Heat islands are created by a combination of heat-absorptive surfaces, such as dark paving and roofing, heat-generating activities, and the absence of vegetation which provides evaporative cooling. Heat islands can be a side effect of climate change. The effects of the proposed HEU associated with greenhouse gas emissions/climate change are addressed in Section 4.7, *Greenhouse Gas Emissions.* As discussed in that section, impacts associated with the project were found to be less than significant. Further, future development under the proposed HEU would be subject to the City's requirements related to usable open space, lot coverage maximums, landscaping and trees, all of

which would limit coverage and would provide cooling that would reduce potential heat island effects.

Response B1.3

There are no housing inventory sites or programs under the proposed HEU that would facilitate development adjacent to the shoreline. Impacts associated with liquefaction are analyzed in Section 4.6, *Geology and Soils,* of the Draft EIR. As shown on Figure 4.6-3, most of the city is within medium, low, and very low susceptibility to liquefaction. The western-most portion of Berkeley does contain a small area with "High" liquefaction potential; however, neither the proposed inventory sites, the R-1, R-1A, R-2, and R-2A districts, or Southside area overlay the "High" liquefaction zones. A small portion of the MU-R district is within a "High" liquefaction zone. Full build-out of the proposed HEU would increase population, structural development, and infrastructure that would be exposed to these hazards. However, proper engineering and required compliance with the California Building Code (CBC) and other City requirements would minimize the risk to life or property associated with liquefaction hazards. Therefore, these impacts were found to be less than significant. Impacts associated with wildfire and development in the Very High Fire Hazard Severity Zone (VHFHSZ) are discussed in Section 4.17, *Wildfire.* As discussed in that section, impacts associated with wildfire were found to be significant and unavoidable. The comment does not address the adequacy or content of the Draft EIR. The commenters suggestion is noted and is included for the decisionmakers' considerations.

Letter B2

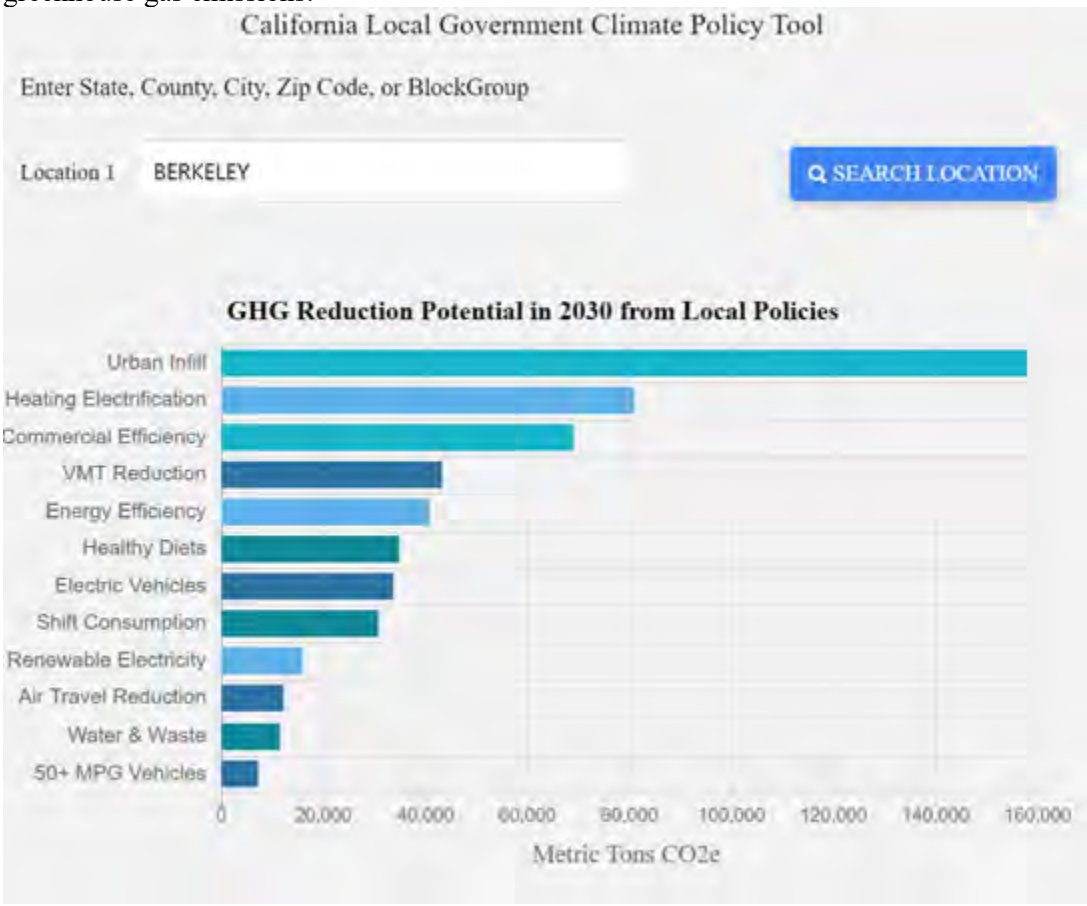
From: Keith Diggs <keith@yesinmybackyard.org>
Sent: Monday, October 17, 2022 3:32 PM
To: Horner, Justin <JHorner@cityofberkeley.info>
Subject: YIMBY Law comment on DEIR for Berkeley 2023-2031 Housing Element

Dear Mr. Horner:

I am the housing-elements manager for YIMBY Law, and would like to register a comment on the draft EIR for Berkeley's sixth-cycle housing element.

Alternative 3 of the DEIR proposes forgoing a rezoning that would accommodate some 975 units of "missing-middle" housing. While we agree with the DEIR that this missing-middle housing is necessary to reduce VMT, **we disagree with the DEIR's assertion that forgoing missing-middle would mitigate "greenhouse gas emissions."** According to UC Berkeley's climate policy tool, "urban infill" housing—such as the proposed missing middle—is by far the most effective policy that Berkeley has to reduce greenhouse gas emissions:

1



YIMBY Law therefore opposes Alternative 3 on the grounds that it would *increase* GHG emissions relative to the project proposal for allowing missing-middle housing. We support the project proposal. Please contact me with questions.

Keith

Diggs
Housing
Elements Advocacy Manager
703-409-5198

Letter B2

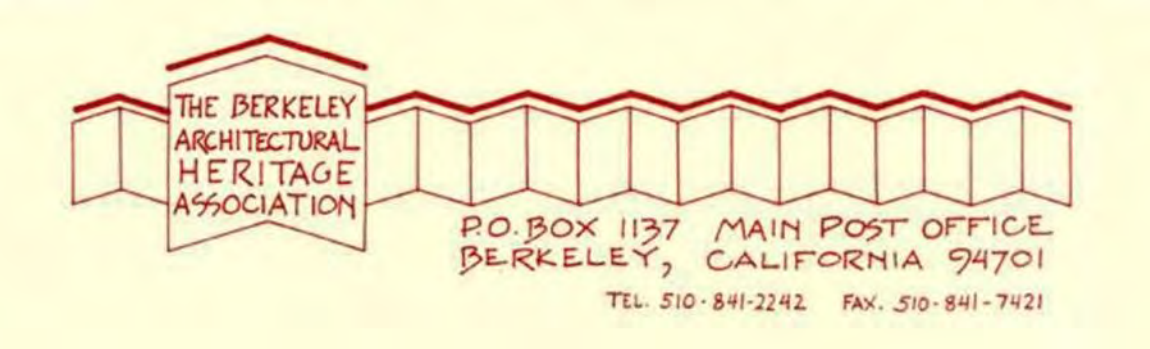
COMMENTER: Keith Diggs, YIMBY Law

DATE: October 17, 2022

Response B2.1

The commenter's opinions about the proposed project and Alternative 3 are noted and are included for consideration by City decision-makers. As required under *CEQA Guidelines* Section 15126.6, an EIR must describe a range of reasonable alternatives which would feasibly attain most of the basic project objectives and avoid or lessen the significant environmental effects of the project. Under Alternative 3, the Middle Housing Rezoning program would not be included in the proposed HEU. Approximately 975 fewer units would be constructed compared to the buildout proposed under the HEU, by not rezoning the R-1A, R-2, R-2A and MU-R districts and excluding Middle Housing Rezoning from the proposed project. The analysis in Section 6, *Alternatives,* explains that fewer total residential units would be developed under this alternative, which would result in a smaller anticipated population increase and less construction-related and operational emissions in comparison to buildout under the proposed HEU. It is acknowledged that urban infill typically generates less emissions per capita than other types of development. This alternative would result in fewer total GHG emissions compared to the proposed HEU; however, it would result in less development overall. The analysis also acknowledges that Alternative 3 would not increase the number of residential units in Priority Development Areas or along transit corridors to the same extent as under the proposed HEU, and as a result would not reduce driving distances or encourage the use of transit as much as development under the proposed HEU. Therefore, while Alternative 3 would result in less than significant impacts related to GHG emissions, the Draft EIR acknowledges that it would not promote urban infill development to the same extent as the proposed project.

Letter B3



October 24, 2022

Justin Horner
Associate Planner
Land Use Planning Division
City of Berkeley
1947 Center Street, 2nd Floor
Berkeley, CA 94704

Re: Comments to City of Berkeley's Revised Housing Element Update

Dear Mr. Horner:

I am writing to you on behalf of the Berkeley Architectural Heritage Association (BAHA) to express our serious concerns regarding the City of Berkeley's 2023-2031 Revised Housing Element Update and Draft Environmental Report (Revised Housing Element Update and RHEU). Our comments address the defects in the promulgation of this ill-advised scheme, as well as the substance of its, now revised, content.

1 Since 1974, our organization has advocated for the preservation of the wonderful legacy of architecture, history and aesthetics that enrich the City of Berkeley. Our diverse membership of over 1200 citizens includes renters, homeowners, Berkeley activists, architects, historians, professors, students, old and new residents, business owners and retirees. What we have in common is concern for the past and future of Berkeley and a desire to see that, as things change, these changes fit within the pioneering, creative, and often socially revolutionary architecture that typifies our wonderful City. They also want to see that new development respects the existing architecturally significant structures, streetscapes and landscapes that make Berkeley unique.

BAHA believes that this Revised Housing Element Update will be used by outside developers to destroy much of what makes Berkeley special, including its inclusive family neighborhoods

where renters and homeowners have co-existed since 1876. The many articles in the *San Francisco Business Times* and other pro-private development publications about how Berkeley is rolling out the red carpet for real estate developers who plan to construct high-rise, mixed-use commercial developments undermine the City's stated purpose of creating housing equity in its latest RHEU. Put simply, we don't believe any of the high-minded promises floated in the RHEU, which we regard as cynical attempts to mask what is otherwise a massive landgrab by private developers to extend their reach into the traditional residential neighborhoods in Berkeley. This residential area landgrab has the very real possibility of uprooting the last vestiges of our diverse city and destroying its wonderful existing structures and outdoor spaces.

1, cont

The choice of city planners to exceed the state required housing element by over 7000 units-- almost double what state law mandates-- is unjustified and highly irresponsible. Not only can Berkeley's existing infrastructure not accommodate the proposed level of housing growth, but this proposed level of development will also necessarily exacerbate the very real threats to life and property endemic in the City at present. As explained below, there is no guarantee in the RHEU– notwithstanding the high-minded rhetoric – that much if any of the new proposed housing will be realistically available to lower income residents, the working poor, or needy families. The RHEU anticipates that 74% of new planned "in the pipeline" units will be for moderate or above moderate income residents. (RHEU C-2.) As for units dedicated to low income residents, the time limits built into the scant number of housing density bonus units mean even the few that may be created can revert to market rate after the relevant low-rent period has expired.

Although it is lengthy, the RHEU contains very little information about the most important part of the proposed plan, namely where this new housing will be built. Table 5.4 asserts that planners found sites for 11,935 units, including 7,310 units on "opportunity sites." Figure 5.2, "Residential Site Inventory," designates numerous "opportunity sites," with no explanation as to the basis by which these parcels were identified and little information on the structures that exist on and adjacent to these locations. The RHEU states only that planners use "objective criteria" and "local knowledge," to select the opportunity sites (RHEU 100). The description of what planners did – offered at page C-14 -- is likewise uninformative: they looked at an "interactive online web mapping platform" and annotated the maps, "annotating existing use and providing additional justification for consideration." RHEU C-14. Exactly what constitutes "additional justification" was not disclosed. Because Figure 5.2 fails to identify city landmarks, parks, schools, and open spaces, it is virtually impossible to tell the impact of these "opportunity sites" within the given neighborhoods, much less assess the basis upon which they were selected. For example, without an overlay of AC Transit routes, it is impossible to tell which of the sites -- -pipeline and opportunity—are near public transportation. Figure 5.1 is similarly flawed. Rather than provide street addresses for the "opportunity sites," the RHEU provide APNs, which makes identifying existing structures and adjacent structures very difficult for a dedicated reader and impossible for

the average member of the public. The absence of information about this key aspect of the RHEU is both striking and highly suspicious.

As for landmarked properties, parks, and open spaces, all are effectively ignored. Notwithstanding the fact that several landmarked and landmark eligible properties are earmarked for demolition under the RHEU plan, the cumulative impact of these demolitions is not examined. Likewise, the individual and cumulative impacts on parks, creeks, and open spaces near the new dense planned developments are ignored.

1, cont

RHEU & DEIR Fail to Consider Alternate Sites for Construction in High Fire Danger Zones

By proposing significant housing growth in areas already challenged by climate change (see Figure 5.2) – including areas of increased fire danger – without performing the required analysis of alternative building sites, city planners have failed to satisfy basic legal requirements thereby undermining their overriding consideration findings. Among other things, the RHEU contemplate new, expansive high-density development in already densely populated hillside areas where narrow winding streets are the norm. These plans, which are in Very High Fire Severity Zones, necessarily increase the fire danger to residents of these areas both directly (by inhibiting already strained evacuation routes and straining existing utilities that are in many cases decades past their useful life) and indirectly (by necessitating the cutting of old growth trees and increasing pollution due to construction and tail pipe emissions).

2

At present, in the event of a large earthquake on the Hayward fault or large fire in the Berkeley hills, Berkeley's current fire services will be unable to save either life or property in the Very High Fire Severity zoned areas and the Hillside Overlay more generally. City officials have acknowledged this potential catastrophic scenario in their communications with CERT groups, filings in connection with UC's LRDP, and community meetings over the past few years. Increasing development in these zones will only exacerbate the disaster waiting to happen. The RHEU's failure to consider alternate building sites in light of the present situation renders the overriding consideration findings null and void. The DEIR is similarly flawed and, therefore, must be redone to address these issues and evaluate alternate sites.

Failure to Consider Aging Infrastructure and Impact of Development on Same

The law requires that the city consider the analysis of governmental constraints on the improvement and development of housing. Nowhere in the RHEU does the City address the adequacy of the City's aging existing infrastructure – including emergency services, emergency service access routes, sewer lines, waterlines -- and private utility infrastructure to support its existing population much less the proposed population growth and development density contemplated in the RHEU. The fact that some areas of the city still used the original hollowed

3

out Redwood trees for underground sewage should cause the public to question whether city infrastructure really can accommodate the thousands more units than called for by state law.

3, cont.

City officials have admitted in connection with Measure L that existing infrastructure –including roads and sewers – are failing and or soon will fail completely absent an infusion of cash via the proposed bond measure. Neither the RHEU nor the DEIR adequately address the impacts of the proposed housing elements on the city infrastructure over the next 10 years. Without doubt problems with the existing infrastructure constitutes a housing constraint. By failing to address this very real constraint, the RHEU and DEIR are demonstrably in adequate.

RHEU and DEIR Fail to Consider Impacts on Landmarked and Historic Structures and Areas

Much of Berkeley's existing housing stock is in aging buildings, some of which are landmarked, historic and/or rent controlled. The RHEU acknowledges this fact. Significantly city planners favor demolishing older structures where the floor area ratio on the lot is small. As long as a building was over 40 years old and its parcel "is underutilized based on existing Floor Area Ratio (FAR)," planners felt free to designate a property an "opportunity site," namely one that could be demolished in favor of more dense housing. Their justification for disfavoring older houses and designating them as "opportunity sites" was that, "Buildings older than 30 years typically require significant systems upgrades and often do not meet ADA requirements." Under this logic, many of the city's landmarked houses could be under the proverbial chopping block. Moreover, creating denser housing on lots where older houses have taken up little lot space (stated as FAR) likely will mean removing mature trees and gardens.

4

Nowhere does the RHEU provide the required and promised analysis of this existing housing stock at the street or neighborhood level. Instead, the RHEU promises that at some point the future – with no dates provided – a survey of existing structures will be undertaken. We are told that this "survey" will have some connection to the Landmarks Preservation Commission (LPC), but no specifics are provided.

Despite these empty promises of a future survey, the RHEU makes many ill-informed assumptions about Berkeley's existing housing and ignores the impacts of the proposed new construction on the existing housing where Berkeley citizens are living and working every day. By way of example, the RHEU ignore the importance of single-family homes in the San Pablo Park area to the economic empowerment of generations of Berkeley's African American residents and the more recent trend of gentrification and densification (tearing down to build up) of that area that is decimating that once thriving community.

Likewise, the RHEU maps potential development sites without indicating on the maps the proximity to existing and potential city landmarks. Because the city's wonderful, landmarked buildings are not even mentioned in the RHEU or reflected on the maps to showing potential

development sites, city planners have fundamentally misled the public about the true impacts of their development schemes.

4, cont.

The RHEU also makes unsupported assumptions about wealth, class, and race within the Berkeley neighborhoods where development is proposed. These assumptions are misleading and mask the very real impacts that the proposed development will have in the existing fabric of this City. Before asserting that any proposed development will make Berkeley "more equitable," city planners must analyze (a) the current racial and economic makeup of the Berkeley neighborhoods where development is proposed (ideally over a 40-year period) and (b) the safeguards or guarantees that the proposed developments will make that neighborhood "more equitable." Generalities must be avoided; instead, planners must provide actual statistics including race, age, disability, and gender, to support their assertions that the creation of largely market rate housing will make a given neighborhood more diverse and, where they claim it, more economically accessible.

Junk-in/Junk Out: the Failed RHEU Planning Process

Because the process by which the RHEU was created was outcome-directed, slapdash, and deeply misleading, we regard the RHEU as fundamentally flawed. We also view the comment process with deep cynicism and believe it to be fundamentally illegitimate given how weighted towards further large-scale development the dialogue has been to date.

5

The RHEU and DEIR should have addressed how the city can fulfill the state's mandated housing element separate and apart from the much larger, more ambitious program proposed. Because these documents do not set out the option of fulfilling the minimum state requirement, Berkeley residents have no means of comparing the proposed large-scale development with that actually required under the new state housing mandates. For example, residents may have preferred a housing plan that satisfies the state mandate but that allows additional units to be built in future if certain parameters have been met. By failing to set out a plan for meeting the minimum housing construction within the state mandate, the RHEU and DEIR fail to provide important benchmarking.

The RHEU promotes large-scale residential development on the basis that it will generate needed low-income housing, yet upon careful examination, little low-income housing is guaranteed. Instead, planners have made aspirational projections as to who will be able to afford the projected units without fully disclosing the lack of guarantees that the units will indeed be available to lower income residents. Nor is there any meaningful analysis of the impact of the proposed development on existing lower cost housing. As noted above, the RHEU lacks actual demographic statistics for each impacted neighborhood. It also fails to provide an analysis of the

demographics of the newly created units. Absent this baseline data, its statements about impacts on existing and future housing stock are flawed and without proper foundation.

BAHA remains disheartened that the needs of existing Berkeley residents, who favor human-scale structures that blend with existing buildings and can house families and multi-generational cohorts, have largely been ignored in favor of dense high-priced developer specials for (largely) single commuters or students many of whom reside in Berkeley for only part of the year. Berkeley's recent housing building boom has largely been high-cost student housing. While the new $2000- $10,000/month apartments may fulfill some UC students' needs, this is hardly the kind of housing that the average Berkeley citizen can afford. Furthermore, most of these new apartments do not feature layouts and floor plans that can easily be occupied by a multi-generational family. Instead, they are designed to be occupied by a specific type of person – a single student living alone or with other students. By developing units and marketing units to students (who necessarily will occupy their units only when enrolled as a student), the large out-of-state private dorm developers are effectively doing an end-run around Berkeley's rent control. This practical reality is a far cry from the housing equity for existing and new long-term residents that Berkeley city planners are touting in the RHEU.

5, cont

BAHA recommends that city planners go back to the drawing board. At a minimum they must:

- Provide a meaningful analysis of alternate sites for constructing housing slated to be built in RH-1 and other fire zones;
- Evaluate the constraints on housing overall including the existing, failing city infrastructure;
- Evaluate the impact of the proposed development on city infrastructure;
- Evaluate the impact of building the proposed additional housing in areas where emergency evacuation is difficult and/or the existing fire risk is high;
- Provide a thorough analysis of existing housing stock on a neighborhood-by-neighborhood basis rather than relying on generalities;
- Provide support, on a neighborhood-by-neighborhood basis, for their assertions that planned housing will make housing in each neighborhood more "equitable";
- Explain what "objective criteria" were used to identify the opportunity sites;
- Identify the opportunity sites by address and describe the cultural and environmental impacts of developing at these addresses;
- Provide information about the proximity to landmarks, potential landmarks, and historic areas and the impacts on those landmarks of the proposed developments;
- Be transparent as to the existence or lack of guarantees that any given proposed development will have low-income housing;
- Provide a plan for meeting the state mandated new housing so that citizens can better understand the costs and benefits of constructing more than the mandated units.

6

Sincerely,

Leila Moncharsh

Leila Moncharsh
President, BAHA

Attachment

AS:fc

cc: Berkeley Mayor and City Council
Berkeley City Attorney
Berkeley Landmarks Commission
Berkeley City Attorney
Berkeley Mayor and City Council
Berkeleyside
Daily Planet

DOWNTOWN PUBLIC REALM

As shown in figures 9 and 10, the public realm in the Downtown blocks adjacent to campus has the potential for transformative c hange in the near future. University owned sites occupy roughly half of the street frontage, and most of these sites are proposed to be redeveloped withi n the timeframe of the Capital Plan.

2009-2019

Figure 10. Aerial view of the west end of the Campus Park at its interface with Downtown Berkeley.

DOWNTOWN PROJECTS: ART MUSEUM AND CENTER STREET

The sketch shows how the new Art Museum would relate to Center Street. The main entrance, the museum store, and the café face and activate the street, while street level windows provide a glimpse of the public galleries. The new conference hotel project, planned as a partnership with a private developer-operator, is shown in the foreground. The scope includes a hotel, a conference center, and a new executive education center operated by the Haas School of Business.

Figure 11. Center Street transformed by new Hotel & Executive Education Center left) and new Art Museum (right).

28

DOWNTOWN PROJECTS: GATEWAY BUILDING & UC GARAGE

This project would also be a third party partnership. Gateway is planned as a flexible office building, used primarily as relocation space for campus units displaced from buildings undergoing seismic renovation. However, despite this prosaic use, Gateway occupies a prime corner at the west entrance to campus, and high quality design is imperative. The adjacent historic UC Garage, now used for bus storage, would be renovated for a public-oriented use, such as the campus visitor center now housed in the drab lobby of University Hall.

Figure 12. View from north of Gateway Building with renovated UC Garage in foreground.

Letter B3

COMMENTER: Leila Moncharsh, President, Berkeley Architectural Heritage Association

DATE: October 25, 2022 (After close of public comment period)

Response B3.1

This comment does not address the adequacy or content of the Draft EIR. This comment summarizes the comments responded to in responses B3.2 to B3.6 below.

Response B3.2

This Draft EIR analyzes the HEU as proposed and described in Section 2, *Project Description.* Impacts associated with wildfire and development in the VHFSZ are discussed in Section 4.17, *Wildfire*. As acknowledged in that section, impacts associated with wildfire, including impacts associated with emergency evacuation and exposure to pollutants from a wildfire, were found to be significant and unavoidable. The Draft EIR also considers an Alternative that includes no zoning changes in the R-1H district and concludes that wildfire impacts would still be significant and unavoidable under that Alternative (Alternative 2). The commenter does not provide information showing that the analysis in the Draft EIR is inadequate.

Response B3.3

Impacts associated with utility infrastructure are discussed in Section 4.9, *Hydrology and Water Quality,* and in Section 4.16, *Utilities and Service Systems*, of the Draft EIR. As discussed in those sections, impacts related to stormwater, water, and wastewater infrastructure, related to the need for new and expanded infrastructure due to the proposed HEU and impacts associated with new or expanded infrastructure pursuant to CEQA *Guidelines* Appendix G, were found to be less than significant. The commenter does not provide information showing that the analysis in the Draft EIR is inadequate.

Response B3.4

The comment is primarily related to the proposed HEU and not the environmental analysis in the Draft EIR. Impacts to historical resources are analyzed in Section 4.4, *Cultural Resources*, of the Draft EIR. As stated in that section, three of the housing inventory sites are known to contain properties which are listed in, or eligible for, the National Register of Historic Places, California Register of Historical Resources, or designated City of Berkeley Landmarks, and therefore are considered historical resources. The Draft EIR also acknowledges that development under the proposed HEU could impact historical structures that are not yet known and concluded that this impact would be significant and unavoidable.

Response B3.5

This comment is related to the proposed HEU and not to the environmental analysis in the Draft EIR. The Draft EIR analyzes the HEU as proposed, including the programs and policies contained in the HEU. Alternatives to the proposed HEU were considered, and a reasonable range of alternatives was analyzed in Section 6, *Alternatives,* of the Draft EIR as required under CEQA.

Response B3.6

The comments mostly pertain to the proposed HEU, and do not address the environmental analysis or conclusions on the Draft EIR. Impacts related to infrastructure, emergency evacuation, and historical resources, which are mentioned in previous comments, were analyzed in the Draft EIR. Please see responses B3.1, B3.2 and B3.3. Alternatives to the proposed HEU were considered and analyzed in Section 6, *Alternatives,* of the Draft EIR, as required under CEQA.

Letter C1

From: "adolfo c" <adolfo2@comcast.net>
Sent: Saturday, October 15, 2022 1:16 PM
To: Horner, Justin <JHorner@cityofberkeley.info>
Cc: All Council <council@cityofberkeley.info>; Berkeley Mayor's Office <mayor@cityofberkeley.info>
Subject: Housing Elelment DEIR for 2023-2031

October 15, 2022

To: Justin Horner, Associate Planner
Land Use Planning Division, City of Berkeley

cc: Mayor Jesse Arreguin and Berkeley City Council

Re: DEIR for 2023-2031 Housing Element

Dear Mr. Horner, et al:

First I want to thank the BNC for their important input and public comment regarding the Berkeley Housing Element for 2023-2031. I too agree and support their insight and constructive criticism regarding our city's housing mandate. Please, do the right thing for the actual people of Berkeley here and now.

1

The leadership of the Berkeley Neighborhoods Council (BNC) is concerned about the DEIR for the 2023- 2031 Housing Element. Our primary complaint is with the DEIR Impact POP-1 (Page ES-19): " This EIR assumes full buildout of 19,098 residential units in Berkeley through 2031, which equates to a population increase of an estimated 47,443 residents compared to the existing population. However, growth resulting from the project is anticipated and would not constitute substantial unplanned population growth. This impact would be less than significant ."

These statements contradict the Housing Element Update itself, which shows that Berkeley's population is estimated to increase by 8,160 people from 2020 to 2030 (page 20). The EIR figure of 47,443 far exceeds the city's own projection and will strain our infrastructure. How is it possible that building for a 37% increase in population in an 8-year span will have "less than significant" impact? Do we have the water, electrical and sewer infrastructure to support this increased population?

2 Secondly, section 5.2.1 of the DEIR states that the 19,098 additional housing units will be built on “vacant and/or underutilized sites within Berkeley’s urban footprint and mostly near transit corridors, BART stations, and Priority Development Areas such as the Southside area, which would reduce the usage of single-occupancy vehicles and vehicle miles traveled (VMT).” Current data show that mass transit ridership decreased sharply during the pandemic and has not returned to pre-pandemic levels. Your report also does not take into account the VMT of ride-shares and deliveries of meals and goods, which are widely used by those without cars. Nor does it include any mitigation for the urban heat island that will be created by replacing yards and other “underutilized sites” with 19,098 housing units.

3 Berkeley is already one of the most dense Bay Area cities. Our high fire zones, liquefaction zones, and shoreline zones subject to sea level rise, limits suitable areas to build. BNC advocated for the City Council to appeal our RHNA allocation because it does not count University housing nor vacant properties that are brought back onto the market. We cannot support a DEIR that more than doubles this number.

We must have leadership that understands and supports and is working to properly manage our city's character and spirit, our livability and quality of life, mitigating our limited capacities and fulfilling our city's priorities to benefit those who live here now.

In agreement with the BNC's concerns and requests,
sincerely,

Adolfo Cabral
D-2, Berkeley

* * *
Berkeley Neighborhoods Council
Steering Committee
Dean Metzger
Shirley Dean
Janis Battles
David Ushijima
Meryl Siegal
Amiee Baldwin
Paola Laverda
Willie Phillips

Letter C1

COMMENTER: Adolfo Cabral

DATE: October 15, 2022

Response C1.1

Please refer to Response B1.1.

Response C1.2

Please refer to Response B1.2.

Response C1.3

Please refer to Response B1.3.

Letter C2

From: Laura Klein <lauraanneklein@gmail.com>
Sent: Saturday, October 15, 2022 7:41 PM
To: Horner, Justin <JHorner@cityofberkeley.info>
Subject: Comment on Housing Element

1 I am shocked at the proposed number of new housing units, more than double the RHNA numbers. This would increase the population of Berkeley by over a third. Where is the infrastructure we need for that kind of growth-public transit, parking, police officers, firefighters, schools? This is truly outrageous. And you are doing this without even getting the word out to the unsuspecting residents of Berkeley!

Laura Klein
Berkeley, CA 94703

Letter C2

COMMENTER: Laura Klein

DATE: October 15, 2022

Response C2.1

Impacts associated with population, infrastructure, transit, police, fire protections services, and schools are addressed in Section 4.12, *Population and Housing,* Section 4.16, *Utilities and Service Systems;* Section 4.14, *Transportation;* and Section 4.13, *Public Services and Recreation* of the Draft EIR. As discussed in those sections, impacts were found to be less than significant. Parking supply and demand is not required to be analyzed under CEQA and is no longer listed in CEQA Guidelines Appendix G as a topic to be analyzed.

Letter C3

From: Eric Johnson <johnsoew@gmail.com>
Sent: Sunday, October 16, 2022 11:46 AM
To: Horner, Justin <JHorner@cityofberkeley.info>
Cc: Berkeley Neighborhoods Council <bnc50@berkeleyneighborhoodscouncil.com>
Subject: Re: DEIR Housing Element

Mr. Horner,

1 As a Berkeley homeowner with young children and a long-term interest in our city's and region's future, I strongly support the vitality and fiscal resilience that 47,443 new residents will bring to Berkeley. I welcome the more dynamic commercial corridors and greater utilization of diverse transit options that more density brings. I encourage the Land Use Planning Division to do all it can to ensure that Berkeley remains forward-looking, climate-conscious, and responsive to the urgent housing needs of our most vulnerable neighbors.

Thank you,

Eric Johnson

On Sat, Oct 15, 2022 at 9:52 AM Berkeley Neighborhoods Council <bnc50@berkeleyneighborhoodscouncil.com> wrote:
Please accept the attached comments for the DEIR for the Housing Element.

Berkeley Neighborhoods Council (BNC)
Check out our website for up to date information and resources:
berkeleyneighborhoodscouncil.com

Letter C3

COMMENTER: Eric Johnson

DATE: October 16, 2021

Response C3.1

The comment does not address the adequacy or content of the Draft EIR. The commenter's suggestion is noted and is included for the decisionmakers' consideration.

Letter C4

From: Walter Wood <whwoodii@gmail.com>
Sent: Saturday, October 15, 2022 7:51 PM
To: Horner, Justin <JHorner@cityofberkeley.info>; All Council <council@cityofberkeley.info>
Subject: public comment on Berkeley Housing Element Draft Environmental Impact Report, due Oct 17, 2022

1 The Housing Element Draft Environmental Impact Report (DEIR) appears to understate damage to neighborhoods and in particular damage to parking availability in Berkeley that would be caused by proposed zoning changes and excessive development in the name of "more housing." Berkeley needs to protect neighborhoods that value lower population density. State legislators should lose their jobs for passing laws that promote higher

2 population density in residential areas where quality of life continues to be adversely affected by population increases. We do not need more people in Berkeley. For example, BART parking lots should remain parking lots, not be transformed into detrimental housing that increases crowding of people together.

Walter Wood
Berkeley, CA

Letter C4

COMMENTER: Walter Wood

DATE: October 15, 2022

Response C4.1

Please refer to response C2.1.

Response C4.2

The comment does not address the adequacy or content of the Draft EIR. The comment is included for the decisionmakers' considerations.

Letter C5

October 16, 2022

Justin Horner
Associate Planner
Land Use Planning Division
1947 Center Street
Berkeley, CA 94707

Subject: City of Berkeley 2023-2032, Housing Element Update,
Draft Environmental Impact Report

Dear Mr. Horner:

I understand it, this 400 plus page complex document, the Draft Environmental Impact Report (DEIR), is required by the California Department of Housing and Community Development to indicate how the city of Berkeley will meet the Rental Housing Needs Allocation (RHNA) goals (8,934 residential units in designated income categories) assigned by the Association of Bay Area Governments (ABAG) through 2032. The DEIR on page ES-2 clearly indicates that based on an inventory of existing sites that rezoning is not needed to meet the level of "deed-restricted affordable housing and economic and geographic diversity" as expressed by the RHNA goals. Therefore, a "buffer zone" of 10,164 new residential zones has been added that increases the need for units for lower income to moderate income households, bringing the total number of new residential units that must be constructed to 19,098, increasing the City's population by some 47,000 new residents.

1

As a long-term resident, a former Mayor of Berkeley and a current member of Berkeley's Disaster and Fire Safety Commission, my comments reflect my deep concern that this is far too much potential density. Berkeley is a small 8 to 9 square mile community that has almost no vacant land and fixed boundaries which do not allow expansion, and which further houses a State Constitutional entity – the University of California – which has its own land use authority. All of these factors and its existing development makes it currently one of the most densely populated areas in the East Bay. My comments follow:

2

First of all, The DEIR indicates that an additional "buffer zone" is introduced to achieve "No Net Loss" which you imply is due to SB 166. Yet, when a search for SB 166 is done, it reveals legislation that involves cannabis. Please supply a corrected reference.

3

The Notice of Preparation of the DEIR was introduced in January 2022 and does not provide sufficient information that to achieve the 19,098 new residential units goal, rezoning of the R-1, R-1A, R-2, R-2A and MU-R Zoning Districts will be needed. It does not indicate that the RHNA goal number did not count existing rooms in University Resident Halls, Co-Ops, or fraternities and sororities because they do not each have a separate bathroom. While a definition of such rooms was not provided there has been no real information provided to a community that faces this problem. Such rooms could possibly house some 6,000 students and are simply ignored as a housing resource.as the city of Berkeley chose not to appeal its RHNA assessment. A decision that has resulted in displacement of lower income people and neighborhoods that

3, cont. once provided stable housing for persons of color. Will the continuation of these policies, particularly in the South Side and Downtown continue the displacement effects and result in greater densities and further losses of racial and economic diversity within Berkeley?

4 As the University continues to adhere to a policy of admitting more and more students and not providing housing on the core campus, student housing (exemplified by one kitchen and 5 separate bedrooms each with a bathroom which counts as just one unit) will be developed in the community that not only displaces residents as rents skyrocket, but the developer's profits also increase substantially, and existing affordable rent-controlled units are destroyed. I did not see a discussion of this current scenario in the DEIR. Why? It's what's happening now and how will increasing development change this?

5 In addition, rezoning the various residential zones includes specifically mentioning the hillside overlay district or Fire Zone 2 to allow more development. This Fire Department has included Fire Zone 2 as a High-Risk Wildfire Public Safety Area. The area includes the Alquist-Priolo Earthquake Zone (Hayward Fault) that has been called the most dangerous earthquake fault in the nation and the most likely fault in the East Bay to suffer a major earthquake. This area also contains officially recognized and mapped landslide designated areas and scores of narrow streets designated by address that was compiled by the city in 2015 which the DEIR does not mention. These streets not only currently impede emergency vehicle access and cannot serve as routes for both fire-fighting apparatus going east to fight a wildfire and evacuation routes for residents going east for their safety. After the 1991 wildfire that killed 25 in Oakland mostly from cars trapped by the fire, evacuation times were studied. Two hours to evacuate was cited as needed for safe evacuation, but since then wildfires have increased in frequency and intensity with fires jumping large areas in less than a minute. A former Berkeley Fire Chief has advised that the burn time from ridge to coast would be only one hour. Yet the DEIR maintains that deleting rezoning in the hillside overlay area would be meaningless due to SB 9. There is nothing that refutes the statement that increasing density in this area will simply expose more people to higher risk. That should not be tolerated in our Housing Element!

6 Furthermore, the DEIR does not consider the areas that have been identified and mapped as Liquification Areas, most of which are in the eastern areas of West and South Berkeley, but some of which are in or near the Downtown. The time has come to consider these areas in the event of more than just a minor shake. What will be the effect of a major incident on buildings, and doesn't this mean that the Building Code should be strengthen before new development occurs? I don't believe that such analysis has even been done, and a text search of the updated Housing Element reveals no mention of "liquefaction." Why is there a lack of such information in the DEIR?

7 The same is true of incorporating new high-rise buildings or renovation of such existing structures that allow for safe evacuation or residents in the event of a fire. One only has to read daily newspapers to understand the vulnerability of the residents and workers in high-rise structures when a fire occurs.

8 While the State Report on Sea Level Rise states that communities should plan for the worst case, the DEIR while recognizing that flooding might occur, relies on compliance with

8, cont.

permits, other regulations and the existence of impervious surfaces to negate consideration of other mitigations such as reducing development in identified areas. Current work being done at the University indicates that ground water plus rising sea level can impact infrastructure such as sewers to levels that will release gas from toxic contaminated soils under residences through hairline cracks around toilets. Such toxins would penetrate homes that would seriously affect the health of the residents. This information is missing from the DEIR.

9

The DEIR is also silent on the issue of allowing increased residential density nearby the locations where large amounts of toxic chemicals are stored or used, e.g., the hot asphalt on Virginia, ammonia at the Bayer plant which is to be substantially expanded and reported radioactive materials on the Berkeley Campus and at Lawrence Berkeley National Laboratory. Incidents have been reported at these sites in the past and again the DEIR does not deal with the impacts to residences nearby in the event of an accidental release of materials on site or which would occur during a wildfire off site or earthquake event. There is also reported to be a large pipeline of airport fuel with transects Berkeley from north to south near I-80. Why are these instances not considered in the DEIR in terms of nearby increased residential development?

10

The DEIR does consider the need for additional police and fire facilities particularly in the event of the predicted increase of some 47,000 people. I do not know about any planned increase in police facilities but with 44 shootings this year in Berkeley and the recent incident near the UC Dorms there might well be such a request brewing. I do know that the Fire Department is seriously looking into a new training facility that may have to be located outside of Berkeley because of lack of current space within city boundaries. This information has been provided to the Disaster and Fire Safety Commission and the public. It should be mentioned in the DEIR not only because it is deemed necessary, but because of the potential possibility of increased response times to an increased population and the increase in height which will may require new equipment but increased construction costs to ensure fire safety. It is doubtful that the reliance on Measure FF funds will mitigate these problems to a less than significant level. These issues need to be address and if not, why?

11

And there is the issue of adequate open space. Berkeley has a policy of 2 acres per 1,000 population. The DEIR says this would be reduced to 1.69 acres per 1,000 population if residential development is increased. However, the DEIR dismisses this loss as not important since Berkeley residents are near to Tilden, McLaughlin East Shore State Park and Claremont Canyon. This misses the point that Berkeley is home to UCB student as well as families and we have always valued open space park facilities that serve children as well aa adults and that, these open spaces that make neighborhoods livable, should be within walkable distance from homes. tNot having such spaces is saying families with children should live elsewhere. Berkeley is not he same as New York City, and we want to provide space for both homes and neighborhood parks. The updated Housing Element does not do this, but the subject can't just go away because the DEIR does not reflect this need.

12

The DEIR mentions People's Park in a way that states that the open space there will not be cleaned up and remain open but will instead become space for students who will be living in a UC Dorm constructed on the site. This doesn't bode well for either open space for the

12, cont. community which includes students or for the recognition of already identified historical resources on the site. Is this the city's position? Questions were raised in a September meeting by the Planning Commission as to what constituted an historic site and was not answered by you or the Rincon Consultant representative. Berkeley has a considerable number of historic resources in all of the indicated rezone areas, but there in no indication of how this will be considered within the proposed new development. These areas should not be simply pushed aside.

13 If, in response to the updated Housing Element and its DEIR, the recommendations are adopted and the rezoning and other actions proceed and, if the development does not occur at the full predicted level, for some reason, residents will be left with the potential hanging over their future, making Berkeley a target for incompatible development here and there no matter what.

14 So why not develop a large map, showing all of the areas where development should be reduced or denied all together, mentioned here and I am sure in other comments, and from that develop the criteria for new development that would include both the denied units from new RHNA goals as well as the units that will be reclaimed hopefully using funds from Vacancy Tax which is on the November ballot that are more likely to occur. Berkeley residents want more affordable housing that is well designed to last and contribute to a community in which all can flourish. I believe we can find such a balanced response what responds to the known challenges, and which also provides more affordable housing.

Sincerely,

Shirley Dean

Letter C5

COMMENTER: Shirley Dean

DATE: October 16, 2021

Response C5.1

The comment does not address the adequacy or content of the Draft EIR. The commenters opinions are noted and are included for the decisionmakers' considerations.

Response C5.2

The citation in the Draft EIR is correct. On September 29, 2017, Governor Brown signed into law 15 bills related to housing, including SB 166. SB 166 amended the "No Net Loss Law" (Government Code Section 65863) to ensure that agencies maintain an ongoing supply of housing construction sites for residents of various income levels throughout the entirety of a housing element planning period. This requirement was effective on January 1, 2019.[1]

Response C5.3

According to *CEQA Guidelines* Section 15082, the Notice of Preparation must be filed immediately after deciding that an EIR is required and should include sufficient information describing the project and the potential effects to enable public agencies to make a meaningful response. The Notice of Preparation for the proposed HEU states that "the City's zoning and other land use regulations must accommodate between approximately 9,750 and 10,500 new units," and satisfied the requirements of the *CEQA Guidelines.* The commenter's opinions about how the City is proposing to satisfy the RHNA requirements are noted and will be considered by City decision-makers but do not pertain to the Draft EIR.

Potential impacts with respect to displacement are discussed in Section 4.12, *Population and Housing,* of the Draft EIR. As noted in this section and throughout the Draft EIR, the proposed HEU is a policy document and does not directly result in the construction of specific development projects that would result in the loss of housing. The proposed HEU is designed to encourage additional housing in accordance with State law. The Draft EIR acknowledges that specific future projects may result in displacement; however, projects that involve demolition or elimination of dwelling units would be subject to BMC Chapter 23.326 and other City and HEU policies which would reduce displacement impacts by ensuring that demolition of housing units would not be materially detrimental to the housing stock and that assistance would be provided to occupants of housing units to be demolished. Therefore, the direct effects associated with displacement from future development under the proposed HEU were found to be less than significant. Impacts associated with diversity within Berkeley are not effects on the environment for the purpose of CEQA. The focus of CEQA is on physical environmental impacts, such as impacts of a project on air quality, water quality, or habitat. In general, socioeconomic effects are beyond the scope of the CEQA environmental review process unless a causal link can be established between anticipated socioeconomic effects of a proposed action and adverse physical environmental impacts (CEQA

[1] https://www.hcd.ca.gov/community-development/housing-element/housing-element-memos/docs/sb-166-final.pdf

Guidelines Section 15131(a), CEQA Section 21082.2). Nevertheless, these issues are important policy considerations that are addressed in the proposed HEU.

Response C5.4

The comment does not address the adequacy or content of the Draft EIR. The cumulative scenario evaluated throughout the Draft EIR considers development proposed under the University of California, Berkeley's Long Range Development Plan, which includes the provision of student housing on university properties. See also Response C5.3.

Response C5.5

Impacts associated with fault rupture and landslides are discussed in Section 4.6, *Geology and Soils.* As acknowledged under Impact GEO-1, the proposed HEU involves zoning modifications in the R-1, R-2, and R-2A districts, portions of which are near the Hayward fault. As shown in Figure 4.6-4 of the Draft EIR, landslide risk throughout the majority of Berkeley is low; however, localized areas of instability exist throughout the Berkeley Hills in the eastern portion of the city. While risks associated with fault rupture and earthquake-induced landslides are present in the city, with compliance with existing regulations and requirements, the impacts were found to be less than significant. Impacts associated with wildfire and emergency evacuation are discussed in Section 4.17, *Wildfire,* of the Draft EIR. As acknowledged in that section, impacts associated with emergency evacuation during wildfires were found to be significant and unavoidable. As discussed in Section 6, *Alternatives,* of the EIR, if the R-1H district remains single family residential, SB 9 would be applicable in that zoning district. SB 9 applies to parcels zoned for single family residential development, and requires agencies issue ministerial approval for projects that propose up to two residential units on any parcel within a single-family residential zoning district if the development meets specific objective criteria. It would be speculative to determine how many eligible parcels would utilize the provisions of SB 9, so the Draft EIR was conservative in its analysis and assumed a maximum development scenario, so as not to miss or underestimate potential environmental effects.

Response C5.6

Impacts associated with liquefaction are analyzed in Section 4.6, *Geology and Soils,* of the Draft EIR. As shown on Figure 4.6-3, most of the city is within medium, low, and very low susceptibility to liquefaction. The western-most portion of Berkeley does contain a small area with "High" liquefaction potential; however, no proposed inventory sites are within the area and the R-1, R-1A, R-2, and R-2A districts and Southside do not overlay the "High" liquefaction zones. A small portion of the MU-R district is within a "High" liquefaction zone. Full build-out of the proposed project would increase population, structural development, and infrastructure that would be exposed to these hazards. However, proper engineering and required compliance with CBC and other City requirements would minimize the risk to life or property associated with liquefaction hazards. These impacts were found to be less than significant.

Response C5.7

As discussed in Section 4.13, *Public Services and Recreation* and Section 4.17, *Wildfire,* future projects would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code, under BMC Chapter 19.48. New residential

projects allowed by the proposed HEU would also be reviewed for compliance with these requirements and compliance with other building and safety regulations several times during different phases of project development. Several tall structures are already located in the city, and the Fire Department has adequate equipment to serve such structures and requires associated measures as part of the permitting process related to fire-safety features such as on-site equipment and adequate water pressure. The increase in height of development would not result in the need for new or expanded public service facilities.

Response C5.8

As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, future development would be required to obtain a State Water Resource Control Board Construction General Permit, which requires preparation and implementation of a Stormwater Pollution Prevention Plan for projects that disturb one acre or more of land. Future projects would also be required to comply with regulations outlined in the Berkeley Municipal Code and the Municipal Regional Stormwater Permit, which would ensure the implementation of Best Management Practices to avoid adverse effects associated with stormwater runoff. Furthermore, future development would be required to implement low-impact development measures and on-site infiltration as required under the provisions of the Municipal Regional Stormwater Permit, which would reduce water pollution from stormwater runoff compared to existing conditions. Compliance with State and local regulations would reduce impacts on water quality to a less than significant level. Therefore, the Draft EIR found that there was not a need for additional mitigation beyond compliance with existing regulations.

The commenter does not provide evidence to support the statement that rising sea levels could result in the release of gas from contaminated soils. Inventory sites and rezone areas are not located near the San Francisco Bay or in areas directly prone to sea level rise inundation, as shown in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR (Figure 4.9-1).[2] Section 4.8, *Hazards and Hazardous Materials,* of the Draft EIR acknowledges that future development could occur on contaminated sites. If dewatering is determined to be necessary during construction, it may result in the discharge of potentially contaminated groundwater to surface water and may degrade the water quality of surrounding watercourses and waterbodies. However, future development projects would be subject to existing regulations to treat effluent and, if water is determined to be contaminated, the water must be collected and either treated or disposed of according to waste discharge requirements. Specifically, future development projects would be subject to the San Francisco Bay Regional Water Quality Control Board Order No. R2-2012-0060, General Waste Discharge Requirements for Discharge or Reuse of Extracted Brackish Groundwater, Reverse Osmosis Concentrate Resulting from Treated Brackish Groundwater, and Extracted Groundwater from Structural Dewatering Requiring Treatment (Groundwater General Permit). The Groundwater General Permit requires dischargers to obtain an Authorization to Discharge, treat effluent to meet water quality-based effluent limitations, and comply with the Monitoring and Reporting Program. Pumped groundwater must be tested and if determined to be contaminated, the water must be collected and either treated or disposed of pursuant to waste discharge requirements of Order No. R2-2012-0060. If required, future housing development sites would be remediated in accordance with existing regulations such that contamination does not result in unacceptable risk to future residents.

[2] https://www.kqed.org/science/1973624/maps-see-which-bay-area-locations-are-at-risk-from-rising-seas

Response C5.9

The Draft EIR analyzes impacts associated with residential development on or near hazardous materials sites and impacts associated with the accidental release of hazardous materials in Section 4.8, *Hazards, and Hazardous Materials*. The California Supreme Court in a December 2015 opinion (*BIA v. BAAQMD*) confirmed that CEQA is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. However, facilitating housing in areas near existing commercial and industrial development could bring additional residents to areas where hazardous materials are used or transported or where there has been past use of hazardous materials, which could potentially increase exposure of residents to hazardous materials. As stated in the Draft EIR, there are many regulations in place to ensure the safe handling, storage, and disposal of hazardous materials and these regulations are overseen by the City of Berkeley's Toxics Management Division. New development that uses hazardous materials would be required to comply with the regulations, standards, and guidelines established by the United States Environmental Protection Agency (EPA), the State of California, and City of Berkeley related to storage, use, and disposal of hazardous materials. Additionally, compliance with the General Plan's Disaster Preparedness and Safety Element and the Environmental Management Element policies, including Policy S-15 (Construction Standards), Policy EM-12 (Education), Policy EM-13 (Hazardous Materials Disclosure), and Policy EM-15 (Environmental Investigation), would reduce the potential for accidental exposure and hazards associated with the use and disposal of hazardous materials.

In addition, as discussed in in Impact HAZ-1 in Section 4.8, *Hazards, and Hazardous Materials,* of the Draft EIR, it is acknowledged that construction activities on contaminated sites could potentially release hazardous materials which could pose a risk to the environment and human health. However, future projects would be subject to regulatory programs such as those overseen by the Regional Water Quality Control Board (RWQCB) and the Department of Toxic Substances Control (DTSC), which require applicants for development of potentially contaminated properties to perform investigation and cleanup if the properties are contaminated with hazardous substances. All future projects requiring discretionary review would also be subject to the City's Standard Condition of Approval outlined under Impact HAZ-1 (pages 4.8-15 – 4.8-16), which would require documents as applicable to the project such as environmental site assessments, soil and groundwater management plans, building materials surveys, and hazardous materials business plans.

Response C5.10

The Berkeley Fire Department is considering the need for a new training facility, but no site has been selected and site-specific details of development of a facility are not reasonably foreseeable at this time, nor would it be a direct result of the HEU.

Response C5.11

The City's 1997 Master Plan included a goal of 2 acres of parkland per 1,000 residents; however, that goal is not included in the City's current General Plan, which supersedes the City's 1997 Master Plan. The City does not have a current policy to achieve 2 acres of parkland per 1,000 residents. The project's impact on parks and recreational facilities is discussed in Draft EIR Section 4.13, *Public Services and Recreation*. The Draft EIR acknowledges that development that would occur during the planning period of the proposed HEU and would increase demand for parks and recreation. However, Appendix G of the *CEQA Guidelines* does not require an analysis of the City's adequate

provision of parks and recreational facilities to serve the project. Instead, it requires an analysis of the potential for adverse physical impacts associated with the provision of new or physically altered facilities, or substantial physical deterioration of existing facilities. Section 4.13, *Public Services and Recreation,* includes an analysis of potential physical deterioration and found that physical deterioration would not occur such that significant physical environmental impacts from the provision of new or expanded facilities would occur. Impacts were found to be less than significant.

Response C5.12

As discussed in Section 4.13, *Public Services and Recreation,* of the Draft EIR, a plan to develop the 2.8-acre People's Park site into student housing and 1.7 acres of open space has been approved by the University of California. This is considered in the Draft EIR. Section 4.4, *Cultural Resources,* of the Draft EIR defines a historical resource pursuant to federal, State, and local standards. The City has provisions in place for projects that would involve the demolition of non-residential buildings over 40 years old that require use permits or administrative use permits to be forwarded to Landmarks Preservation Commission for review. The City's zoning project application process also has submittal requirements for zoning projects that include the proposed demolition or substantial change to any building more than 40 years old subject to environmental review to complete and submit a historical resource evaluation. The Draft EIR acknowledges that development under the proposed HEU could impact historical structures and found that this impact would be significant and unavoidable.

Response C5.13

The comment does not address the adequacy or content of the Draft EIR.

Response C5.14

The comment does not address the adequacy or content of the Draft EIR.

Letter C6

From: Toni Mester <healthyparks@comcast.net>
Sent: Sunday, October 16, 2022 5:51 PM
To: Horner, Justin <JHorner@cityofberkeley.info>
Subject: HEU DEIR

To: Justin Horner, Associate Planner, City of Berkeley and all concerned

From: Toni Mester, 2431 Tenth Street

RE: Comments on the DEIR for 2023-2031 Housing Element

October 17, 2022

Please respond to the following queries by topic, which are found in several sections of the Housing Element DEIR.

Student Population: How does the City count the student population, including the increase required by University of California, toward the RHNA goals?

State density bonus: please explain in the relevant sections how the state density bonus is calculated in areas other than the Adeline Corridor Specific Plan and whether the City's alternative calculation approximates the standard of dwelling units per acre that is assumed in state law. In what ways does the City's methodology alter the outcome or differs from the standard of dwelling units per acre? Does unit size alter the outcome in the City's methodology?

1 **Density bonus BMRs:** Please explain how the number of below market rate units determined by the application of the state density bonus interacts with the 20% inclusionary rule and the affordable housing mitigation fee.

Affordable Housing Mitigation Fee: What is the current rate and when was it adopted? What was the old rate? Are all the funds received from imposition of the Affordable Housing Mitigation Fee deposited in the Housing Trust Fund? How have the Fund monies been used since the current rate change? Since its adoption, how much has each approved project donated to the housing trust fund? Please list by project with a total. What has been the response of housing developers to the increase in the fee? Have the number of larger units with three or more bedrooms increased after the increase in the fee?

Affordable Housing Mitigation Fee Exemption: Why are GLAs exempt from the fee? In a legal opinion included in our appeal of 2435 San Pablo Avenue (attached), attorney Jessica L. Blome, Senior Associate Attorney, Greenfire Law, wrote that the fee was established by resolution and not by ordinance, which is contrary to case precedent and the state government code. What is the City attorney's response to this opinion? Given that the mitigation fee might have been established incorrectly and that developer response has been to lessen or avoid the fee, would it not be in the City's interest to revisit the mitigation fee, consider an imposition by square footage rather than by unit, and to pass the new fee by ordinance?

Group Living Accommodations: Has the City adopted standards for GLAs including co-living, dormitories, single room occupancy hotels? Such standards might include a manager's office, size of bedrooms, size of group rooms, appliances in group kitchens, cleaning schedules, and features that ensure food security and safety. Which standards are currently adopted and which have yet to be adopted? How does the City count bedrooms towards the RHNA?

Efficiency units: Has the City adopted an efficiency unit ordinance as required by state law (CHSC 17958.1) that includes alternate standards than those found in the building code for efficiency units? Absent such an ordinance, have substandard efficiency units been counted as units for purposes of the RHNA? Besides 2435 San Pablo Avenue, what building plans, approved or otherwise, feature efficiency units different in size, appliances, and other standards than those in the building code? Is it the intent of the City to count those toward the RHNA?

Objective Standards: What other objective standards could be applied besides those listed? Is the interface between higher and lower density areas simply a matter of aesthetics? How is it beneficial to the affected property owners to provide for building step-downs from higher to lower heights that are now voluntary by the developer? What general plan goals support sunlight on gardens and private and public open spaces as well as privacy? Are there general plan and climate action goals that support protecting sunlight on existing and potential solar panels? What local and state laws and programs support solar panels on private homes? What are the energy benefits of such solar arrays? Is there a difference in the efficacy of energy production between older and new solar technologies? If a taller building shadows existing solar panels, who is responsible for updating the old panels to more efficient technologies? Since the City has approved the taller building, should not the City compensate the homeowner for the expense?

1, cont

Complete Streets: What does the Alameda County design initiative of the San Pablo Avenue Corridor encompass? Is it confined to the design of the street itself or does it include objective standards such as building set backs and step-downs? What features will be determined by the project and which fall within the jurisdiction of the City? What are the reasons that the Mayor cites the San Pablo Avenue Corridor project to justify delay of zoning reforms?

Neighborhood Preservation Ordinance: what features of the NPO have been incorporated in the BMC? Since the NPO was passed by initiative, can those features be changed without submitting such changes to a vote of the people according to state government code? How does the NPO affect the DEIR alternatives?

Hydrology, creeks and flooding: Please provide a creek map of the City and a history of creek flooding. For example, Derby and Parker Street flooding of streets, yards, and basements due to Derby Creek, lower Hearst due to Strawberry Creek, and the lower Potter basin due to back up during storms? What flooding is due to the antiquated structures of Aquatic Park? How could upgrades in Aquatic Park prevent such flooding? How will bay rise and increase in downpours due to climate change affect Aquatic Park and its environs including housing in the Strawberry and Potter watersheds?

2

Hydrology, pollution: Please summarize the recent history of pollution of Aquatic Park, its frequency, likely source, and organisms found. How does dumping of waste from homeless encampments and RV parking on the streets effect the City's neighborhoods and housing needs?

3

JESSICA L. BLOME
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Date: September 11, 2020

To: Toni Mester

From: Jessica L. Blome, Senior Associate Attorney

RE: 2435 San Pablo Ave.

The Berkeley Municipal Code (BMC) gives the City Council authority to adopt an affordable housing impact fee by resolution, which "shall be imposed on the development of new rental housing in Berkeley, subject to limitations set forth in this Chapter and any additional limitations set forth in the Resolution." (BMC §22.20.065(C).) The BMC does not exempt Group Living Accommodations from the requirement to pay the affordable housing impact fee. (Id.) The BMC defines "Group Living Accommodation" as "a building or portion of a building designated for or accommodating Residential Use by persons not living together as a Household." (BMC § 23F.04.)

The City Council adopted Resolution No. 68,074-N.S. on June 27, 2017, which set the fee at $37,000 per "new rental housing" unit. (See Berkeley Resolution No. 68,074-N.S., ¶ 1.) "New rental housing" includes "Group Living Accommodations, except for those categories that are currently exempt pursuant to BMC Section 23C.12.020.B." (Id. at ¶ 3.) The Council singled out Group Living Accommodations because it wanted to limit the fee for co-living arrangements, "such that one-half the fee shall be imposed on each bedroom." (Id.) The BMC expressly delegated authority to Council to set the fee by resolution, so the Council had authority to set fee policy in this way. However, with the resolution, the City also attempted to exempt certain Group Living Accommodations from the requirement to pay the affordable housing mitigation

fee altogether, which violates state and local requirements for amending the BMC. (See BMC §23C.12.020.B (exempting "Dormitories, Fraternity and Sorority Houses, Boarding Houses, Residential Hotels, or Live/Work Units").)

Although the two terms are often used interchangeably, "ordinance" and "resolution" are two distinct methods by which local governments can act. (*City of Sausalito v. County of Marin* (1970) 12 Cal.App.3d 550, 565 [hereinafter *City of Sausalito*].) An "ordinance" is a local law which is "adopted with all the legal formality of a statute." (Id.) A "resolution" is usually "a mere declaration with respect to future purpose or proceedings" of the government entity, such as the setting of a fee schedule or penalty matrix. (Id.; see also *616 Croft Ave., LLC v. City of West Hollywood* (2016) 3 Cal.App.5th 621, 625.) When a state statute requires local legislative action by ordinance, action by "resolution" does not satisfy the statutory requirement "under any circumstances." (Id.) Moreover, resolutions adopted without the "formality" required of an ordinance cannot morph into an ordinance. (*City of Sausalito, supra*, at 566; see also *Pinewood Investors, Inc. v. City of Oxnard* (1982) 133 Cal.App.3d 1030, 1037-1038 (invalidating the City sewer fee, which was unlawfully adopted by resolution when state law required the fee be adopted by ordinance).) An ordinance is a law of the state, a resolution "is not." (Id.) Accordingly, courts frequently void city actions taken via resolution if the city was required by law to take such action via ordinance. (See e.g. Id.; see also *San Diego City Firefighters, Local 145 v. Bd. of Admin. of San Diego City Emples. Ret. Sys.* (2012) 206 Cal.App.4th 594, 608-09 (voiding a city resolution terminating a resolution related to retirement funding because the city charter required the city to adopt an ordinance for "all provisions related to the city's retirement program").)

The California Government Code authorizes the legislative body of any county or city to adopt zoning regulations by ordinance in order to "regulate the use of buildings, structures, and land as between industry, business, residences, open space, including agriculture, recreation, enjoyment of scenic beauty, use of natural resources, and other purpose." (Gov't Code § 65850(a) (emphasis added).) Government Code, section 36931, *et seq*. sets forth the specific

provisions a municipality must follow to duly enact a zoning ordinance. (Id. at § 36931, et seq.) For example, each ordinance or amendment must be published at least once in a newspaper of general circulation within fifteen days after the ordinance is first read at a city council meeting. (Id. at § 36933.) The proposed ordinance or amendment must be read a second time at a duly notice council meeting and does not go into effect for thirty days after its final passage. (Id. at § 36937.) Zoning restrictions that do not comply with the Government Code are not valid. (*City of Sausalito,* 12 Cal.App.3d 550, 565 (invalidating the Marin County general plan because the Board of Supervisors adopted the plan by resolution instead of ordinance, as required by the Government Code.)

Consistent with the Government Code, the BMC obligates Council to adopt a new ordinance if it wants to amend an existing ordinance to be "less restrictive" than the provision it replaces. (BMC §23A.20.010, *et seq*.; See also id. at §23A.20.070(B).) There can be no doubt that the adoption of an exemption to an ordinance is "less restrictive" than the ordinance itself. The Council's attempt to exempt certain Group Living Accommodations from BMC §22.20.065 by resolution is, therefore, invalid, and the affordable housing mitigation fee applies to this project.

Letter C6

COMMENTER: Toni Mester

DATE: October 16, 2021

Response C6.1

These are comments on the proposed HEU, not on the adequacy or content of the Draft EIR.

Response C6.2

A map of the creeks in the city is provided on Figure 4.9-1 in Section 4.9, *Hydrology and Water Quality,* of the Draft EIR. In addition, a map of Federal Emergency Management Agency (FEMA) designated flood zones is provided on Figure 4.9-2 of the Draft EIR. As discussed in Impact HYD-4 in Section 4.9, most new development would not be in areas subject to flood hazards. For new development promoted or facilitated by the proposed HEU that would be in flood-prone areas, future development would be designed to withstand flooding hazards in accordance with state and local regulations. Further, FEMA flood maps are regularly updated and if flood zones change due to sea level rise, regulations related to development in flood zones would apply to future development in those areas. Therefore, although development under the proposed project in limited areas of Berkeley could place housing and other structures within FEMA-designated Flood Hazard Areas, potential flood impacts would be less than significant. Impacts associated with stormwater runoff and flooding are discussed under Impact HYD-3 in Section 4.9 and were found to be less than significant with compliance with existing regulations. The California Supreme Court in a December 2015 opinion (*BIA v. BAAQMD*) confirmed that CEQA is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, specific impacts related to sea level rise affecting future developments are not discussed in the Draft EIR. Further, there are no housing inventory sites or rezone areas adjacent to the San Francisco Bay or Aquatic Park. Please also see Response C5.8, regarding impacts related to sea level rise. As discussed in Section 4.7, *Greenhouse Gas Emissions*, the proposed HEU would have a less than significant impact related to GHG emissions and would not contribute to a cumulative GHG impact such that it would substantially increase impacts related to climate change.

Response C6.3

This comment is about the potential for water pollution and water quality impacts from existing sources in Berkeley and not about the potential for impacts under the proposed HEU. The development of new housing would not result in more or larger encampments of unhoused people. The information requested by the commenter is not related to the EIR's analysis of the impacts of the proposed HEU, and this is not a comment on the adequacy or content of the environmental analysis in Draft EIR.

Letter C7

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

Preparing the HEU is an exercise to fulfill the State of California mandated Housing Element requirement, nonetheless to deny the impact of adding 19,098 dwelling units and the increase in population to fill these units denies everyone within the City of Berkeley whether visiting or living here permanently the necessary mitigation measures to reduce the impacts.

The response of "less than significant impact" throughout the DEIR is irresponsible at best or blatant disregard for the health and life of residents at worst.

There are actions to be taken and acknowledging the impacts of increased density carries the possibility of mitigating, reducing those impacts and driving necessary adaptation.

As you review my comments for all that I caught and pieces I missed, think about Babcock Ranch in Florida https://babcockranch.com/. Babcock Ranch was designed with housing to withstand hurricanes, roads were designed for flooding from massive storms. During hurricane Ian, Babcock Ranch residents never lost power, their homes are intact, their schools are now shelters for residents from surrounding cities/areas not designed to survive massive hurricanes.

Denial left Floridians in the path of hurricane Ian in a wasteland of demolished housing and commercial buildings, but not Babcock Ranch. Babcock Ranch exemplifies recognizing the dangers of massive storms and building to withstand them.
https://www.foxweather.com/extreme-weather/americas-first-solar-powered-town-did-not-lose-power-ian-hurricane (This is one of many reports on Babcock Ranch)

You are challenged to acknowledge the impacts of adding 19,098 housing units, covering land with hardscape, interrupting habitat and all that comes with density and change your focus to how do we make this work to the best of our ability.

The denial evident throughout this document of the affect of the increase in housing and population filling these units carries with it, impacts to the health and life expectancy of residents, air quality, wildlife, safety of all forms of life living or visiting Berkeley.

We are living in a climate crisis. More and more areas of the planet will become unlivable. We probably won't see a population increase of over 47,000 in the next eight years, but we can expect population growth through migration in the future unless Berkeley too succumbs to catastrophe through massive earthquake or drought and the lack of planning that was necessary to adapt in advance to survive.

To the preparers of this HEU DEIR, your role is to see the consequences and possibilities. Thus far the preparers of this HEU DEIR have failed.

Staying stuck in the current frame of "**impact would be less than significant**" in all areas except Wildfire where the response is **impact would be significant and unavoidable** may save your job or consulting gig temporarily, but it will not be a plan for Berkeley for the future.

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

Aesthetics
Impact AES-4. Development facilitated by the proposed HEU would create new sources of light or glare that could adversely affect daytime or nighttime views in the area. However, Berkeley is already largely built out with sources of light and glare throughout the city and development would not substantially add to existing light and glare. With compliance with existing regulations, this impact would be less than significant.

1

Response: Exposure to night light is associated with increased health and disease risks. This little promotional article describes the impact on sleep and health https://www.sleepfoundation.org/bedroom-environment/light-and-sleep there are more studies on sleep and light which you can easily find if you look. So while the impact on views may not matter, the impact of night light on residents does and that can be mitigated through education and light blocking shades over windows. Such mitigation will have a spillover positively affecting the life cycles of wildlife including the insects that become food for birds, riparians and other species.

Responsible night lighting standards must be required to reduce the impact of light pollution. https://resjournals.onlinelibrary.wiley.com/toc/17524598/2021/14/2#:~:text=Artificial%20light%20at%20night%20is,observed%20declines%20in%20insect%20populations.

And, there is a spillover here besides reducing the threat to biodiversity. Night lights with motion detectors and times reduces the drain on energy when solar energy is not available.

Air Quality
Impact AQ-1. The proposed HEU would not conflict with the control measures within the 2017 Clean Air Plan, and VMT increase from the project would be less than the project's project population increase. Therefore, this impact would be less than significant.

2

Response: Housing on transit corridors sounds like a reasonable conclusion that fewer persons will be traveling by single occupancy vehicles, however, the growth of lyft, uber and the convenience of like services are expanding while transit use has dropped precipitously. This an unfortunate tread. https://www.businessinsider.com/uber-lyft-having-devastating-effect-on-public-transportation-study-2019-1

With the impact of the pandemic BART ridership has not recovered. Ridership is down dramatically. Cuts to bus lines and frequency of service further exacerbate this problem. While the HEU cannot solve this problem the mitigation that must be advised is to increase transit frequency and connectiveness between entities.

Biological Resources

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

Impact BIO-1. Development facilitated by the proposed HEU may result in direct or indirect impacts to special-status species or their associated habitats, and impacts to nesting birds. This impact would be less than significant.

Response: When mature trees are cut down, especially when those mature trees are native and replaced with little non-natives this impacts nesting not just in the immediate year, but far into the future. The impact on habitat takes decades to recover if it ever recovers and we don't have decades. Rather than denying the impact the mitigation needs to include every effort to preserve of trees and designing around them and using permeable paving to save tree roots.

3 There is so much that can be done to save trees and habitat. By writing this off as less than significant obliterates those opportunities. Just leaving space, setbacks, between buildings can connect habitat corridors. Setback with native plantings that supports leaf eating species needs to be a mitigation that is required.

Urban settings are a critical piece of biodiversity and are ever more important as open land is gobbled up for food production with mono-plantings. The fact there Berkeley is filled with non-native plantings instead of being an excuse to do nothing needs to be a call to action.

As another action to preserve trees take heed to this excerpt from my Activist's Diary for the week ending September 24, 2022 published in the Berkeley Daily Planet https://berkeleydailyplanet.com/issue/2022-09-25/article/49979?headline=A-BERKELEY-ACTIVIST-S-DIARY-Week-Ending-September-24--Kelly-Hammargren
Last week I wrote about asphalt in tree wells in front of BODYROX. It is always a benefit to pay attention and this time it was a benefit to be wrong as that lead to an extended email exchange with Scott Ferris, Director of Recreation, Parks and Waterfront. It turns out the product around the trees only looks like asphalt and is instead a product that is flexible and porous protecting tree roots and letting water run through.

Ferris didn't say which of the two manufacturers Rubberway https://sustainablesurfacing.com/pervious-pavement or Flexi-pave https://apaicorp.com/kbi.htm Berkeley is using, but the product used at 3120 Eton in 2017 to save a majestic Redwood from having its roots cut to replace damaged concrete is a much closer blend in color to a concrete sidewalk (see photo in google maps https://goo.gl/maps/H9G3E1zg6J7iDt7VA). It has a nice cushy feel when walking on it.

4 Impact BIO-4. Implementation of the proposed HEU would not substantially impede the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors with compliance with existing and proposed regulations. This impact would be less than significant.

Response: This is where the mitigation needs to be setbacks with native plantings as described above. Birdsafe glass needs to be a requirement for all glass and windows from the ground up.

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

4, cont.

The bird safe ordinance has not passed, the outcome is unknown. This is not a done deal as implied in the HEU. It needs to be a strong requirement. Berkeley is in the migratory bird corridor. While potential for mitigation bird collisions with glass is described in the expanded paragraphs, it is not carried over into a requirement. Nearly 3 billion birds have disappeared, were lost in North America between 1970 and 2020. That one piece of knowledge should be connected to mitigation measures, but instead the answer is less than significant. https://www.smithsonianmag.com/science-nature/north-america-has-lost-nearly-3-billion-birds-180973178/#:~:text=Grassland%20birds%2C%20such%20as%20meadowlarks,abundant%2C%20lost%20one%20billion%20individuals.

5

Impact BIO-5. Implementation of the proposed HEU would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact would be less than significant.

Response: Preserving Oaks and expanding the planting of oaks throughout the city with new construction is the mitigation answer.

6

Energy
Impact E-2. The proposed HEU would be consistent with the State plans and General Plan policies related to energy efficiency and utilizing renewable energy. This impact would be less than significant.

Response: Biomass fuels, burning trees is not green and no amount of greenwashing can make destroying forests to burn trees as biomass fuels can make this practice green. It is abhorrent that any intelligent person has fallen for this propaganda. And it should be below the dignity of the preparers to include it in the HEU.

Berkeley has thus far been unsuccessful in gaining architectural design and construction beyond the minimal requirements. Green buildings is a myth. There are great opportunities here and the challenge and requirements need to be stepped up dramatically. Berkeley ought to be a center for passive homes and building to building living challenge. Berkeley couldn't even get it together to protect solar on existing structures. This should be an embarrassment.

7

There is nothing I have found that addresses the heat island impact from increased density of buildings and added hardscape. Heat Island impact is huge.

This is an excerpt of an email sent to the DRC, ZAB and others on heat island effect and cool walls

Living in Berkeley, we have benefited from a mild climate and the cooling fog that tempers summers and have not needed to consider heat island effect or color as anything more than a design element, however, the climate in Berkeley is changing just as it is around the world. The

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

7, \cont.

new York Times featured San Francisco's disappearing fog in the September 14, 2022 article. in https://www.nytimes.com/interactive/2022/09/14/climate/san-francisco-fog.html

As it turns out, the color and surfaces on buildings does have a significant impact on heat absorption including within the building, the building exterior surface and the surrounding environment from the radiating of heat from buildings and other hard surfaces. This is known as urban heat island effect. The radiation of heat from buildings and hard surfaces does not stop when the sun goes down. All the heat absorbed by buildings during the day continues after the sun goes down creating microclimates of warmer nights which in extreme heat events when people need cool nights to recover exacerbates risk of heat-related illness and death.

The first reference and quote supporting the impact of dark surfaces which absorb heat rather than reflect it is from the 2019 update of the Berkeley Local Hazard Mitigation Plan pages 180-181.
https://berkeleyca.gov/sites/default/files/2022-01/Local-Hazard-Mitigation-Plan-2019.pdf

"Urban Heat Island Effect Extreme heat events can be further exacerbated by the urban heat island (UHI) effect, through which densely-built cities like Berkeley experience higher temperatures in comparison to surrounding more rural areas. Factors contributing to the UHI effect include: • A relative lack of vegetation; • Reduced air flow; • **An abundance of hard, dark surfaces—such as buildings,** [emphasis added] streets, cars and sidewalks— which absorb heat rather than reflect it. These surfaces also slowly release that absorbed heat throughout the night, contributing to warmer nighttime temperatures as well. The UHI effect can also worsen air quality (particularly ground-level ozone) in urban environments.The UHI effect increases heat-related illnesses and fatalities, particularly after two to three days of extreme heat. Vegetation helps mitigate the UHI effect through evaporative cooling, making urban tree cover, parks, and green roofs essential to combatting the UHI effect. Green roofs, cool roofs, and cool pavements (light-colored materials that reflect, rather than absorb, solar energy) reduce the UHI effect, and can also lower cooling loads in buildings. Urban vegetation and increased urban tree cover reduce temperatures, with co-benefits such as improving air quality and providing needed shade (for buildings and people) during heat events."

The Local Hazard Mitigation plan using the data available at the time of adoption states on page 168,

"Extreme heat events will increase in the Bay Area due to climate change in intensity, length, and frequency. By the end of the century, Bay Area residents may average six heat waves annually, which will average a length of ten days120. Extreme heat threatens critical infrastructure, air quality, and public health. The urban heat island effect, where built surfaces absorb and retain heat causing higher nighttime temperatures, can exacerbate those health risks."

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

7, cont.

As background, the Federal Mitigation Act of 2000 signed into law by President Clinton requires state and local governments to prepare the Local Hazard Mitigation Plan, a comprehensive risk reduction analysis, and to update the plan every five years. Comprehensive Some of the FEMA relief in the event of a disaster is tied to having a Local Hazard Mitigation Plan. President Carter established FEMA in 1979.

The purpose of hazard mitigation is to implement and sustain actions that reduce vulnerability and risk from hazards, or reduce the severity of the effects of hazards on people, property, and the environment. Mitigation actions include both short-term and long-term activities which reduce the impacts of hazards, reduce exposure to hazards, or reduce effects of hazards through various means including preparedness, response, recovery, and resilience measures.

Berkeley Lab Heat Island Group has been studying how cool walls, walls on the exterior of buildings that reflect sunlight can decrease envelope surface temperature and diminish heat conduction into the occupied space. This lowers surface, radiant, and air temperatures inside an unconditioned building, and decreases cooling load (heat that must be removed from the occupied space to maintain setpoint), annual cooling energy use, and peak power demand in a conditioned building. With the possible exception of thermochromics, CEMs [Cool Envelope Materials] also tend to increase heating load (heat that must be added to the occupied space to maintain setpoint) and annual heating energy use in climates that have a heating season.10 Direct benefits and penalties. The "direct" cooling benefits and heating penalties of CEMs—meaning those attained by reducing the building's net radiative heat gain—have been assessed in over 30 countries and regions. https://heatisland.lbl.gov/coolscience/cool-walls
Berkeley Lab projects on cool walls https://heatisland.lbl.gov/projects/cool-walls

Berkeley Lab Heat Island Group Web page lists Urban Heat Island resources https://heatisland.lbl.gov/resources/Guides and there are many other sources that can be accessed through an internet search.

American Chemical Society on cool walls and impact on heat island effect
https://pubs.acs.org/doi/10.1021/acs.est.8b00732

Scientific research demonstrates color, reflective qualities on exterior wall surfaces on buildings does matter. Where as cool roofs are more widely accepted, cool walls on multi-story buildings with greater surface area than roofs carry greater impact on heat island effect.

Within this frame of responsibility and action, please reconsider exterior color and surfaces of buildings in relation to reflecting rather than absorbing heat in response to a future of a warming climate with unpredictable potentially catastrophic climate extreme heat and weather events.

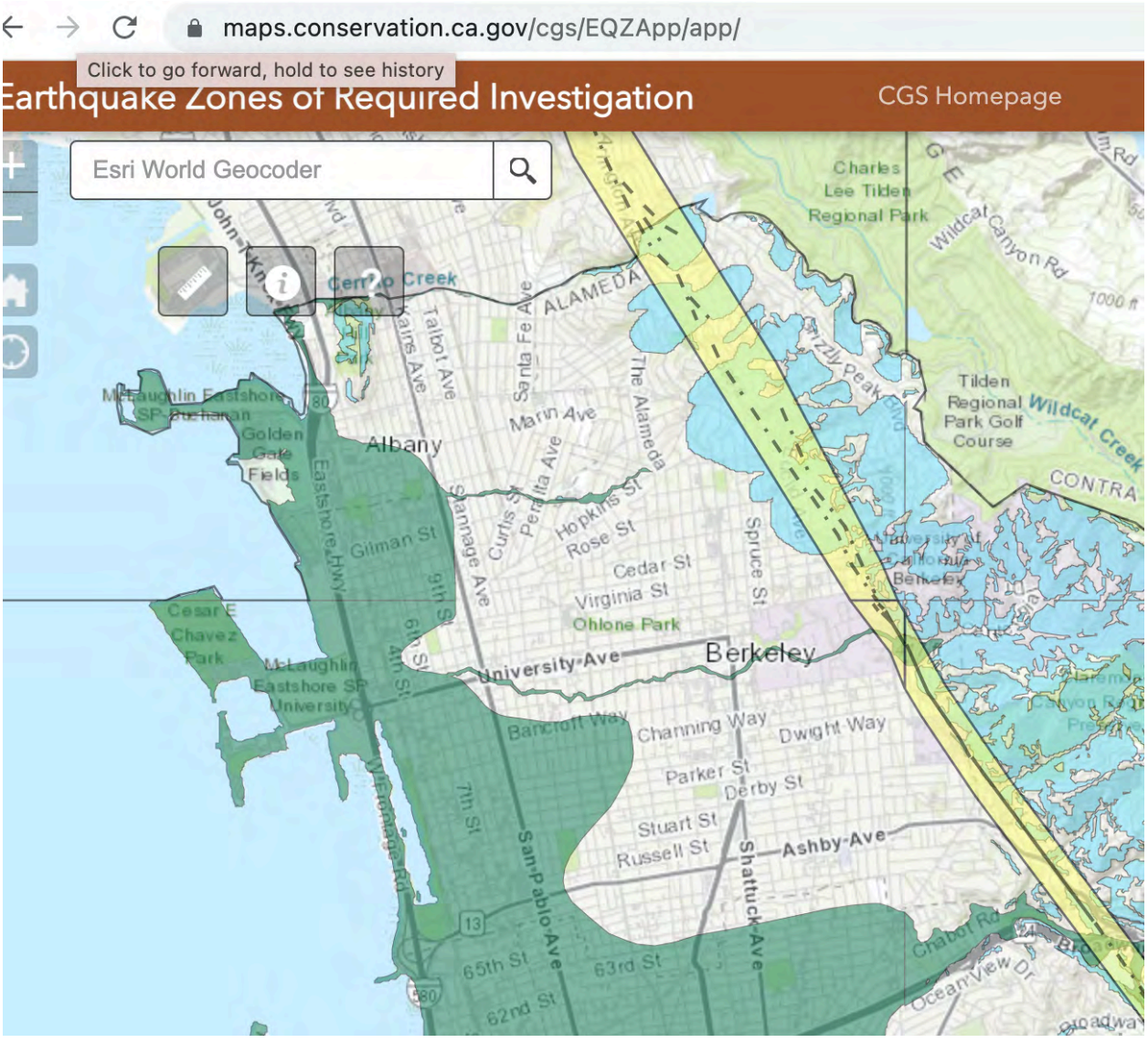
Geology and Soils

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

Impact GEO-1. A portion of Berkeley is located within the Hayward Fault zone. Development facilitated by the proposed HEU is subject to seismically-induced ground shaking and other seismic hazards, including liquefaction and landslides, which could damage structures and result in loss of property and risk to human health and safety. However, implementation of State-mandated building standards and compliance with the Alquist-Priolo Act Earthquake Fault Act, the CBC, the Berkeley General Plan's policies and actions, and the BMC would reduce impacts to a less than significant level.

Response: Note the California map of earthquake zones of required investigation. The website for the map is imbedded in the screen shot. As is written with the response to wildfire, the mitigation is not to build on the fault and in the slide zones as these are right in the middle of the High Fire severity Zones. These zones for expansion of density need to be off the table. It is magical thinking that adding density in these areas will not have a significant impact.

8



Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

8, cont.

Green = Liquefaction
Yellow = Fault
Blue = landslide areas
HEU includes developments in areas of liquefaction, fault line, slide areas. The Berkeley Hills are also the high fire zones with urban wildland interface.

9

Greenhouse Gas Emissions
Impact GHG-2. The proposed HEU would not conflict with GHG reduction goals and policies in the 2017 Scoping Plan, Plan Bay Area 2050, the City's General Plan, or the City's CAP. This impact would be less than significant.

VMT is already addressed under Air Quality. Increasing density, adding population will increase GHG emissions with aggressive mitigation. It is not enough to ban new extensions of natural gas. That is not the end of greenhouse gas emissions.

10

Hazards and Hazardous Materials
Impact HAZ-5. The proposed HEU would not result in physical changes that could interfere with or impair emergency response or evacuation. Therefore, the project would not result in interference with these types of adopted plans. This impact would be less than significant.

Response: Emergency response and evacuation are absolutely impacted. More vehicles, more traffic, diversions and street closures in attempt to manage the increasing density will slow emergency response. Adding density in high fire severity zones. A concern of the fire department is they don't have the equipment to put out fires in taller buildings. Mitigation needs to include tall buildings need to come with fire equipment to handle events in those buildings, if that means a surcharge for the purchase of the equipment then that needs to be written in as a mitigation in adding these dwellings.

11

Hydrology and water Quality
Impact HYD-2. Future development facilitated under the proposed HEU would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. Further, implementation of low impact development measures and onsite infiltration required under the C.3 provisions of the MRP, and compliance with the Berkeley Municipal Code would increase the potential for groundwater recharge. Impacts would be less than significant

Response: Adding density will absolutely add hardscape with water runoff and that must be addressed in required mitigations. Permeable paving needs to be installed at every opportunity in street replacement as along Channing between Milvia and MLK JR Way and in sidewalks, driveways, pathways, patios, literally everywhere.

This is easy. First recognize the impact, then give the solutions. Why is this so hard.

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

11, \cont. There are multiple solutions with premade permeable concrete blocks as on Channing, with brick streets as on Allston between Milvia and MLK Jr. Way and in permeable laid sidewalks like at 3120 Eton and space left between concrete pavers.

12 Impact HYD-3. Development under the proposed HEU would not substantially alter the existing drainage pattern of future development sites, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in flooding or exceed the capacity of stormwater drainage systems. Impacts related to drainage patterns would be less than significant.

Response: It is true that Berkeley has already culverted many of the creeks. There is a worldwide movement to daylight creeks and funding to do it. Think about what a different City this would be if at the same time density is being increased, creeks are being daylighted adding open space, habitat, supporting ecosystems and at the same time reducing heat island effect and giving refuge to the City's expanding population. Daylight creeks and build around them. Look to the world for examples. https://www.americanrivers.org/conservation-resource/daylighting-streams-breathing-life-urban-streams-communities/

13 **Population and Housing**
Impact POP-1. This EIR assumes full buildout of 19,098 residential units in Berkeley through 2031, which equates to a population increase of an estimated 47,443 residents compared to the existing population. However, growth resulting from the project is anticipated and would not constitute substantial unplanned population growth. This impact would be less than significant.

Response: To write that adding 47,443 residents would be less than significant is laughable. The point is to plan for population especially for unexpected influxes of large numbers of climate refugees.

14 Impact POP-2. Implementation of proposed project would not result in the displacement of substantial numbers of people or housing. The proposed project would facilitate the development of new housing in accordance with State and local housing requirements, while preserving existing residential neighborhoods. This impact would be less than significant.

Response: People will be displaced as older buildings are torn down for new construction. To discount this impact as insignificant is just blatant disregard for existing residents. This displacement will result in larger numbers of homeless who will not have housing they can afford.

15 **Public Services and Recreation**
Impact PS-1. Development facilitated by the proposed HEU would result in an increase of population and buildings within Berkeley. The projected population increase would increase

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

15, cont. demand for fire protection services and potentially create the need for a new or altered fire station. However, compliance with policies in the 2020 General Plan would reduce impacts related to fire service facilities to a less than significant level.

Response: The general plan doesn't solve the problem of needing more fire stations, more equipment, more personnel, plus the difficulty of getting from one place to another especially with increasing traffic and especially when the needed facility for an emergency sits ouside of the city boundary as in emergency medical care.

16 Impact PS-2. Development facilitated by the proposed HEU would result in an increase in the City's population. The projected population increase would increase demand for police protection services and potentially create the need for new or altered police service facilities. However, compliance with policies in the 2020 General Plan would reduce impacts related to police facilities to a less than significant level.

Response: Reiterating a policy does not make it a plan.

17 Impact PS-3. Development facilitated under the proposed HEU would result in an increase in population in Berkeley, resulting in the need for additional or expanded school facilities. However, Government Code 65995 (b) would require funding for the provision or expansion of new school facilities to offset impacts from new residential development. Therefore, this impact would be less than significant.

Response: The problem here is do existing school sites have space for expansion. Berkeley as we all know is constricted in land mass, surrounded by water, wildland and neighboring cities. If the population growth is from a significant number of families with children, then schools will be needed. If much of the population growth is from single persons without children and college students, then impact on schools may be insignificant, however, there does need to be an assessment of BUSD possibilities for expansion at existing sites.

18 Impact PS-4. Development associated with the proposed HEU would increase the population of Berkeley and the use of existing parks and recreational facilities. However, additional recreational opportunities are available adjacent to the City and donation of parkland pursuant to the Quimby Act would be required prior to occupancy of individual projects. No plans for the expansion or construction of new parks or recreational facilities are anticipated. Therefore, this impact would be less than significant.

Response: Berkeley needs more Parks, The more people that are added the more parks that are needed. For projects to count little balconies and rooftop patios as fulfilling the open space requirement needs to end. The investment needs to be directed to expanding parks and daylighting creeks.

Transportation

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

Impact TRA-1. The proposed HEU would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This impact would be less than significant.

19

Response: Berkeley needs to do so much more to make streets safe. Really planning neighborhoods for streets without cars. Closing down streets to through traffic as was done during the peak of the pandemic was really nice. Ending it demonstrates a lack of commitment to safe streets.

Utilities and Service Systems

Impact UTIL-1. Development under the proposed HEU would require utility service and connections for water supply, wastewater conveyance, and stormwater conveyance, as well as telecommunications, electricity, and natural gas. Existing utility systems for water, wastewater, stormwater, electric power, natural gas, and telecommunications facilities in Berkeley have sufficient capacity to serve the project. Relocation or construction of new or expanded facilities resulting in significant environmental impacts would not occur, and adequate wastewater capacity exists to serve the project's projected demand in addition to the provider's existing commitments. impacts would be less than significant.

20

Response: Depending on the rate of sea level rise (SLR) the wastewater facility used by EBMUD could be in deep trouble. It is underwater at 6 feet. If the Twaites Glacier collapses within five years as recently projected, that is three feet of SLR. This is also trouble for the sewer system.

Impact UTIL-2. Development under the proposed HEU would result in an increase in water demand. However, this increase in demand can be served by the East Bay Municipal Utility District (EBMUD) with demand management measures required by EBMUD. This impact would be less than significant.

21

Response: California is in drought with some cities running out of water. This is an older article, but it tells the tale of copping with drought and water shortages. https://time.com/6187823/california-drought-cape-town-water-crisis/ We cannot count on an endless supply of water. The city and state would do well to require purple pipes to capture water for non-potable uses. Why in heaven's sake are toilets still flushed with drinkable water? Adaptation through insistence of "less than significant impact is yet one more opportunity for mitigation lost in the HEU.

Impact UTIL-3. Development facilitated by the project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. The project would not impair the attainment of solid waste reduction goals and would comply with federal, State, and local statutes and regulations related to solid waste. Impacts would be less than significant.

22

Response: This is nonsense. Berkeley is already under penalty for wet weather releases.

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

Wildfire
Impact W-1. Development during the planning period of the proposed HEU would occur in hillside areas located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. The city employs multiple strategies to reduce the impairment the HEU would have on emergency response and evacuation. Nonetheless, **this impact would be significant and unavoidable. -** No feasible mitigation measures have been identified.

23 This response "**this impact would be significant and unavoidable"** is pinnacle of irresponsibility.

Response: The Berkeley hills will burn again, we just don't know when weather, drought and a spark will converge into catastrophe so while this threat looms, the topography can't be changed, the HEU must take adding density in Very High Fire Hazard Severity Zones 2 and 3 identified by the City of Berkeley off the table. Adding density in the hills needs to stop period.

Ending building in the hills is a hot button political issue. Still, that should not stop the preparers of this DEIR from taking the responsible step by taking adding density in the Very High Fire Hazard Severity Zones 2 and 3 off the table.

Probably our best hope to end expansion in the Very High Fire Hazard Severity Zones 2 and 3 is for insurance companies to stop insuring buildings in high fire zones, since no one else seems to have the fortitude to state the obvious.

(As a personal note, I do not live in the hills, I do not live in fire zones 2 &3)

Cumulative Impact: In and near Berkeley, the VHFHSZs are located largely along the WUI borders with the hilly northwestern areas. Within the geographic scope for this cumulative analysis wildfire-related impacts could be significant if development is in or near Berkeley's
24 VHFHSZ. The proposed LRDP update would involve improvements and development in Campus Park, the Hill Campus West, the Hill Campus East, the Clark Kerr Campus, and the City Environs Properties, areas of which fall within the VHFHSZ. Development within this area could exacerbate wildfire risks. Like development under the proposed HEU, new development under the LRDP would be subject to statewide standards for fire safety in the California Fire Code. Nonetheless, because the proposed HEU could exacerbate wildfire risk in a VHFHSZ and development under the proposed LRDP update could also exacerbate such risks, a cumulative impact would occur and the proposed projects' contribution would be cumulative considerable. - No feasible mitigation measures have been identified.

Response: The HEU must take adding density in Very High Fire Hazard Severity Zones 2 and 3 identified by the City of Berkeley off the table. Adding density in the hills regardless of who or what entity does it needs to stop period.

Response to Housing Element DEIR for 2023 – 2031
Comment Submission Deadline October 17, 2022 at 5 pm

In conclusion, the HEU could and should be a planning tool for adaptation, not an exercise in deniability of population and development impact.

Kelly Hammargren
Berkeley Resident

Letter C7

COMMENTER: Kelly Hammargren

DATE: October 17, 2022

Response C7.1

Appendix G of the *CEQA Guidelines* does not require analysis of the impacts of artificial light on human health. As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, development facilitated by the proposed HEU would redevelop facilities such as parking lots, which when replaced by buildings, may reduce nighttime sources of light where parking lots are more brightly lit during nighttime than most buildings. Future development would be congruous with nearby light sources, and light from windows on residential units would mostly be filtered or obscured by window coverings. That said, estimating how much light would be produced from interior sources, when this light would be visible, and for how long is speculative. Much of the light spillover from residential lighting could be blocked by adjacent structures or trees. Future development would be required to comply with BMC Sections 23.304.100 and 23.304.130 which require that exterior lighting be shielded to avoid light spillover onto adjacent residential properties. Further, in accordance with Senate Bill 743 (California Public Resources Code Section 21099) passed in 2013, impacts on aesthetics from residential or mixed-use projects in transit priority areas are no longer considered significant impacts on the environment. As shown on Figure 4.1-1 in Section 4.1 of the Draft EIR, most of Berkeley is within a transit priority area and therefore light and glare impacts for future development projects in those areas would be less than significant. Impacts from exterior lighting and effects on views would be less than significant.

Response C7.2

Please see Response B1.2, regarding evaluation of all vehicle modes including ride share. While the commenter's opinions related to transit services are noted, transit operations are outside of the purview of the proposed HEU.

Response C7.3

As discussed in Section 4.3, *Biological Resources,* of the Draft EIR, future development would be required to comply with the city's Tree Ordinance (BMC Chapter 6.52) which prohibits the removal of coast live oak trees, as well as General Plan Policy EM-29 which requires the City to maintain and enhance street and park trees to improve the environment and provide habitat. On-going implementation of the policy through site-specific design review and use permits would reduce potential impact to locally significant trees to a less than significant level. Future development would also be subject to the Berkeley General Plan policies requiring the protection of biological resources. Specifically, Policies EM-1 and EM-3 which create a framework for environmental policy and encouraging agencies, businesses, and households to focus on environmental management and sustainability. Policy EM-5 encourages construction projects to be sited, designed, constructed, and operated to minimize present and future impacts on the natural environment.

In addition, as discussed in Section 4.3 of the Draft EIR, Berkeley's residential neighborhoods are not wildlife corridors. One essential connectivity area has been mapped along the eastern border of the City of Berkeley related to mountain lion movement. This corridor would not be affected by the

proposed HEU. Further, the proposed project would not involve development that would affect creeks and creeks, which are protected by the City's creek protection regulations (BMC Chapter 17.08). Impacts to species and wildlife were found to be less than significant without implementation of mitigation.

Response C7.4

As stated in Section 4.3, *Biological Resources,* of the Draft EIR, the City of Berkeley is adjacent to a designated essential connectivity area, but the City of Berkeley is not within, and does not function as, a significant regional or local wildlife movement corridor. Bird strikes can occur in a migratory bird corridor or in areas adjacent to foraging, roosting, or nesting habitat for avian species. If development occurs adjacent to such habitat well utilized by land-based birds, and there are direct lines of sight between the habitat and proposed buildings, then the reflection of trees in windows may attract birds and such reflections may result in window collisions. The commenter does not provide new information or evidence related to the analysis completed in the Draft EIR, including any evidence that bird strikes constitute a substantial effect on any specific species identified as a candidate, sensitive or special status species, or that use of standard windows has substantially interfered with the movement of native resident or migratory species. Accordingly, requirement for use of bird-safe glass was therefore not included as mitigation in the Draft EIR. However, the City is currently considering a bird safe glass ordinance.

Response C7.5

As discussed in Section 4.3, *Biological Resources,* of the Draft EIR, under the City of Berkeley's Tree Ordinance (BMC Chapter 6.52) the removal of coast live oak trees is prohibited for any reason, unless such removal is deemed necessary for public safety by the City Manager. With compliance with the City's Tree Ordinance, removal of coast live oak trees would not occur without City approval and the impact would be less than significant. The commenter's recommendation for preserving oak trees and planting additional oak trees is noted, but does not change the findings or conclusions in the Draft EIR.

Response C7.6

The proposed project does not involve the use of biomass fuels or burning trees and the impact analysis in Section 4.5, *Energy,* does not assume biomass fuels would be used for consistency with state energy policies. Future development would be subject to the applicable California Code of Regulations (CCR) Title 24, Part 11 (CALGreen) energy efficiency requirements at the time of construction, as well as the City's building electrification ordinance.

Response C7.7

Please refer to Response B1.3, regarding the evaluation of heat islands.

Response C7.8

Please see responses C5.5 and C5.6, regarding seismic hazards and liquefaction zones.

Response C7.9

Impacts associated with GHG emissions from future development under the proposed HEU are analyzed in Section 4.7, *Greenhouse Gas Emissions,* of the Draft EIR. As shown on page 4.1-17, the project's 1.7 MT of CO_2e per service population per year would not exceed BAAQMDs interpolated 2031 target of 3.7 MT CO_2e per service population at the plan-level. Therefore, the impact was found to be less than significant.

Response C7.10

As discussed in Section 4.17, *Wildfire,* of the Draft EIR, temporary construction barricades or other construction-related obstructions used for project development that could impede emergency access would be subject to the City's Standard Conditions of Approval, which include a condition to prepare a Transportation Construction Plan (TCP) subject to City review and approval. Implementation of a TCP would limit the extent to which development would impair or physically interfere with adopted emergency response or evacuation procedures during the planning period of the HEU. Nonetheless, as discussed in Section 4.17, impacts related to emergency evacuation were found to be significant and unavoidable. In response to this comment, information about the City's Standard Condition of Approval for a TCP has been added to the discussion under Impact HAZ-5 in Section 4.18, *Hazards and Hazardous Materials.* Revisions to the Draft EIR are shown in Chapter 5 of this document. Please also refer to Response C5.7, regarding wildfire hazards.

Response C7.11

The proposed HEU does not include infrastructure improvements such as street replacements. As stated throughout the Draft EIR, the proposed HEU is a policy document and does not involve direct physical changes to the environment. It is acknowledged that buildout under the HEU could increase impermeable surfaces in Berkeley. However, as explained in Section 4.9, *Hydrology and Water Quality,* of the Draft EIR, future development projects proposed under the HEU would be required to adhere to state and Berkeley Municipal Code requirements related to green infrastructure and Low Impact Development (LID) requirements to reduce stormwater runoff.

Response C7.12

Buildout under the proposed HEU is not anticipated to involve culverting or daylighting creeks.

Response C7.13

The comment does not address the adequacy or content of the Draft EIR. Please also refer to Response B1.1.

Response C7.14

Please refer to Response C5.3, regarding population projections.

Response C7.15

As discussed in Section 4.13, *Public Services and Recreation*, of the Draft EIR, impacts associated with the need for new or expanded fire department facilities were found to be less than significant for several reasons including: necessary compliance with the Fire Code and review of future

development by the Fire Department, replacement of older buildings that are not constructed to today's more stringent levels of fire-safety regulations, additional funding to the fire department through Measure FF, as well as implementation of General Plan policies. As stated in Section 4.13, there are no plans to expand fire facilities based on HEU buildout at this time. Should the Berkeley Fire Department and the City determine that new or expanded facilities are needed to provide additional fire protection services in the future, the construction of the new fire station would not be anticipated to cause additional significant environmental impacts beyond those identified in the Draft EIR, because the potential future facility would likely be developed as infill on one of the inventory sites.

Response C7.16

As discussed in Section 4.3, *Public Services and Recreation*, of the Draft EIR, impacts related to the need for new or expanded police facilities were found to be less than significant for several reasons, not just implementation of General Plan policies. In addition to adherence to General Plan policies, which would ensure that there is adequate staffing to meet existing service demands, police protection service levels would also continue to be evaluated and maintained by BPD in accordance with existing policies, procedures and practices as development occurs over the lifetime of the HEU. Future housing developers would be required to submit a service questionnaire to the BPD in conjunction with their applications to ensure that police protection services are available to serve the proposed housing development. Similar to Response C7.15, if the Berkeley Police Department and the City determine that new or expanded facilities are needed to provide additional police protection services in the future, the construction of the new police station would not be anticipated to cause additional significant environmental impacts beyond those identified in the Draft EIR, because the potential future facility would likely be developed as infill on one of the inventory sites.

Response C7.17

As discussed in Section 4.13, *Public Services and Recreation,* there are no planned improvements to add capacity through expansion of school facilities at this time. As discussed in the Draft EIR, existing laws and regulations would require funding for the provision or expansion of new school facilities to offset impacts from new residential development, with the provision that SB 50 imposes limitations on the authority of cities and counties to require mitigation of school facilities impacts as a condition of approving new development. This impact would be less than significant. Notwithstanding the above, expansion of existing facilities would be subject to project-based CEQA review.

Response C7.18

This is not a comment on the adequacy or content of the EIR. Please refer to Response C5.11, regarding parks and recreation facilities.

Response C7.19

This is not a comment on the adequacy or content of the Draft EIR. As discussed in Section 4.14, *Transportation,* the EIR is a Program EIR covering city-wide impacts of the proposed HEU at a programmatic level. Significant impacts to transportation facilities were not identified. Site-specific

potential safety impacts would be addressed during review of individual future projects. Nonetheless, the comments are noted and will be considered by City decision-makers.

Response C7.20

Impacts related to utilities are discussed in Section 4.16, *Utilities and Service Systems*, of the Draft EIR, and were found to be less than significant. Although sea level rise may require changes and upgrades to infrastructure systems in the coming decades, EBMUD, the agency that manages wastewater treatment facilities and much of the conveyance system, did not provide information to the City or comments on the Draft EIR that would indicate a significant impact in this regard.

Response C7.21

As discussed in Section 4.16, *Utilities and Service Systems*, of the Draft EIR, EBMUD anticipates having an adequate water supply to meet demand in its service area, except during the third year of a multi-year drought starting around 2025 or later. During a multi-year drought, EBMUD may require substantial reductions in water use by customers and development facilitated by the proposed HEU would be subject to the same drought restrictions that apply to all EBMUD customers. Additionally, compliance with CALGreen would require a 20 percent reduction in residential indoor water use that would lower potential water demand, and future development would also be subject to the CCR concerning water-efficient landscapes (Division 2, Title 23, CCR, Chapter 2.7, Sections 490 through 495). Implementation of the Water Efficient Landscape Ordinance would encourage water conservation for new development and in landscaped areas. Impacts were found to be less than significant without the need for additional mitigation.

Response C7.22

Impact UTIL-3 is related to solid waste, which is a different topic than the commenter appears to address (stormwater infrastructure). As discussed in Section 4.16, *Utilities and Service Systems*, of the Draft EIR, the proposed HEU would not result in the need to expand the capacity of EBMUD's Main Wastewater Treatment Plant and would not exceed the wastewater treatment requirements of the San Francisco RWQCB. During wet-weather conditions, additional flow could potentially exceed pipeline capacities and create overflow. However, new development would be required to comply with the city's Private Sewer Lateral Ordinance, by eliminating wet-weather infiltration and inflow to private sewer laterals, which would regulate wet-weather contribution from the proposed project.

Response C7.23

As discussed in Section 4.17, *Wildfire*, of the Draft EIR, impacts associated with the proposed project were found to be significant and unavoidable. The comment that development should be prohibited in fire hazard zones is noted. The commenter does not provide new information or evidence showing that the analysis in the Draft EIR is inadequate.

Response C7.24

Please refer to Response C7.23.

Letter C8

From: Virginia Browning <vexxie@yahoo.com>
Sent: Monday, October 17, 2022 4:58 PM
To: Horner, Justin <JHorner@cityofberkeley.info>
Subject: DEIR Berkeley Housing Element

Hello Mr. Horner and all,
I've carefully read the summary of the DEIR and most of the whole statement.
I have some questions:

1. Given that other than unhealthy land use (including increasing climate damage) requires a 40% use of an area as greenspace, I don't see that addressed in this document. How is any real crucial climate-mitigation being addressed here? The U.N. Intergovernmental Panel on Climate Change has said that in developed countries (and you have I think incorrectly assessed Berkeley as a highly urban setting, which it is not, though it is in a "developed country," that to reduce Greenhouse Gas Emissions and try to stave off further damage, the most environmentally positive course is to protect and promote the building of small and rooftop solar energy, NOT to add to damage by creating more concrete towers. I don't see this alternative addressed. Why is this alternative or some version of it not being addressed? 1
2. See the end of the previous paragraph for this question on a realistic alternative
3. from the DEIR "

middle- and moderate-income households is what they call middle above

to encourage a mix of dwelling types and
sizes, housing for middle- and moderate-income households, **and increase the availability of affordable housing in a range of sizes to reduce displacement risk for residents living in overcrowded units or experiencing high housing cost burden. :** 2

QUESTION: IS IT NOT A FLAWED METHODOLOGY THAT makes the above assumption, given housing trends all across the country (and world for that matter) whereby fewer and fewer entities own more of our country's housing everywhere, particularly where denser building has driven up land values so that only those with wealth can afford to buy, and that it is, in fact, this that has driven most people from their homes?

4. Southside housing seems to have not only no real provision for adequate greenspace (even given the Quimby possibility, which is not adequate), but seems to allow for completely inadequate and psychologically as well as physically unhealthy set-backs on building. 3
5. from the report "

meet the City's RHNA with the required buffer

QUESTION 4
I assume you don't mean trees and greenspace, but where is that addressed here? Fauna is mentioned twice, flora once. Ecological needs, psychological crowding that occurs without adequate greenspace and trees is not addressed.

Here are some important scientific needs for trees. Where are they addressed?

BART comment 5-30-22

Dear Councilmember Kesarwani, Mayor, and other councilmembers,

I'm writing to beg you to attend to a few more things when planning for the housing at North Berkeley BART. I have done some hard research on this so I hope you'll read it.

I'm starting with trees and greenspace. When we see the canopy around us now, we strongly sense how important it is. More extensive scientific research than you may imagine has been done showing the crucial importance of trees in cities. Climate change absolutely mandates that we don't write this off lightly. But even more than that, to lose as much green as these proposals seem to be doing (yes, I have research showing that too) is a tragedy of epic proportion. Please read on to see that this is not an exaggeration.

Berkeley is now, especially near this BART station, human-scaled, livable, a joy to visitors and residents.

Our green cities of the future need to be designed to benefit human (and non-human) residents equitably. Is that what is being done here?

You may think you know all this, but I'm asking you to just go through the list here. Each item is backed up by extensive research linked at the end.

Significant greenspaces in cities and particularly trees have many benefits: they cool cities, including hot city streets by releasing water vapor, sequester carbon, reduce energy usage, remove air pollutants, filter stormwater, slow stormwater

runoff, provide habitat for some animals, make people happier, encourage active healthier activities, including walking, provide an economic value for communites.

Trees and vegetation can reduce risk: dampen ambient noise, improve air quality, cool over-heated urban centers, and be a food security solution.

“Safe streets” research and scientific evidence reveal vegetation benefits concerning city trees and transportation safety.

Crime, public safety: more science findings show a strong relationship between urban vegetation and crimes, aggressive behavior, and safety. While there can be an implication of vegetation as a screen for criminal activity, the evidence is fairly overwhelming that more good than harm in the purview of public safety results from increased well-placed vegetation. As just one of many examples in this linked report, trees can provide a sense and a reality of more “eyes on the street.” There are many other benefits in this realm: https://depts.washington.edu/hhwb/Thm_Crime.html

Quality of Life: including trees, parks, gardens, and natural areas – enhance quality of life in cities and towns. The experience of nature improves human health and well-being in many ways.

Social and cultural strengths: Urban green spaces can provide a neutral space within which people come together, social interactions occur (that include people from different backgrounds), and relationships or partnerships take form.

Mental health and function: Both visual access and being within green space helps to restore the mind’s ability to focus. This can improve job and school performance, and help alleviate mental stress and illness. Work and learning places that incorporate or are located near nature can help remedy mental fatigue and restore one’s ability to focus on tasks. The result can be better performance in the work place and classroom.

Place attachment and meaning are particularly relevant when considering issues of urban development and community-building. Attachment and meaning emerge from a variety of experiences and situations, and are often related to parks, green spaces, and natural areas.

Green local economies: economic benefits includine increased taxes for cities, and shoppers spend more in areas with trees.

Scientific research shows being surrounded by birds can make you happier.

I haven't even mentioned the endangered status of pollinators and food. I hope you understand this. It's covered above in “risk” I think.

Healthy Trees, Healthy Lives Research: Take care of the forest, and it will take care of you. As research is being conducted and becoming available, findings reinforce what much of the urban forestry community already knows — that trees have a positive impact on human health. Check out research on why Healthy Trees make Healthy Lives.

Cities need green spaces that are well designed, creatively delivered, accessible to all, and managed and maintained with appropriate resources to ensure long-term quality and availability.

Beyond Trees and Greenspace

Economics: Berkeley and many world-wide communities suffer from national economic policies leaving them on starvation diets relative to their needs, creating a situation in which localities cut off their own legs to survive. Much more inclusionary housing is absolutely needed, and climate abuse is very real, but those who are honest (as in one surprisingly well-researched study linked here, among others) will admit hoped-for tax and other revenue is one of the highest priorities for building these projects. Yes, building on BART is slightly different, posing differing challenges and opportunities. Still this is relevant.

Thank you,
Virginia Browning,
Berieley CA

Letter C8

COMMENTER: Virginia Browning

DATE: October 17, 2022

Response C8.1

Effects associated with GHG emissions/climate change are addressed in Section 4.7, *Greenhouse Gas Emissions*. As discussed in that section, impacts associated with the project were found to be less than significant; therefore, no mitigation measures were required. As discussed in Section 6, *Alternatives,* of the Draft EIR, as required by CEQA (CEQA Guidelines § 15126.6(a)), the range of alternatives considered included alternatives that would avoid or reduce the significant impacts associated with the proposed HEU. No significant GHG impacts were identified in the Draft EIR, and none were identified in the alternatives included in Section 6. Finally, Berkeley is an urban area; CEQA Statute Section 21071 defines an urbanized area as "An incorporated city that…has a population of at least 100,000 persons."

Response C8.2

The comment does not address the adequacy or content of the Draft EIR.

Response C8.3

As discussed in Section 2, *Project Description,* an implementation program of the proposed HEU is the Southside Zoning Modification Project, which proposes zoning changes intended to increase housing capacity and production to better meet student housing demand in the Southside through changes in zoning parameters, including building heights, building footprints (including setbacks and lot coverage), parking, ground-floor residential use, and adjustments to the existing zoning district boundaries. The exact modifications have not been determined, but the EIR conservatively assumes an additional 1,000 housing units in the Southside associated with the zoning changes. Please also refer to Response C5.11, regarding parks and recreation facilities.

Response C8.4

The comment does not address the adequacy or content of the Draft EIR.

Response to Attachment

The attachment does not address the adequacy or content of the Draft EIR.

Letter C9

From: Anthony Campana <a_campana@live.com>
Sent: Monday, October 17, 2022 5:00 PM
To: Horner, Justin <JHorner@cityofberkeley.info>
Subject: Public Comment: Berkeley Draft Environmental Impact Report, 2023-2031 Housing Element

Thank you for considering and responding to the comments below:

1. The alternatives presented in the Draft EIR are insufficient to establish selection of the Housing Element Update as presented. The three alternatives presented include only no-build and partial no-build options. No positive/additional alternatives are presented or considered. The City should add and evaluate alternatives that provide additional rezoning near transit. One such alternative that the City should consider is increasing allowable heights and relaxing zoning as required within one half mile of BART stations to permit construction of 7-story residential buildings. I am confident that this alternative, if included as it should be, would be found to be the Environmentally Superior Alternative due to reduced Vehicle Miles Travelled, energy use, and health impacts relative to the Housing Element Update as proposed.

1

2.

3. The analysis of Bicycle and Pedestrian Access in the Draft EIR does not sufficiently consider the placement of Opportunity Sites along major roads. For example, Table 4.2-6 states that the proposed Housing Element Update is consistent with Bicycle and Pedestrian Access because "most housing inventory sites are generally located near or along transportation corridors served by Class II and Class III bicycle lanes, which would encourage the usage of bicycles and reduce reliance on single-occupancy vehicles." In fact, most sites in the inventory identified by the City are located along high-injury corridors, dangerous streets where Class II and III bike lanes are insufficient, and most of the length of these streets, including San Pablo Avenue, Sacramento, MLK, and University, does not have bike lanes or adequate pedestrian crossing infrastructure. The Draft EIR should consider street safety impacts of the Opportunity Sites identified, relative to a superior alternative which focuses development in accessible areas near major transit stops.

2

Berkeley Resident

Letter C9

COMMENTER: Anthony Campana

DATE: October 17, 2022

Response C9.1

As discussed in Section 6, *Alternatives,* of the Draft EIR, alternatives considered included ones that would avoid or reduce the significant impacts associated with the proposed HEU. Because no significant VMT, energy, or GHG impacts of the proposed HEU were identified, alternatives specifically targeted to reduce VMT, energy, or GHG impacts were not analyzed.

Response C9.2

The EIR is a Program EIR covering city-wide impacts of the proposed HEU at the programmatic level. It would be speculative to attempt to quantify individual project-level effects on non-motorized safety until the City receives design plans for specific developments.

Letter C10

From: Virginia Browning <vexxie@yahoo.com>
Sent: Monday, October 17, 2022 5:12 PM
To: Horner, Justin
Subject: computer crash DEIR comments continued

Hello Mr. Horner et al,
I'm sorry my computer crashed when I was trying to send my previous comments.

I have some additional ones I hope you will consider.

1 Transportation to high-density areas seems to cancel out any need for other environmental concerns in several areas of the report. What about considering this alternative:
Given that 40% of healthy livable areas need to be tree-covered or green-covered, for health and for climate mitigation, and given that folks should be growing some of their food locally to reduce trips elsewhere (VMT) - what about a policy that prioritizes public transit to NON-urban and LESS-URBAN areas as well as just to "get out of town" to find adequate recreation, which so many human beings still need to do, even more in these concrete jungles?

I hope you will add these questions to my comments. I know they're arriving a few minutes past 5, but as I say, my computer crashed.

Thank you,
Virginia Browning
Berkeley Ca

Letter C10

COMMENTER: Virginia Browning

DATE: October 17, 2022

Response C10.1

The comment proposes an additional alternative for analysis but does not address the adequacy or content of the Draft EIR. Please refer to Responses C8.1 and C9.1.

Letter C11

From: Virginia Browning <vexxie@yahoo.com>
Sent: Monday, October 17, 2022 5:20 PM
To: Horner, Justin
Subject: DEIR p.s. last idea

Whether you can officially add this to the comments or not, no one ever talks about different types of public transit - not just mostly-empty buses that go on regular schedules.

1

People schedule Uber and Lyft and Taxi rides. We should be able to schedule shared smaller shuttles that don't run empty VMT. With these alternatives, we don't need to pretend to make things ecological by creating heat islands of massive concrete structures with the assumption that big buses need to go only to big buildings. We need more greenspace. People will still use VMT to get OUT of these crowded noisy ugly heat traps.

Thank you again,
Virginia Browning
Berkeley

Letter C11

COMMENTER: Virginia Browning

DATE: October 17, 2022

Response C11.1

The comment does not address the adequacy or content of the Draft EIR.

PLANNING COMISSION

DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE HOUSING ELEMENT UPDATE PROJECT

comments
submitted by

BARBARA ROBBEN
1964 EL DORADO
BERKELEY CA 94707
510-524-2383

WESTWARD THE COURSE OF EMPIRE TAKES ITS WAY.

— George Berkeley,
1685 - 1753

The proposed project establishes policies and programs to further the goal of meeting the existing and projected housing needs of all household income levels of the community.

— the City of Berkeley, 2022

D.E.I.R.

It is likely that large percentages of the worlds populations would be happy to come to CALIFORNIA if they could. With all of its amenities such as climate; culture; beaches and mountains; rich agricultural soils; a thriving economy; technical and scientific opportunities, along with construction and service jobs; people of all kinds would find something to please them.

1 However, each one of these folks would require sustenance: food, transportation, private living space, recreation, water supply, sanitary services such as water treatment plants, trash removal, schools, parks...

So that is a large order, not so obvious at first. Before committing, we who are already living, paying taxes and voting, might take a closer look at what may be involved. Not only just for people, but also for wildlife, for forests and grasslands, for deserts, for rivers — perhaps all dammed. The reservoirs behind these dams may even be empty and parched. Faucets may be turned on but find no water forthcoming. Our layer of air could be combined with smoke and exhaust for each person to breathe.

So really, if that were to happen, the difficulties could shortly turn even an attractive location into a disappointment. A warming Arctic leads to rising sea water. Heat waves and flooding will follow, along with additional traffic and high taxes.

1, cont.

Then, to be honest, there is the ever-present certainty of a severe and distaserous earthquake along our many active fault lines. There will be consequences for our various heavily built-up fault zones, with a long and painful recovery process. The more people and properties that are harmed, the longer the wait for help and supplies - for both the immediate healthcare needs as well as for any rebuilding.

A mandate from the State Goverment wont fix any of these inevitable occurences.

Proposed remedies such as the use of electric vehicles, desalination of sea water, Solar farms and Wind farms each carry their own consequences, and will affect the future of all humanity.

Addendum

The Govenor in Rome has sent out an Order stating that each Town is to accept more residents because there is a need of housing. The needs are great, and every community is expected to do its part including Pompeii. Orders and build is to commence AD 70's,

Rich fertility of the Lands, with Vineyards climbing up the slopes of nearby Mount Vesuvius, add to the desirability of the Area, which must be shared with Newcomers especially by those with Villas, as currently many workers are without the means to acquire simple homes. Villas should be divided into four parts with two additional small dwellings to share the Courtyards.

Be it so sealed A.D. 70

D.E.I.R.

Of a practical nature, aside from the issues of filling in Bay-shore lands with housing plans, while there may exist real and pressing needs for these sites to serve as Desalination Plants and Water Treatment Plants in future years, especially with an increase in population —

2 I have studied the Maps included in my LARGE-PRINT-PACKAGE, courtesy of GRACE WU: Thank You.

I will include specific comments only on Projects in my immediate area, SOLANO AVENUE at The ALAMEDA, near the SOLANO TUNNEL. JACQUE'S WAY is a path going from the MARIN CIRCLE FOUNTAIN down toward the commercial district of SOLANO AVENUE. This path is a pleasant pedestrian access. The history of this area includes the fact that it was once considered as a location for the State Capitol. The SOLANO TUNNEL was made by the 'cut-and-fill' process.

The path areas were likely utilized during construction processes, then enhanced with landscaping and pedestrian access.

When repairs to the TUNNEL become necessary, these small parklets will again likely be called into use. Do not impair future access for repair work by suggesting HOUSING on this valuable open Space.

2, cont.

Another area marked on this map in pink, is for a parcel a block down on Solano from the Alameda. It is presently used as a GAS STATION.

Planners might realize that this Service Station could equally well in the future serve as an Electrical Vehicle Charging Station. But not if it had been converted to housing.

Thanks to GRACE WU for supplying me with the LARGE-PRINT-EDITION of the MAPS.

BARBARA ROBBEN
1964 EL DORADO
BERKELEY CA 94707
510-524-2383

Letter C12

COMMENTER: Barbara Robben

DATE: No Date

Response C12.1

The comment does not address that physical environmental effects and cumulative impacts associated with the proposed HEU for issue areas such as biological resources, air quality, infrastructure, recreation, water supply, transportation, and earthquake are discussed throughout the EIR, including in Sections 4.1, *Air Quality*, 4.3, *Biological Resources*, 4.6, *Geology and Soils*, 4.13, *Public Services and Recreation*, 4.14, *Transportation*, and 4.16, *Utilities and Service Systems*. Impacts related to these topics were generally found to be less than significant or less than significant with mitigation. The comment does not address the adequacy or content of the Draft EIR.

Response C12.2

Construction of a desalination plant or water treatment plant is not a part of the proposed HEU, which is a plan to accommodate housing, and the Draft EIR does not identify a need for new or expanded facilitates such as a water treatment plant. This comment does not provide specific comments on the analysis completed or conclusions provided in the Draft EIR.

4 Public Hearing Comments

Verbal comments received at the public hearing (Planning Commission, September 7, 2022) from members of the public are transcribed below. Each transcribed comment has been numbered sequentially and each separate issue raised by the commenters has been assigned a number. The responses to each comment identify the number of the comment (Response PC.1, for example, indicates that the response is to comment PC.1).

Comment PC.1

I understand the impacts that that you've described-- the unmitigable impacts--now many of which exist today, you know, related to emergency response, evacuation, wildfire, landslide, etc. Under historical resources there was no specific resource identified, but there was a reference to buildings over 40 years old. Is that number relevant to determining historic resources? How did? Where did 40 years come from? And is that used in in trying to assess those impacts?

Response PC.1

The City has provisions in place for projects that would involve the demolition of non-residential buildings over 40 years old that require use permits or administrative use permits to be forwarded to Landmarks Preservation Commission for review. The City's zoning project application also has submittal requirements for zoning projects that include the proposed demolition or substantial change to any building more than 40 years old subject to environmental review requiring a historical resource evaluation. The Draft EIR acknowledges that development under the proposed HEU could impact historical structures and found that this impact would be significant and unavoidable.

Comment PC.2

The following up, then, is in that scenario where something has identified, or the impact that you're describing, would that be where somebody wanted to modify that historic building to add it additional units, or some activity that might the damage the historic structure, is that the thinking?

Response PC.2

The commenter is correct that the EIR assumes that future development could involve modification or demolition of a historic structure. As discussed in Section 4.4, *Cultural Resources,* of the Draft EIR, three of the housing inventory sites are known to contain properties which are listed in, or eligible for the National Register of Historic Places, California Register of Historical Resources, or designated City of Berkeley Landmarks, and therefore are considered historical resources. Future development on those sites under the proposed HEU could impact existing known historical resources. Further, the Draft EIR also acknowledges that development under the proposed HEU could impact historical structures that are not yet identified. Therefore, overall impacts to historical resources were found to be significant and unavoidable.

Comment PC.3

I mean, this this this 40 years is not something that you know, we're focusing on tonight. But I you know, because Brad raised it that I did want to comment on it I mean, I would say in some other procedure we should revisit that year, because I also balked at that, having someone who recently did a remodel in their house; reason I had to do a historic analysis of the house for the city, because it was older than 40 years old, and I think that this is not the venue I know to change that, but to my mind, 40 years seems way too short for something like that, and you have to go through a whole procedure--I'm blanking on the name, the city has guidelines on how you fill out the historic you know, historic issues with the house--and frankly, it's about I actually think it's sort of put in place as a way to sort of put curbs on development. Because if you identify even a previous resident who became famous, that was reason to raise a flag which might get in the way of doing an addition on your house, which has nothing to do with you. So I think it's something to flag I just had. I could not comment on that. Thank you.

Response PC.3

This commenter's opinions about the City's procedures for the evaluation of potential historical resources are noted. This comment does not address the adequacy or content of the Draft EIR.

Comment PC.4

I had a follow up to the same thing as well. I guess I'm trying to understand, because the way it's written in the EIR it's just very broad and it seems like we don't know, so therefore it could be a huge problem, or it could be nothing. So my question was on the potential sites that are listed--or all of the housing units, whatever the 3 categories are --many of those, has it been studied for each of those sites that there are buildings on those sites and the majority of those sites are over 40 years old, and that's why, it's an issue. I just want to understand that piece.

Response PC.4

Please refer to Response PC.1 and PC.2. In addition, as explained in Section 4.4, *Cultural Resources,* of the Draft EIR, there are a number of inventory sites that contain structures over 40 years old and therefore may be eligible to be considered historic. Therefore, overall impacts to historical resources were found to be significant and unavoidable.

Comment PC.5

But I just want to make sure I'm understanding: does that mean then, that of the sites that are listed, if this I mean, there are two unavoidable impacts, right? One is that we were affecting many historic buildings by development, and the other impact is, if there are so many buildings that are historic, that we can't touch, then how does that affect our RHNA numbers? I think going forward. That's a kind of analysis I would be interested in in in looking at, I guess.

Response PC.5

Please refer to Response PC.2. Three of the inventory sites contain known historic structures. Therefore, removal of those sites from the inventory would not affect the City's ability to meet the RHNA numbers. Further, the proposed HEU itself is a plan and does not include specific development projects. As stated in Section 2, *Project Description,* of the Draft EIR, under existing

land use and zoning regulations and with implementation of programs in the proposed HEU, more than 19,000 additional units could be constructed which is more than double the City's RHNA. The Draft EIR assumes full buildout as a conservative analysis of environmental effects of the proposed HEU.

Comment PC.6

Yeah, I guess we're making like through this process. We've always been saying we are we are meeting our RHNA numbers, we don't need to rezone, yet this is such an unavoidable [impact that] could potentially be huge, and if it is huge then we may not meet our RHNA numbers. I see a tension and a contradiction there, and that's what I'm trying to balance. Like how can we say both?

Response PC.6

Please refer to Response PC.5.

Comment PC.7

I had a question, I mean, you are really having a lot of extra units over what assigned in the housing element in the RHNA numbers, because that's 8,934 and the EIR is for 19,098 units; so planning for excess units. I mean I didn't expect over 11,000 excess units. So is there some explanation as to why we're going for that number rather than just sort of a safety plan over our 8,934 assigned RHNA?

Response PC.7

As discussed in Section 2, *Project Description,* of the Draft EIR, the projected buildout assumed for the analysis in the Draft EIR consists of a projection based on the EIR Sites Inventory of 15,153 units, an additional 1,200 units at the Ashby and North Berkeley BART stations, as well as projections for implementation programs related to the R-1, R-1A, R-2, R-2A and MU-R zoning districts and the Southside Zoning Modification Project, totaling 2,745 units. Overall, this EIR assumes 19,098 units associated with the proposed HEU. The number and location of units actually developed during the Housing Element period will likely differ from those included in the EIR Projected Buildout, but any difference would result in fewer total units and a reduction of total physical sites for housing development.

Comment PC.8

I do have a couple of comments, I guess and they're kind of related to some of Commissioner Ghosh's comments. But you know it was really interesting to read through. Thanks for bringing it forward--and I know it's a huge amount of work, you know, so I guess my first comment is, I you know I was kind of surprised to see that the EIR seems to assume no more density along the main corridors. And you know it seems to focus, you know, stay where there will be density or seen there might be more density, as in both missing middle and then Southside only.

My thinking was that we have some changes in the works along the lines of more density on the corridors. So I thought I would see some expectation to see something around that, like an alternative that had some upzoning along the corridors. And I was also thinking in something I saw of which was submitted to HCD, I thought that it did talk about upzoning considerations following the corridor, so it's kind of surprised to not see that, I guess.

But I think that you know that's related to this issue of you know, the number of units. So the housing element counts identified a total of about 11,000 units, right, and then you got the EIR looking at about 19,000 units right? I mean that's a fairly large buffer in that regard. But I mean my kind of ongoing concern I guess is that there's sort of you know more kind of unrealistic assumptions about the development on those different parcels identified, and no one has a crystal ball, so we don't know -- you know, part art and part science, clearly. But even at 19,000 right, you know, if the development likelihood is 50% or less, which I think is entirely plausible, I mean that maybe gets you at RHNA, maybe not, right--you cut 19 and half--so you know what are those are being as 8,500, or so. I mean, if I was to bet, I probably would not bet that the likelihood is over 50% on the vast majority of these sites, by any stretch.

So, anyway, my opinion is that you know we have to zone for more in order to meet the goal like we have to sort of count above, and the number has to be larger in order to meet RHNA. But I think particularly to meet the below market rate goals. I'm gonna read the statement in the staff report, and it's in the EIR, which I thought was really telling. It's on of the pdf--on the page that has the bullet of missing middle and the bullet of South Side--it says:

"Based on the foregoing, the city has determined that rezoning is not needed to meet the RHNA"--which I was kind of surprised by, but the next sentence is what really got me—"However, recent development activity suggests current zoning alone does not deliver the number of, or number or affordability level of deed restricted affordable house units." That signals to me that we're well aware that existing zoning is not gonna give us the deed restricted units that we're hoping, so that we need you know additional density.

I think lastly, my comment is, you know, I would be a more informed commenter if I was able to see the formal response from HCD first. So you know I think you know that it's expected in early November, so you know I feel like my comments are a bit premature, because HCD hasn't weighed in and I know they don't have time to scrutinize every housing element in state. But I guess I'll end with a question which is can staff kind of tell us what the process is for addressing HCD.

I'm not an EIR expert, but you don't want to have to redo an EIR to accommodate more, denser alternative. So I'm just trying to avoid any of us having to do that.

Response PC.8

Please refer to Response PC.7. The Draft EIR includes an analysis of the HEU as proposed. The proposed HEU does not involve a specific policy or program to increase density along corridors; though as discussed in Section 2 of the Draft EIR, many of the inventory sites are along corridors. Further, as noted by the commenter, the proposed HEU determined that rezoning is not needed to meet RHNA; nonetheless, the proposed HEU includes policies and programs to achieve affordable housing goals and to increase density in some areas per the direction of City Council.

Comment PC.9

I would agree with a lot of Commissioner Vincent's comments that, with the current zoned capacity, if we look at how much got built under that in the last [period], that's not going to meet our needs for the upcoming cycle, especially since a lot of the sites have already been built on. The other comment I have is If you go to page 573 of our packet, it looks like almost all of the sites are concentrated in a handful of neighborhoods. I think that if one of the goals is to affirmatively further fair housing and get housing in high resource neighborhoods. This doesn't quite do that. Thank you.

Response PC.9

This comment does not address the adequacy or content of the Draft EIR.

Comment PC.10

Thanks. I definitely agree with what I've heard already, and Commissioner Twu brought up a really critical thing. You know, my day job is in the affordable housing development space, and I've got an intern right now, and the first thing I'm training him on is what do we look for in an affordable housing site? Well, Albert mentioned one of those things and that's to be in a so called high resource area. The State of California prioritizes affordable housing funding for projects in high resource areas. And if you're not in one, you may have a project that's well conceived, well located, transit-oriented, deeply affordable, and fully financed, but you might be sent on the sidelines for several rounds of funding, and there's a 100 projects in California that look just like that today.

So as staff is contemplating-- and I've read this in the in the staff's memo--that there is a desire to try to promote more affordable housing, middle income housing-- I'm in favor of all of those things-- so interestingly one strategy would be to identify properties within these high resource areas, and Albert might have been speaking—and I don't know if he was if you were talking generically, Commissioner Twu-- but the State has adopted a mapping program that UC Berkeley created, and there are now defined high, medium and low resource areas, so that role could change over the life cycle of this housing element.

But I can tell you the affordable housing developers that might be scouring the city for opportunities, that's where they're going to start. It might be helpful if the city sort of rolled out the red carpet, particularly in areas like that. So I think that's a it just triggered this thought for me that that's what we look for, and that's what I think a lot of our collegial competitors seek out as well.

And of course, as it turns out, many of these are in areas where we're not building affordable housing today. I know that, you know, as the map was shown earlier…and I know there's some of my colleagues and friends in Berkeley are wondering why we're not seeing more proposals in some of these other neighborhoods--in the in the transition up into the hills. Hills are challenging for all the reasons we know, but there are other locations, you know, maybe Upper Solano keeps getting mentioned. I don't know if that was studied as fully as other parks in the city. Thanks. By the way, before I forget, you know I do want to thank the staff and the consultants for the high quality work it's here. I find it most of the stuff really fascinating.

Response PC.10

This comment does not address the adequacy or content of the Draft EIR.

Comment PC.11

I'm trying to understand a few things: one is one of the things I think you'll said is some pieces of this might peel off when specific projects happen or might be referred to in some way. So I'm wondering if you could explain that relationship and give an example of how this might play with specific projects. So that's one thing

The second thing is I want to understand how these alternatives--the no project one is clear but the other 2, how were they were chosen? Were there other alternatives that could have been chosen?

And the last thing is more general: which is I think just sort of reading this, sort of looking at the piece-- I couldn't read all 600 pages of it but you're just reading some pieces--or even with this historic resource piece, there seem to be some pieces that are maybe I guess out of date with where the city is today, just because the plans were done at different times. I think the aesthetics piece I think that's something you're called out in the EIR as well as something that doesn't apply anymore, depending on the location in transit zones or something like that. So I'm just wondering if staff, do we ever do look at any EIR like this as programmatic and identify things that are barriers, but that we follow because they're in the city's documents, but from some time ago. So it's a little bit of a complicated question, and just wondering through, can we use this as a tool to identify what we need to be working on to sort of get everything aligned again.

I mean you said it basically we don't touch anything nothing, then there are no impacts. I think that's a huge sort of assumption when we're making the alternatives. I guess my I'm also sort of struggling with this [question] is that we zone, but we don't often meet our goals, we don't meet enough we're not meeting our you know affordable housing goals, and so I wonder, and I don't know the answer. But if you all have any thoughts I would love to hear, but like by choosing the middle zoning to reduce units because effectively, what you're saying is, if we don't do this we reduce units right? But at what point are we looking at whether that affects 2 and 3 like the other goals, right? So, this is not a zoning we've had before the others we've had and they haven't really us helped build this kind of housing we want, the middle zoning might help us get more affordable housing units, so by picking this and saying that not doing this is an environmentally superior alternative, but as a strategy, does the strategy get us more affordable units? And are we sort of creating an understanding of it that is false? If the goal is just to say that if we do fewer units--but what kind of units too? right?--so I think I have no issue with taller buildings in Berkeley. I think now with engineered timber, often the construction noise, and all of that can be mitigated can be less. But at the same time a smaller project in many places will have less construction noise impact right. So I just want to make sure that I'm understanding correctly, and I don't want somebody who's not having the opportunity to read all of this to walk with an assumption that Oh, we don't do the middle housing rezoning because that's an environmentally superior alternative. But really what you're saying this isn't a stand-in for something that might lead to fewer units, therefore it is an environmentally superior alternative. Does that right?

Okay, Okay, I know this is I mean so complicated. I just want to make sure I was understanding it correctly.

Oh, and the last thing any is that that's not entirely related to CEQA, but I'm wondering: Since we don't often do such a huge programmatic CEQA, we don't do the housing element CEQA that often, are there things that staff is identified that are not in sync with the general plan, or that require policy changes or plan changes in the future? Or you all have not had time to look at that?

Response PC.11

The alternatives analysis includes alternatives identified through the scoping process and in coordination with City staff. As discussed in Section 6, *Alternatives,* of the Draft EIR, the EIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives (stated in Section 2, *Project Description,* of this EIR) but would avoid or substantially lessen any significant adverse impacts of the proposed HEU. In addition, the CEQA-required "No Project" alternative was analyzed. Alternative 3, No Middle Housing Rezoning, includes approximately 975 fewer units in the middle housing rezone areas compared buildout included in the analysis of the proposed HEU with rezoning of the middle housing zones. This alternative would

result in reduced impacts to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and recreation, tribal cultural resources, utilities and service systems and wildfire due to the decrease in residential units developed. Because Alternative 3 slightly reduces the severity of impacts resulting from the proposed project, it is the environmentally superior alternative. However, the City is not obligated to adopt the environmentally superior alternative.

As discussed in Section 4.10, *Land Use and Planning,* of the Draft EIR, the proposed HEU does include amendments to other elements of the City's General Plan so that there is internal consistency between documents. Overall, the proposed HEU was found to be consistent with the City's General Plan.

5 Draft EIR Text Revisions

Chapter 5 presents specific changes to the text of the Draft EIR that are being made to clarify, amplify, or make insignificant modifications to the text of the Draft EIR, including in response to comments received during the public review period. In no case do these revisions result in a greater number of impacts or impacts of a substantially greater severity than those set forth in the Draft EIR such that recirculation of the Draft EIR would be required. Where revisions to the main text are called for, the page section number are set forth, followed by the appropriate revision. Added text is indicated with underlined text. Text deleted from the Draft EIR is shown in ~~strikeout~~. Page numbers correspond to the page numbers of the Draft EIR.

5.1 Draft EIR Text Revisions

The text under Impact HAZ-5 on Page 4.8-22 in Section 4.8, *Hazards and Hazardous Materials* has been revised as follows:

> **IMPACT HAZ-5 THE PROPOSED HEU WOULD NOT RESULT IN PHYSICAL CHANGES THAT COULD INTERFERE WITH OR IMPAIR EMERGENCY RESPONSE OR EVACUATION. THEREFORE, THE PROJECT WOULD NOT RESULT IN INTERFERENCE WITH THESE TYPES OF ADOPTED PLANS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.**
>
> Figure 14 of the Berkeley General Plan identifies existing emergency access and evacuation routes in the City. Many of the proposed inventory sites are located along access and evacuation routes including Sacramento Street, Ashby Avenue, University Avenue, and San Pablo Avenue. General Plan Policy T-28 identifies actions for emergency access. These include not installing diverters or speed humps on streets identified as Emergency Access and Evacuation Routes. While traffic increases associated with the proposed rezoning may affect streets within the city, Sacramento Street, Adeline Street, Ashby Avenue, and Shattuck Avenue would still serve as evacuation routes in case of emergency.
>
> As discussed in Section 4.17, *Wildfire,* construction of individual housing developments could interfere with adopted emergency response or evacuation plans as a result of temporary construction activities within rights-of-way. However, temporary construction barricades or other construction-related obstructions used for project development that could impede emergency access would be subject to the City's Standard Conditions of Approval, which include a condition to prepare a Transportation Construction Plan (TCP) subject to City review and approval. Implementation of a TCP would limit the extent to which construction activities during the planning period of the HEU would impair or physically interfere with adopted emergency response or evacuation procedures.
>
> As discussed in Section 4.13, *Public Services and Recreation*, future development in the City would be required to conform to the latest fire code requirements, including provisions for emergency access. With adherence to existing General Plan policies and other regulations, implementation of the proposed HEU would not impair or interfere with an emergency response or evacuation plan. This impact would be less than significant.

During review of the Draft EIR, the City opted to make voluntary changes to the following Mitigation Measures in order to provide further clarity. Added text is indicated with underlined and deleted text is indicated with strikeout. None of these changes would warrant recirculation of the EIR pursuant to CEQA Guidelines Section 15088.5.

Page ES-6 in the Executive Summary and Page 4.2-18 In Section 4.2, *Air Quality,* of the Draft EIR are revised as follows:

AQ-1: Construction Emissions Reduction Measures

~~As part of the City's development approval process, the City shall require applicants for future development~~ ~~projects within the project sites to~~ Projects shall comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM_{10} (Table 8-2, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the May 2017 BAAQMD CEQA Guidelines), outlined below.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper conditions prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.

Pages ES-7 through ES-8 in the Executive Summary and Page 4.2-22 in Section 4.2, *Air Quality,* of the Draft EIR are revised as follows:

AQ-2: Construction Health Risk Assessment

For ~~individual~~ projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize Tier 4 and/or alternative fuel construction

equipment, the project applicant shall prepare a construction health risk assessment (HRA) and implement necessary measures to reduce risk below ~~The HRA shall determine potential risk and compare the risk to~~ the following BAAQMD thresholds:

- ~~Non compliance with Qualified Community Risk Reduction Plan;~~
- Increased cancer risk of > 10.0 in a million;
- Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
- Ambient PM2.5 increase of > 0.3 µg/m3 annual average

Page ES-6 in the Executive Summary and Page 4.4-17 In Section 4.4, *Cultural Resources,* of the Draft EIR are revised as follows:

CUL-2: Historical Resources Discretionary Review

For projects that are subject to discretionary review that occur during the Housing Element period where a historical-age building or structure that has not been previously evaluated is present, a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level survey in accordance with the California Office of Historic Preservation guidelines to determine if the property qualifies for federal, state, or local historical resources designation. All age eligible properties shall be evaluated within their historic context and documented in a technical memorandum with Department of Parks and Recreation Series 523 Forms.

~~Should~~ If a property is ~~be~~ found to be a qualifying historical resource, then the project shall be subject to the City's regulations for permit review, including by the Preservation Landmarks Commission pursuant to Chapter 3.24.260, and/or by the Zoning Adjustments Board pursuant to Chapter 23.326 of the City of Berkeley Municipal Code. Efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources built environment assessment shall also identify and specify the treatment of character-defining features and construction activities.

Page ES-20 in the Executive Summary and Page 4.15-7 in Section 4.15, *Tribal Cultural Resources,* of the Draft EIR are revised as follows:

TCR-1: Tribal Cultural Monitoring

For ~~future~~ projects that are determined through tribal consultation to potentially affect tribal cultural resources, in order to mitigate potential adverse impacts to Native American cultural objects and human remains discovered during construction, tribal cultural monitors will be retained to monitor work done in areas of Tribal concern, as determined through tribal consultation. If Native American cultural objects and/or human remains are discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by tribal cultural monitors and a qualified archaeologist meeting the Professional Qualifications Standards of the Secretary of the Interior (36 CFR Part 61). The archaeologist shall, in accordance with the appropriate

Guidelines, identify and evaluate the significance of the discovery and develop recommendations for treatment in consultation with the affected Tribe to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in consultation with the affected Tribe consistent with the *CEQA Guidelines for Determining the Significance of and Impacts to Cultural Resource, Archaeological Historic and Tribal Cultural Resources*. Such mitigation may include, but is not limited to, additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that a TCR might be encountered.

6 CEQA Implications for Changes to the Housing Element

This section provides a discussion of the CEQA implications of changes to the Housing Element that have been made after circulation of the Draft EIR.

6.1 Changes to the Housing Element

The total number of units included in the EIR sites inventory is 15,001 units, a reduction 152 units from the EIR projection. In addition, the units included in the each of the three categories used to meet the RHNA – likely sites, pipeline sites, and opportunity sites – have been updated:

- *The likely sites*, which originally included an estimated 4,685 units, now includes an estimated 2,690 units. This includes a reduction in the number of estimated ADUs from 800 units to 600 ADUs to be developed during the 2023-2031 planning period based on information from previous years and trends.
- *The pipeline sites*, which originally included an estimated 2,415 units, now include an estimated 5,822 units.
- *The opportunity sites* included an estimated 8,053 units, and now includes an estimated 6,489 units.

These changes result from the submission of a number of development applications and pre-applications, with higher than anticipated unit counts, in the first six months of 2022. Additionally, a number of opportunity sites were removed as a result of community input, HCD Feedback, and additional research into specific site conditions. One new pipeline site (zoned C-DMU Core and comprising 214 units) was added. Additionally, another pipeline site was moved to the opportunity site category (zoned R-SMU, originally 100 units and revised to 199 units based on lot size). A third pipeline site was reduced in unit count (zoned R-2, originally 136 units and revised to 110 units based on pre-application). Finally, corrections to four other pipeline sites resulted in the removal of 25 units from the total unit count.

6.2 Environmental Implications

As stated above, the number of units within each category of likely, pipeline, and opportunity sites has changed and the overall number of inventory sites has been reduced by 152 units. Therefore, the projected overall buildout analyzed throughout has been reduced.

The Draft EIR determined that the environmental impacts of the original HEU would be less than significant or could be reduced to below a level of significance with proposed mitigation measures for most of the topical areas studied except for historical resources, construction noise, and wildfire. Overall, the potential changes to the proposed HEU would not the area studied in the EIR (impacts were assessed citywide), would not change the objectives and goals of the proposed HEU, would not change the allowed uses or densities under the proposed HEU, and would not increase the buildout assumptions analyzed in the Draft EIR. Therefore, the proposed HEU changes would not affect the findings and conclusions of the Draft EIR with respect to aesthetics, agriculture and

forestry resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, public services, recreation, transportation, tribal cultural resources, utilities and service systems, or wildfire. Those impacts would be incrementally reduced and remain less than significant, less than significant with mitigation, or in the case of construction noise, historical resources, and wildfire, significant and unavoidable.

The changes to the proposed HEU would not result in new or increased significant environmental impacts. No new significant impacts would occur, and no new mitigation measures would be required; therefore, no impacts beyond those identified in the EIR would occur. No substantial revisions to the EIR are required; therefore, pursuant to CEQA Guidelines Section 15088.5 recirculation of the EIR is not required.

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Mitigation Monitoring and Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the City of Berkeley 2023-2031 Housing Element Update Project. The California Environmental Quality Act (CEQA) and State CEQA Guidelines require a public agency to adopt a monitoring and reporting program for ensuring compliance during project implementation with mitigation measures identified in the EIR and adopted at the time of project approval. As stated in section 21081.6(a)(1) of the Public Resources Code:

> ...the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.

Section 21081.6 and CEQA Guidelines Section 15097 provide general guidance for implementing mitigation monitoring programs, and indicate that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined by the agency.

To ensure that the mitigation measures are properly implemented, this MMRP identifies the timing and responsibility for implementing and monitoring each measure. Applicants for future projects will have the responsibility for implementing the measures that apply to the proposed development activity, and the identified City of Berkeley departments will have the primary responsibility for monitoring and reporting on the implementation of the mitigation measures.

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
Air Quality					
AQ-1: Construction Emissions Reduction Measures					
Projects shall comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM_{10} (Table 8-2, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the May 2017 BAAQMD CEQA Guidelines), outlined below. 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and	Project applicants shall comply with BAAQMD control measures for reducing construction emissions.	As part of any grading / building permit, ensure control measures are implemented during construction.	During construction.	City of Berkeley Department of Planning & Development, Building & Safety Division	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
determined to be running in proper conditions prior to operation. 8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.					
AQ-2: Construction Health Risk Assessment					
For projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize Tier 4 and/or alternative fuel construction equipment, the project applicant shall prepare a construction health risk assessment (HRA) and implement necessary measures to reduce risk below the following BAAQMD thresholds: ▪ Increased cancer risk of > 10.0 in a million; ▪ Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or ▪ Ambient $PM_{2.5}$ increase of > 0.3 µg/m^3 annual average	Project applicants shall prepare a construction health risk assessment (HRA) where required by the measure and implement measures as necessary to reduce construction health risk.	Verify HRA completed. Verify measures are implemented during construction as needed.	Prior to issuance of building permit. During construction as needed.	City of Berkeley Department of Planning & Development City of Berkeley Department of Planning & Development, Building & Safety Division	
AQ-3: TAC Exposure Reduction Building Measures					
The following design features shall be incorporated for residential development located within 1,000 feet of I-580/80 or on a lot that fronts on a section of roadway with 10,000 vehicles per day or more in order to reduce exposure of proposed residences to	Project applicants shall incorporate design features to reduce exposure of proposed residences to TACs	Verify design features to reduce TACs have been incorporated into plans as appropriate.	Prior to issuance of building permit.	City of Berkeley Department of Planning & Development	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
TACs from vehicles and stationary combustion engines (i.e., generators): 1. If the proposed buildings would use operable windows or other sources of infiltration of ambient air, the development shall install a central HVAC system that includes high efficiency particulate filters (HEPA). These types of filters are capable of removing approximately 99.97 percent of the DPM emissions from air introduced into the HVAC system (U.S. EPA 2022). The system may also include a carbon filter to remove other chemical matter. Filtration systems must operate to maintain positive pressure within the building interior to prevent entrainment of outdoor air indoors. 2. If the development limits infiltration through non-operable windows, a suitable ventilation system shall include a ventilation system with filtration specifications equivalent to or better than the following: (1) American Society of Heating, Refrigerating and Air- Conditioning Engineers MERV-13 supply air filters, (2) greater than or equal to one air exchanges per hour of fresh outside filtered air, (3) greater than or equal to four air exchanges per hour recirculation, and (4) less than or equal to 0.25 air exchanges per hour in unfiltered infiltration. These types of filtration methods are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system. 3. Windows and doors shall be fully weatherproofed with caulking and weather-stripping that is rated to last at least 20 years. Weatherproof should be maintained and replaced by the property owner, as necessary, to ensure functionality for the lifetime of the project. 4. Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).	where required by the measure.	Inspect at project site to confirm that required design features are properly installed	During construction	City of Berkeley Department of Planning & Development	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
5. Prepare an ongoing maintenance plan for the HVAC and filtration systems, consistent with manufacturers' recommendations. 6. The applicant shall inform occupants regarding the proper use of any installed air filtration system.					
Cultural Resources					
CUL-1: Historic Context Statement, Cultural Resources Survey and Designations					
During the period of this Housing Element, the City should conduct a citywide historic context statement and a cultural resource survey to identify historic resources, with priority given to sites in the EIR Site Inventory, to determine if there are designed built environment features which are over 40 years of age proposed to be altered or demolished. Designation of historic or cultural resources should be conducted by the Landmarks Preservation Commission pursuant to 3.24.260 of the Berkeley Municipal Code.	The City shall conduct a citywide historic context statement and a cultural resource survey.	Verify that survey has been completed, designate resources that are discovered.	During the housing element period.	City of Berkeley Department of Planning & Development Landmarks Preservation Commission to make necessary designations	
CUL-2: Historical Resources Discretionary Review					
For projects that are subject to discretionary review that occur during the Housing Element period where a historical-age building or structure that has not been previously evaluated is present, a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level survey in accordance with the California Office of Historic Preservation guidelines to determine if the property qualifies for federal, state, or local historical resources designation. All age eligible properties shall be evaluated within their historic context and	Project applicants shall retain a qualified architectural historian to perform a historical resources assessment for any historical-aged building or structure that has not been previously evaluated.	Review and approve the historical resources assessment.	During project review.	City of Berkeley Department of Planning & Development	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
documented in a technical memorandum with Department of Parks and Recreation Series 523 Forms. If a property is found to be a qualifying historical resource, then the project shall be subject to the City's regulations for permit review, including by the Preservation Landmarks Commission pursuant to Chapter 3.24.260, and/or by the Zoning Adjustments Board pursuant to Chapter 23.326 of the City of Berkeley Municipal Code. Efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources built environment assessment shall also identify and specify the treatment of character-defining features and construction activities. Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR § 15126.4(b)(1)). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the report shall demonstrate how the project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits.	If significant historical resources are identified, develop and implement site-specific mitigation measures.	Verify site-specific mitigation measures have been implemented as needed.	During and at completion of construction.	Landmarks Preservation Commission	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These may include documentation of the resource in a manner consistent with the standards of the Historic American Building Survey (HABS). Documentation should include full descriptive and historical narrative, measured drawings, and medium format photographs, all in archivally stable format.					
Geology and Soils					
GEO-1: Protection of Paleontological Resources					
If ground disturbance below the level of prior disturbance and into native soils is proposed to occur in areas mapped as Pleistocene alluvial fan and fluvial deposits (Qpaf), Orinda Formation (Tor), or Knoxville Formation (Kjk), then the City shall require the following to be implemented: **Retention of Qualified Professional Paleontologist.** Prior to initial ground disturbance, the project applicant shall retain a Qualified Professional Paleontologist, as defined by Society of Vertebrate Paleontology (SVP) (2010), to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards. If underlying formations are found to have a high potential for paleontological resources, the Qualified Professional Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements: If underlying formations are found to have a high potential for paleontological resources, the Qualified Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements:	On the identified soil types: Project applicants shall retain a qualified paleontologist.	Verify that qualified paleontologist has been retained and measures have been implemented.	Prior to issuance of grading / building permit, periodically during construction.	City of Berkeley Department of Planning & Development	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
Paleontological Worker Environmental Awareness Program (WEAP). Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff should fossils be discovered by construction staff.	Project applicants shall implement a Worker Environmental Awareness Training (WEAP) on paleontological resources.	Verify that WEAP has been completed.	Prior to issuance of grading / building permit	City of Berkeley Department of Planning & Development.	
Paleontological Monitoring. Full-time paleontological monitoring shall be conducted during ground disturbing construction activities (i.e., grading, trenching, foundation work) in sediments assigned a high paleontological sensitivity. Paleontological monitoring shall be conducted by a qualified Paleontological Resources Monitor, as defined by the SVP (2010). The duration and timing of the monitoring will be determined by the Qualified Professional Paleontologist based on the observation of the geologic setting from initial ground disturbance, and subject to the review and approval by the City. If the Qualified Professional Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Professional Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Professional Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Professional Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources. Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological	Project applicants shall hire a paleontological resources monitor, and if fossils are discovered, follow procedures for managing resources. Project applicants shall prepare final Paleontological Monitoring report and shall obtain review and approval of the report from the City of Berkeley.	Verify that qualified paleontological resources monitor has been retained. Review final Paleontological Monitoring report.	Prior to issuance of grading / building permit. Upon completion of ground disturbing activity.	City of Berkeley Department of Planning & Development. City of Berkeley Department of Planning & Development.	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.					
Tribal Cultural Resources					
TCR-1: Tribal Cultural Monitoring					
For projects that are determined through tribal consultation to potentially affect tribal cultural resources, in order to mitigate potential adverse impacts to Native American cultural objects and human remains discovered during construction, tribal cultural monitors will be retained to monitor work done in areas of Tribal concern, as determined through tribal consultation. If Native American cultural objects and/or human remains are discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by tribal cultural monitors and a qualified archaeologist meeting the Professional Qualifications Standards of the Secretary of the Interior (36 CFR Part 61). The archaeologist shall, in accordance with the appropriate Guidelines, identify and evaluate the significance of the discovery and develop recommendations for treatment in consultation with the affected Tribe to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in consultation with the affected Tribe consistent with the CEQA Guidelines for Determining the Significance of and Impacts to Cultural Resource, Archaeological Historic and Tribal Cultural Resources. Such mitigation may include, but is not limited to, additional archaeological testing, archaeological monitoring and/or an	Project applicants shall retain tribal cultural monitors to monitor work done in areas of tribal concern. Project applicants shall retain a qualified archaeologist to identify and evaluate the significance of a discovery and develop recommendations for treatment in consultation with the affected Tribe.	Verify that a tribal cultural monitor and qualified archaeologist have been retained. Verify that resources are mitigated as appropriate.	Prior to issuance of grading / building permit and during construction as needed. Prior to issuance of grading / building permit and during construction as needed.	City of Berkeley Department of Planning & Development. City of Berkeley Department of Planning & Development.	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that a TCR might be encountered.					
Wildfire					
W-1: Undergrounding of Power Drops in the VHFHSZs					
The City shall require that new or upgraded power drops located in the very high fire hazard severity zone be installed underground. Prior to the issuance of a building permit, the applicant shall submit plans for undergrounding of power drops	Project applicants shall submit plans for undergrounding of power drops.	Verify that plans for undergrounding of power drops have been submitted and that power drops are properly undergrounded.	Prior to issuance of a building permit; verification after construction.	City of Berkeley Department of Planning & Development	

CEQA Findings and Statement of Overriding Considerations

for the

City of Berkeley 2023-2031 Housing Element Update

Pursuant to Sections 15091 and 15093 of the
State CEQA Guidelines and Section 21081 of the Public Resources Code

The Final Environmental Impact Report (Final EIR) prepared by the City of Berkeley (City) for the City of Berkeley 2023-2031 Housing Element Update (HEU) Project ("the project") consists of the August 2022 Draft EIR and December 2022 Response to Comments on the Draft EIR. The Final EIR identifies significant environmental impacts that will result from implementation of the project. The City finds that the adoption of mitigation measures identified in the EIR as part of project approval will reduce all but the following significant environmental effects (impacts) to levels that are less than significant: historical resources, construction noise, wildfire, and cumulative cultural resources, cumulative construction noise, and cumulative wildfire impacts. For those impacts, no feasible mitigation measures have been identified to reduce these impacts to a less-than-significant level or mitigation measures have been identified and included but would not reduce impacts to a level of less than significant; therefore, these impacts will remain significant unavoidable impacts of the project. These findings contain a statement of overriding considerations that explains why the benefits of the proposed project outweigh the unavoidable adverse environmental effects and are therefore acceptable.

As required by the California Environmental Quality Act, Public Resources Code Section 21000 *et seq*. (CEQA) and the State CEQA Guidelines, California Code of Regulations, Title 14, Section 15000 *et seq*. (CEQA Guidelines), the City, in addition to adopting these CEQA Findings and Statement of Overriding Considerations, also adopts a Mitigation Monitoring and Reporting Program (MMRP) for the project. In adopting the MMRP, the City finds that it meets the requirements of Public Resources Code Section 21081.6 by providing for the implementation and monitoring of measures intended to mitigate potentially significant environmental effects of the project.

In accordance with CEQA and the CEQA Guidelines, the City adopts these findings as part of the project approval. Pursuant to Public Resources Code Section 21082.1(c)(3), the City also finds that the Final EIR reflects the City's independent judgment as the lead agency for the project.

TABLE OF CONTENTS

SECTION 1: INTRODUCTION

1.1 Statutory Requirements for Findings

CEQA Guidelines § 15091 states that:

> (a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
>
> (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
>
> (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
>
> (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

In short, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to avoid or mitigate significant environmental effects (impacts) that will otherwise occur with implementation of the project. Mitigation measures or project alternatives are not required, however, where they are infeasible or where the modifying the project or adopting mitigation is within the responsibility and jurisdiction of another agency.[1]

For significant impacts that cannot be mitigated to a less-than-significant level, the public agency is required to find that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.[2] CEQA Guidelines §15093(a) states that:

> "If the specific economic, legal, social, technological, or other benefits of a propos[ed] project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'"

SECTION 2: PROJECT DESCRIPTION: CITY OF BERKELEY 2023-2031 HOUSING ELEMENT UPDATE (HEU)

This section provides a brief description of the project and lists the objectives of the proposed project.

2.1 Project Description

The project, which is an update to the Housing Element of the General Plan, is applicable to the entire City of Berkeley (citywide). The city encompasses approximately 17.2 square miles, approximately 7.2 of which is underwater in the San Francisco Bay. The proposed project consists of a comprehensive update to the Housing Element and related edits to the City's General Plan Land Use Element and Berkeley Municipal Code. The Housing Element is one of the seven state-mandated elements of the local General Plan and is required to be updated every eight years by local governments within the regional jurisdiction of the Association of Bay Area Governments (ABAG). The City of Berkeley is preparing the 2023-2031 Housing Element Update to comply with the legal mandate that requires each local government to identify adequate sites for housing to

[1] CEQA Guidelines Section 15091(a)(2) and (3).

[2] Public Resources Code Section 21081(b).

meet the existing and projected housing needs for various income-levels in the community. It is intended to provide the city with a comprehensive strategy for promoting the production of safe, decent and affordable housing, and affirmatively furthering fair housing during the housing cycle. The Housing Element Update establishes goals, policies, and actions to address the existing and projected housing needs in Berkeley.

The goals, policies, and actions in the Housing Element are required to meet Berkeley's Regional Housing Needs Assessment (RHNA) allocation. Berkeley's latest RHNA allocation calls for 8,934 new housing units, including 3,854 new units for residents in the low- and very low-income categories. The City must demonstrate to the State Department of Housing and Community Development (HCD) that the City's Housing Element has adequate land capacity and implementing policies to accommodate its RHNA allocation. In addition, HCD recommends that cities identify a "buffer" of 15% to 30% above the RHNA for lower- and moderate-income categories. Thus, overall, the City's zoning and other land use regulations must accommodate between approximately 10,275 and 11,615 new units.

The City has determined that rezoning is not needed to meet the RHNA. However, recent development activity suggests current zoning does not deliver the level of deed-restricted affordable housing and economic diversity that the HEU aims to achieve. Therefore, the HEU contains implementation programs and zoning policies to encourage additional housing, particularly affordable housing that supports a diversity of income levels and household types.

In conjunction with the Housing Element Update, the project includes amendments to the General Plan including revising the Land Use Element as well as changes to the City's Zoning Ordinance to maintain consistency with the updated Housing Element. The Land Use Element and Zoning Ordinance revisions are to ensure consistency among all General Plan Elements and zoning upon implementation of the updated Housing Element.

For the implementation of the proposed HEU and associated other General Plan amendments and zoning changes, the Draft EIR assumes growth of an estimated 19,098 units over the Housing Element period. The EIR Sites Inventory includes 1) sites for an estimated 4,685 units considered Likely Sites for development, 2) sites for an estimated 2,415 units that are currently in the entitlement and development Pipeline, 3) sites for an estimated 8,053 units on Opportunity Sites identified by the City, 4) sites for approximately 1,745 units projected to result from rezoning of lower-density districts, and 5) sites for 1,000 units projected to result from rezoning of the Southside Plan Area. This total may not include all potential residential development sites within the City limits, and individual sites may or may not be developed at the allowable densities. The placement and design of buildings on specific sites cannot be determined until the City receives an application for a specific project.

The EIR also analyzes alternatives to the project as described in Section 5, below.

2.2 Project Objectives

Pursuant to *CEQA Guidelines* Section 15124(b), the EIR project description must include "[a] statement of objectives sought by the proposed project… The statement of objectives should include the underlying purpose of the project." The City of Berkeley 2023-2031 Housing Element Update is intended to achieve the following project objectives:

1. Adopt policies and programs that meet the City's RHNA with the recommended buffer, provide additional housing opportunities consistent with other City priorities, remove governmental constraints to the maintenance, improvement and development of housing, and ensure ongoing compliance with State Housing Element law and the No Net Loss provisions of State law through the eight-year cycle.
2. Adopt policies and programs to encourage the development of affordable housing at a range of income levels consistent with RHNA, including at least 2,450 units for Very Low-Income households, at least 1,400 units for Low Income households, and at least 1,400 units for Moderate Income households.

3. Encourage the development of housing with access to transit, jobs, services, and community benefits in a manner that distributes affordable and special needs housing in high resource neighborhoods and affirmatively furthers fair housing.
4. Identify housing policies and programs that will conserve and rehabilitate existing units, provide services to increase housing opportunities for all residents of Berkeley, and increase the energy efficiency of both current and future housing units.

SECTION 3: ENVIRONMENTAL REVIEW PROCESS

Pursuant to the California Environmental Quality Act (CEQA), lead agencies are required to consult with public agencies having jurisdiction over a proposed project and to provide the general public with an opportunity to comment on the Draft EIR.

On January 14, 2022, the City of Berkeley issued a Notice of Preparation (NOP) for a 30-day comment period to receive input on the scope and content of the EIR and help identify the types of impacts that could result from the project as well as potential areas of controversy. The NOP was filed with the County Clerk, published in a local newspaper, and mailed to public agencies (including the State Clearinghouse), organizations, and individuals considered likely to be interested in the project and its potential impacts. The City received written responses to the NOP regarding the scope and content of the EIR. The City also held an EIR scoping meeting as part of the regularly scheduled Planning Commission meeting on February 9, 2022. No members of the public provided verbal comments at the scoping hearing, but several Planning Commissioners provided verbal comments.

The Draft EIR was made available for public review on August 30, 2022. The Notice of Availability of a Draft EIR was posted with the County Clerk, filed with the State Clearinghouse for distribution to state agencies, published in a local newspaper, and mailed to local agencies and interested organizations. A Notice of Completion was also filed with the State Clearinghouse. The Draft EIR and an announcement of its availability were posted electronically on the City's website. The Draft EIR comment period closed on October 17, 2022. During the comment period, the City Planning Commission held a hearing to receive comments on the Draft EIR on September 7, 2022. The City received 16 comment letters (including emails) on the Draft EIR during the public comment period.

SECTION 4: FINDINGS

These findings summarize the environmental determinations of the EIR about project impacts before and after mitigation and do not attempt to repeat the full analysis of each environmental impact contained in the EIR. Instead, these findings provide a summary description of and basis for each impact in the EIR, describe the applicable mitigation measures identified in the EIR, and state the City Council’s findings and rationale therefor on the significance of each impact with the adopted mitigation measures. A full explanation of these environmental findings and conclusions can be found in the EIR, and these findings hereby incorporate by reference the discussion and analysis in the EIR supporting the EIR’s determinations regarding mitigation measures and the project’s impacts.

4.1 SIGNIFICANT EFFECTS THAT CANNOT BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

The Draft EIR identifies the following significant and unavoidable adverse impacts associated with the approval of the project, some of which can be reduced, although not to a less-than-significant level, through implementation of mitigation measures identified in the Final EIR (Public Resources Code § 21081(a)(1)). To the extent that these mitigation measures will not mitigate or avoid all significant effects on the environment, it is hereby determined that any remaining significant and unavoidable adverse impacts are acceptable for the reasons specified in Section 6, below (Public Resources Code § 21081(a)(3)). The findings in this section are based on the Draft EIR, the discussion and analysis in which is hereby incorporated in full by this reference.

4.3.1 Cultural Resources

Impact CUL-1: Development accommodated by the proposed Housing Element Update could adversely affect known and previously unidentified historic-period resources. Impacts to historic-period resources would be significant and unavoidable with mitigation.

Mitigation Measure CUL-1: ***Historic Context Statement, Cultural Resources Survey and Designations.*** *During the period of this Housing Element, the City should conduct a citywide historic context statement and a cultural resource survey to identify historic resources, with priority given to sites in the EIR Site Inventory, to determine if there are designed built environment features which are over 40 years of age proposed to be altered or demolished. Designation of historic or cultural resources should be conducted by the Landmarks Preservation Commission pursuant to 3.24.260 of the Berkeley Municipal Code.*

Mitigation Measure CUL-2: ***Historical Resources Discretionary Review.*** *For projects that are subject to discretionary review that occur during the Housing Element period where a historical-age building or structure that has not been previously evaluated is present, a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level survey in accordance with the California Office of Historic Preservation guidelines to determine if the property qualifies for federal, state, or local historical resources designation. All age eligible properties shall be evaluated within their historic context and documented in a technical memorandum with Department of Parks and Recreation Series 523 Forms.*

If a property is found to be a qualifying historical resource, then the project shall be subject to the City's regulations for permit review, including by the Preservation Landmarks Commission pursuant to Chapter 3.24.260, and/or by the Zoning Adjustments Board pursuant to Chapter 23.326 of the City of Berkeley Municipal Code. Efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources built environment assessment shall also identify and specify the treatment of character-defining features and construction activities.

Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR § 15126.4(b)(1)). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the report shall demonstrate how the project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits.

If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These may include documentation of the resource in a manner consistent with the standards of the Historic American Building Survey (HABS). Documentation should include full descriptive and historical narrative, measured drawings, and medium format photographs, all in archivally stable format.

Finding: The City finds impacts related to cultural resources have been mitigated to the maximum extent feasible. Despite the implementation of mitigation measures, impacts would remain significant and unavoidable. The City finds that although this impact would be significant and unavoidable, the impact is

acceptable when weighed against the overriding social, economic, and other considerations set forth in the Statement of Overriding Considerations (Section 6 of these Findings).

Facts in Support of Finding: Mitigation Measure CUL-1 would ensure that a historical resource evaluation is conducted for properties subject to discretionary review to determine if a property contains a historical resource eligible for listing in the NRHP, CRHR, or as a City of Berkeley Landmark or Structure of Merit. In combination with City of Berkeley regulations, Mitigation Measures CUL-1 and CUL-2 would reduce impacts to historical resources to the maximum extent feasible. However, even with implementation of this mitigation measure, existing and eligible historical resources could still be materially impaired by future development that would be carried out under the proposed Housing Element because specific actions intended for the reduction of impacts to historical resources could be deemed infeasible. Additionally, projects that are not subject to discretionary review and have not been previously evaluated could result in the demolition of potential historic resources. Therefore, impacts would be significant and unavoidable.

4.3.2 Noise

Impact NOI-1: Construction associated with housing development accommodated under the proposed HEU would be required to comply with the allowed daytime construction hours as set forth in the Berkeley Municipal Code and therefore, would not occur during nighttime hours when people are more sensitive to noise. Larger developments could involve construction with lengthy durations, substantial soil movement, use of large, heavy-duty equipment, and/or pile driving near noise-sensitive land uses that would exceed the applicable FTA daytime noise limits. implementation of City Standard Conditions of Approval for construction noise would reduce construction noise levels, but may not reduce them to below thresholds for every project. Therefore, impacts generated by temporary construction noise would be significant and unavoidable.

Mitigation Measures: No feasible Mitigation Measures have been identified.

Finding: The City finds no feasible mitigation measures are available to reduce impacts beyond what is already required under the City's Standard Conditions of Approval. Because there are no feasible Mitigation Measures, impacts would remain significant and unavoidable. The City finds that although this impact would be significant and unavoidable, the impact is acceptable when weighed against the overriding social, economic, and other considerations set forth in the Statement of Overriding Considerations (Section 6 of these Findings).

Facts in Support of Finding: The City's Standard Conditions of Approval for large projects would reduce construction noise levels to the maximum extent feasible. These conditions would include the installation of temporary sound barriers, which are the most effective advanced measure to reduce noise from construction sites adjacent to sensitive receptors. No further measures are available to provide additional reductions in construction noise. However, construction noise levels could still exceed the City's standards for stationary equipment in both multi-family residential and commercial zones. Furthermore, construction noise levels could exceed the City's standards at multiple sites where the proposed amendments would facilitate development in Berkeley. Therefore, this impact would be significant and unavoidable.

4.3.3 Wildfire

Impact W-1: Development during the planning period of the proposed HEU would occur in hillside areas located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. The city employs multiple strategies to reduce the impairment the HEU would have on emergency response and evacuation. Nonetheless, this impact would be significant and unavoidable.

Mitigation Measures: No feasible Mitigation Measures have been identified.

Finding: The City finds impacts related to wildfire have been mitigated to the maximum extent feasible. Because there are no feasible Mitigation Measures, impacts would remain significant and unavoidable. The City finds that although this impact would be significant and unavoidable, the impact is acceptable when weighed against the overriding social, economic, and other considerations set forth in the Statement of Overriding Considerations (Section 6 of these Findings).

Facts in Support of Finding: Implementation of the City's Standard Conditions of Approval for a Transportation Construction Plan requires applicants to prepare a TCP which has the effect of ensuring that emergency evacuation routes are not obstructed or hindered in the event of a wildfire. This would reduce the potential for development under the proposed HEU to hinder or impair emergency access and evacuation during construction. Future development would also be required to comply with applicable development standards including the Berkeley Fire Code. No additional mitigation measures beyond adherence to existing procedures are required or are feasible. Nonetheless, for some development projects, impacts may result from the potential for unusual site-specific or road conditions, project characteristics, and the general ongoing fire risk in the Berkeley Hills. Based on this, impacts would be significant and unavoidable.

Impact WF-2. Implementation of the proposed HEU would encourage development in the hillside areas located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. New development would be required to comply with extensive regulations and fire safety provisions in the Berkeley Municipal Code, including the Fire Code. Based on the existing regulatory framework and project review process with Berkeley Fire Department, impacts would be generally avoided. However, it remains possible that even with existing regulations, construction or other human activities related to development in or near an SRA or in a VHFHSZ could exacerbate wildfire risk and expose existing and new residents to pollutant concentrations and uncontrolled spread of a wildfire. Additionally, by increasing the population of the WUI area, more people will be directly threatened when a wildland fire occurs. Therefore, this impact would be significant and unavoidable.

Mitigation Measures: No feasible Mitigation Measures have been identified.

Finding: The City finds impacts related to wildfire have been mitigated to the maximum extent feasible. Because there are no feasible Mitigation Measures, impacts would remain significant and unavoidable. The City finds that although this impact would be significant and unavoidable, the impact is acceptable when weighed against the overriding social, economic, and other considerations set forth in the Statement of Overriding Considerations (Section 6 of these Findings).

Facts in Support of Finding: Compliance with existing City regulations and the implementation of the City's requirement for a Fire Protection Plan to be prepared for development of housing projects in the Wildland-Urban Interface Fire Area would reduce the potential to exacerbate wildfire risk during construction and after projects are constructed. This would reduce the severity of potential impacts related to exposure to pollutant concentrations from a wildfire or the likelihood of wildfire ignition. No additional mitigation measures beyond adherence to existing procedures are required or are feasible. Nonetheless, for some development projects, even with implementation of these wildfire prevention measures, impacts may result from the potential for unusual site-specific or road conditions, project characteristics, and the general ongoing fire risk in Berkeley Hills. Additionally, by increasing the population of the VHFHSZ, more people will be directly threatened and evacuation and firefighting efforts will be further challenged when a fire occurs. Based on this, impacts would be significant and unavoidable.

Impact WF-3. Implementation of the proposed HEU would encourage development of housing on inventory sites and in the Hillside Overlay district located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. The proposed HEU could expose people and structures to risk due to the terrain and slope in the Berkeley hills. This could result in potential risks such as landslides. This impact would be significant and unavoidable.

Mitigation Measures: No feasible Mitigation Measures have been identified.

Finding: The City finds impacts related to wildfire have been mitigated to the maximum extent feasible. Because there are no feasible Mitigation Measures, impacts would remain significant and unavoidable. The City finds that although this impact would be significant and unavoidable, the impact is acceptable when weighed against the overriding social, economic, and other considerations set forth in the Statement of Overriding Considerations (Section 6 of these Findings).

Facts in Support of Finding: BMC requirement of site-specific geotechnical investigations would reduce potential impacts related to landslides for individual future development projects. These requirements would reduce potential impacts such as landslides due to runoff, post-fire slope instability, or drainage changes following a potential wildfire. However, based on the potential for unusual site-specific conditions or project characteristics, and the general ongoing fire risk in the Berkeley Hills, impacts of a housing development project under the HEU may still occur. Therefore, impacts would be significant and unavoidable.

Impact WF-4. Implementation of the proposed HEU would encourage development of housing on inventory sites and in the R-, R-2, and R-2a districts located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. However, the area is already developed and served by existing infrastructure and it is not anticipated that installation of new infrastructure or a substantial increase in the maintenance of existing infrastructure would occur. Should additional maintenance or construction of such infrastructure occur, implementation of Mitigation Measure w-1 would reduce the risk of fire during construction. Overall, this impact would be significant and unavoidable.

Mitigation Measures W-1: ***Undergrounding of Power Drops in the VHFHSZs****. The City shall require that new or upgraded power drops located in the very high fire hazard severity zone be installed underground. Prior to the issuance of a building permit, the applicant shall submit plans for undergrounding of power drops.*

Finding: The City finds impacts related to wildfire have been mitigated to the maximum extent feasible. Nonetheless, impacts would remain significant and unavoidable. The City finds that although this impact would be significant and unavoidable, the impact is acceptable when weighed against the overriding social, economic, and other considerations set forth in the Statement of Overriding Considerations (Section 6 of these Findings).

Facts in Support of Finding: Implementation of Mitigation Measure W-1, would reduce the potential for impacts under this threshold by placing power lines underground in areas subject to wildfire risk. However, it may not be feasible to impose this requirement on all projects. Additionally, potentially unusual site-specific conditions or aspects of the infrastructure project, including power line installation, may result in wildfire impacts from the installation or maintenance of infrastructure required by build out under the HEU. This impact would therefore remain significant and unavoidable.

4.2 EFFECTS DETERMINED TO BE MITIGATED TO LESS-THAN-SIGNIFICANT LEVELS

The Draft EIR identified certain potentially significant effects that could result from the project. However, the City finds for each of the significant or potentially significant impacts identified in this section (Section 4.2) that, based upon substantial evidence in the record, changes or alterations have been required or incorporated into the project which avoid or substantially lessen the significant effects as identified in the Final EIR (CEQA Guidelines Section 15091) and, thus, that adoption of the mitigation measures set forth below will reduce these significant or potentially significant effects to less-than-significant levels. These measures will be required of development projects as part of the City review and approval process where applicable. In addition, City Conditions of Approval and compliance with City and other regulations will further reduce project impacts.

4.3.1 Air Quality

Impact AQ-2. Construction facilitated by the project would temporarily increase air pollutant emissions, which would affect local air quality. Adherence to Mitigation Measure AQ-1 and the City's Standard Conditions of Approval would reduce construction emissions. This impact would be less than significant with mitigation incorporated.

Mitigation Measure AQ-1: ***Construction Emissions Reduction Measures****. Projects shall comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM10 (Table 8-2, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the May 2017 BAAQMD CEQA Guidelines), outlined below.*

1. *All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day.*
2. *All haul trucks transporting soil, sand, or other loose material off-site shall be covered.*
3. *All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.*
4. *All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.*
5. *All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.*
6. *Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.*
7. *All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper conditions prior to operation.*
8. *Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.*

Finding: Implementation of Mitigation Measure AQ-1, set forth above, which is hereby adopted and incorporated into the project, would avoid or substantially reduce the significant environmental effect identified in the Final EIR to a less-than-significant level.

Facts in Support of Finding: Implementation of Mitigation Measure AQ-1 would require future development projects within the project area to comply with measures to reduce air pollution emissions during construction. Impacts would be less than significant with implementation of Mitigation Measure AQ-1, which requires compliance with the Bay Area Air Quality Management District (BAAQMD) Basic Construction Measures, and required application of the City's air quality standard condition of approval.

Impact AQ-3. Construction activities for individual projects lasting longer than two months or located within 1,000 feet of sensitive receptors could expose sensitive receptors to substantial pollutant concentrations. Additionally, development facilitated by the project would site new sensitive land uses near Interstate 580/80 which may expose them to substantial pollutant concentrations. This impact would be less than significant with mitigation.

Mitigation Measure AQ-2: ***AQ-2 Construction Health Risk Assessment.*** *For projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize Tier 4 and/or alternative fuel construction equipment, the project applicant shall prepare a construction health risk assessment (HRA) and implement necessary measures to reduce risk below the following BAAQMD thresholds:*

- *Increased cancer risk of > 10.0 in a million;*

- *Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or*
- *Ambient $PM_{2.5}$ increase of > 0.3 µg/m^3 annual average*

Mitigation Measure AQ-3: ***TAC Exposure Reduction Building Measures*** *The following design features shall be incorporated for residential development located within 1,000 feet of I-580/80 or on a lot that fronts on a section of roadway with 10,000 vehicles per day or more in order to reduce exposure of proposed residences to TACs from vehicles and stationary combustion engines (i.e., generators):*

1. *If the proposed buildings would use operable windows or other sources of infiltration of ambient air, the development shall install a central HVAC system that includes high efficiency particulate filters (HEPA). These types of filters are capable of removing approximately 99.97 percent of the DPM emissions from air introduced into the HVAC system (U.S. EPA 2022). The system may also include a carbon filter to remove other chemical matter. Filtration systems must operate to maintain positive pressure within the building interior to prevent entrainment of outdoor air indoors.*
2. *If the development limits infiltration through non-operable windows, a suitable ventilation system shall include a ventilation system with filtration specifications equivalent to or better than the following: (1) American Society of Heating, Refrigerating and Air- Conditioning Engineers MERV-13 supply air filters, (2) greater than or equal to one air exchanges per hour of fresh outside filtered air, (3) greater than or equal to four air exchanges per hour recirculation, and (4) less than or equal to 0.25 air exchanges per hour in unfiltered infiltration. These types of filtration methods are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system.*
3. *Windows and doors shall be fully weatherproofed with caulking and weather-stripping that is rated to last at least 20 years. Weatherproof should be maintained and replaced by the property owner, as necessary, to ensure functionality for the lifetime of the project.*
4. *Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).*
5. *Prepare an ongoing maintenance plan for the HVAC and filtration systems, consistent with manufacturers' recommendations.*

The applicant shall inform occupants regarding the proper use of any installed air filtration system.

Finding: Implementation of Mitigation Measure AQ-2 and AQ-3, set forth above, which are hereby adopted and incorporated into the project, would avoid or substantially reduce the significant environmental effect identified in the Final EIR to a less-than-significant level.

Facts in Support of Finding: Implementation of Mitigation Measure AQ-2 would require preparation of a construction HRA for projects with construction activities with timelines greater than two months, located within 1,000 feet of sensitive receptors, and would not utilize Tier 4 and/or alternative fuel construction equipment in order to reduce potential risk exposure to nearby sensitive receptors to a less than significant level. Implementation of Mitigation Measure AQ-3 would require implementation of design features 1 to 6 in order to reduce exposure of proposed residences to TACs from vehicles and stationary combustion engines and to reduce impacts to a less than significant level.

4.3.2 Geology and Soils

Impact GEO-5: Development facilitated by the proposed HEU has the potential to impact paleontological resources. This impact would be less than significant with mitigation incorporated.

Mitigation Measure GEO-1: ***Protection of Paleontological Resources.*** *If ground disturbance below the level of prior disturbance and into native soils is proposed to occur in areas mapped as Pleistocene alluvial fan and fluvial deposits (Qpaf), Orinda Formation (Tor), or Knoxville Formation (Kjk), then the City shall require the following to be implemented:*

Retention of Qualified Professional Paleontologist. *Prior to initial ground disturbance, the project applicant shall retain a Qualified Professional Paleontologist, as defined by Society of Vertebrate Paleontology (SVP) (2010), to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards.*

If underlying formations are found to have a high potential for paleontological resources, the Qualified Professional Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements:

Paleontological Worker Environmental Awareness Program (WEAP). *Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff should fossils be discovered by construction staff.*

Paleontological Monitoring*. Full-time paleontological monitoring shall be conducted during ground disturbing construction activities (i.e., grading, trenching, foundation work) in sediments assigned a high paleontological sensitivity. Paleontological monitoring shall be conducted by a qualified Paleontological Resources Monitor, as defined by the SVP (2010). The duration and timing of the monitoring will be determined by the Qualified Professional Paleontologist based on the observation of the geologic setting from initial ground disturbance, and subject to the review and approval by the City. If the Qualified Professional Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Professional Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Professional Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Professional Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources.*

Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

Finding: Implementation of Mitigation Measure GEO-1, set forth above, which is hereby adopted and incorporated into the project, would avoid or substantially reduce the significant environmental effect identified in the Final EIR to a less-than-significant level.

Facts in Support of Finding: Implementation of Mitigation Measure GEO-1 would ensure procedures are in place to avoid destruction of paleontological resources. Therefore, impacts would be less than significant with mitigation.

4.3.3 Tribal Cultural Resources

Impact TCR-1: Development during the planning period of the proposed HEU could adversely impact tribal cultural resources due to ground disturbing activity during construction. This impact would be less than significant with mitigation incorporated.

Mitigation Measure TCR-1: ***Tribal Cultural Monitoring.*** *For projects that are determined through tribal consultation to potentially affect tribal cultural resources, in order to mitigate potential adverse impacts to Native American cultural objects and human remains discovered during construction, tribal cultural monitors will be retained to monitor work done in areas of Tribal concern, as determined through tribal consultation. If Native American cultural objects and/or human remains are discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by tribal cultural monitors and a qualified archaeologist meeting the Professional Qualifications Standards of the Secretary of the Interior (36 CFR Part 61). The archaeologist shall, in accordance with the appropriate Guidelines, identify and evaluate the significance of the discovery and develop recommendations for treatment in consultation with the affected Tribe to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in consultation with the affected Tribe consistent with the CEQA Guidelines for Determining the Significance of and Impacts to Cultural Resource, Archaeological Historic and Tribal Cultural Resources. Such mitigation may include, but is not limited to, additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that a TCR might be encountered.*

Finding: Implementation of Mitigation Measure TCR-1, set forth above, which is hereby adopted and incorporated into the project, would avoid or substantially reduce the significant environmental effect identified in the Final EIR to a less-than-significant level.

Facts in Support of Finding: Implementation of Mitigation Measures TCR-1 would reduce impacts related to tribal cultural resources, as actions would be taken to identify, avoid, and retain identified tribal cultural resources. Impacts would be less than significant with mitigation.

4.3 EFFECTS DETERMINED TO BE LESS THAN SIGNIFICANT OR NOT SIGNIFICANT

The City finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the project are not significant or are less than significant. The Draft EIR identifies the following as less than significant impacts or as having no impact. Mitigation to further reduce less than significant impacts is not required by CEQA. The findings in this section are based on the Draft EIR, the discussion and analysis in which is hereby incorporated in full by this reference.

4.3.1 Aesthetics

Impact AES-1. Implementation of the proposed HEU would alter the development pattern of the city such that scenic views of and from public viewpoints could be adversely affected. Potential future new development throughout the city could block views of a scenic vista from some public viewpoints. However, this would occur on individual sites and would be limited. This impact would be less than significant.

Impact AES-2. There are no designated or eligible Scenic Highways in Berkeley or with substantial views of Berkeley. Implementation of the proposed HEU not damage scenic resources visible from a Scenic Highway. No impact would occur.

Impact AES-3. Berkeley is urbanized and future development under the proposed HEU would not conflict with applicable zoning and other regulations governing scenic quality. This impact would be less than significant.

Impact AES-4. Development facilitated by the proposed HEU would create new sources of light or glare that could adversely affect daytime or nighttime views in the area. However, Berkeley is already largely built out with sources of light and glare throughout the city and development would not substantially add to existing light and glare. With compliance with existing regulations, this impact would be less than significant.

4.3.2 Agricultural and Forest Resources

There are no agricultural lands on or adjacent to the project sites. None of the properties on or adjacent to the project sites are under a Williamson Act contract. Also, no properties on or adjacent to the project sites are zoned for timberland or contain forest land or significant stands of trees (City of Berkeley 2001a). Therefore, there would be no impacts with respect to agricultural lands, Williamson Act contracts, timberland, or forest resources.

4.3.3 Air Quality

Impact AQ-1. The proposed HEU would not conflict with the control measures within the 2017 Clean Air Plan, and vehicle miles traveled (VMT) increase from the project would be less than the project's project population increase. Therefore, this impact would be less than significant.

Impact AQ-4. Development facilitated by the project would not create objectionable odors that could affect a substantial number of people. This impact would be less than significant.

4.3.4 Biological Resources

Impact BIO-1. Development facilitated by the proposed HEU may result in direct or indirect impacts to special-status species or their associated habitats, and impacts to nesting birds. This impact would be less than significant.

Impact BIO-2. Implementation of the proposed HEU may directly or indirectly impact riparian habitat, sensitive natural communities, or protected wetlands in the City of Berkeley. Implementation of federal, State, and local regulations and policies would ensure riparian habitat and wetlands are not significantly impacted. This impact would be less than significant.

Impact BIO-3. Implementation of the proposed HEU may result in impacts to state or federally protected wetlands. This impact would be less than significant.

Impact BIO-4. Implementation of the proposed HEU would not substantially impede the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors with compliance with existing and proposed regulations. This impact would be less than significant.

Impact BIO-5. Implementation of the proposed HEU would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact would be less than significant.

Impact BIO-6. Implementation of the proposed HEU would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. No impact would occur.

4.3.5 Cultural Resources

Impact CUL-2. Development accommodated by the housing element update could adversely affect identified and previously unidentified archaeological Resources. Impacts would be less than significant with required adherence to the City's Standard Conditions of Approval for archaeological resources.

Impact CUL-3. Ground-disturbing activities associated with development under the housing element update could result in damage to or destruction of human burials. Impacts would be less than significant through adherence to State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

4.3.6 Energy

Impact E-1. Project construction and operation would require temporary and long-term consumption of energy resources. However, with adherence to State and local regulations, the project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. This impact would be less than significant.

Impact E-2. The proposed HEU would be consistent with the State plans and General Plan policies related to energy efficiency and utilizing renewable energy. This impact would be less than significant.

4.3.7 Geology and Soils

Impact GEO-1. A portion of Berkeley is located within the Hayward Fault zone. Development facilitated by the proposed HEU is subject to seismically-induced ground shaking and other seismic hazards, including liquefaction and landslides, which could damage structures and result in loss of property and risk to human health and safety. However, implementation of State-mandated building standards and compliance with the Alquist-Priolo Act Earthquake Fault Act, the CBC, the Berkeley General Plan's policies and actions, and the Berkeley Municipal Code (BMC) would reduce impacts to a less than significant level.

Impact GEO-2. With adherence to applicable laws and regulations, the proposed project would not result in substantial soil erosion or the loss of topsoil. Therefore, this impact would be less than significant.

Impact GEO-3. Portions of Berkeley are located on expansive soils. However, with required implementation of standard engineering practices, impacts associated with unstable or expansive soils would be less than significant.

Impact GEO-4. The proposed project would not include septic tanks or alternative wastewater disposal systems. No impact would occur.

4.3.8 Greenhouse Gas (GHG) Emissions

Impact GHG-1. Future development under the proposed HEU would not directly or indirectly generate GHG emissions that would have a significant effect on the environment. GHG emissions from the project would not exceed BAAQMD 2031 interpolated thresholds. This impact would be less than significant.

Impact GHG-2. The proposed HEU would not conflict with GHG reduction goals and policies in the 2017 Scoping Plan, Plan Bay Area 2050, the City's General Plan, or the City's Climate Action Plan (CAP). This impact would be less than significant.

4.3.9 Hazards and Hazardous Materials

Impact HAZ-1. Implementation of the proposed HEU would facilitate new residential development in Berkeley. Proposed new residential uses would not involve the routine transportation, use, or disposal of hazardous materials. However, construction of new residences could result in an increase in the overall routine, transport, use and disposal of hazardous materials in Berkeley for construction activities. Nonetheless, required compliance with applicable regulations related to hazardous materials and compliance with General Plan policies would minimize the risk of releases and exposure to these materials. Impacts would be less than significant.

Impact HAZ-2. Implementation of the proposed HEU may result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. However, compliance with existing regulatory requirements would minimize risks to schools and students, resulting in a less than significant impact.

Impact HAZ-3. Implementation of the proposed HEU would accommodate development on or near hazardous materials sites. However, compliance with applicable regulations and the City's Standard Conditions of

Approval requiring site characterization and cleanup would minimize hazards from development on contaminated sites. This impact would be less than significant.

Impact HAZ-4. There are no airports within two miles of the Berkeley, and Berkeley is not within the influence area of an airport. No impact would occur.

Impact HAZ-5. The proposed HEU would not result in physical changes that could interfere with or impair emergency response or evacuation. Therefore, the project would not result in interference with these types of adopted plans. This impact would be less than significant.

4.3.10 Hydrology and Water Quality

Impact HYD-1. Future development under the proposed HEU would involve ground-disturbing activities and the use of heavy machinery that could release materials, including sediments and fuels, which could adversely affect water quality. Operation of potential future development could also result in discharges to storm drains that could be contaminated and affect downstream waters. However, compliance with required permits and existing regulations, and implementation of Best Management Practices contained therein, would ensure that potential water quality impacts would be less than significant.

Impact HYD-2. Future development facilitated under the proposed HEU would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. Further, implementation of low impact development measures and on-site infiltration required under the C.3 provisions of the MRP, and compliance with the Berkeley Municipal Code would increase the potential for groundwater recharge. Impacts would be less than significant.

Impact HYD-3. Development under the proposed HEU would not substantially alter the existing drainage pattern of future development sites, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in flooding or exceed the capacity of stormwater drainage systems. Impacts related to drainage patterns would be less than significant.

Impact HYD-4. Development under the proposed HEU would place housing and other structures within FEMA-designated Flood Hazard Areas and tsunami zones. However, compliance with the General Plan, the BMC, and the California Health and Safety Code would reduce potential effects associated with flood events. This impact would be less than significant.

4.3.11 Land Use and Planning

Impact LU-1. The proposed HEU includes policies and programs to encourage housing development on underutilized and vacant sites and along established commercial corridors and neighborhoods. Development under the proposed HEU would not physically divide an established community. No impact would occur.

Impact LU-2. The proposed HEU would be consistent with the goals and policies of Plan Bay Area 2050, the Berkeley General Plan, and the BMC. This impact would be less than significant.

4.3.12 Mineral Resources

The project sites are not designated as a significant mineral resources zone and mineral resource extraction in this area would be generally incompatible with existing and planned uses. As such, no mineral resource impacts would occur.

4.3.13 Noise

Impact NOI-2. Housing development accommodated under the proposed HEU could include mechanical equipment (i.e., HVAC), delivery and trash trucks, and other noise-generating activities. However, such activities would be similar to the existing noise environment. In addition, on-site activities would be required to comply with applicable noise standards in the Berkeley Municipal Code. Furthermore, while housing development would generate vehicle trips in the city, the increase in mobile noise would not result in a perceptible (3-dBA or greater) noise increase. Permanent noise increases due to operation of new development under the proposed HEU would be less than significant.

Impact NOI-3. Housing development accommodated under the proposed HEU would not involve operational activities that would result in substantial vibration levels (e.g., use of heavy equipment or machinery). Construction activities would be required to implement the City's Standard Conditions of Approval that control vibration. This impact would be less than significant.

Impact NOI-4. Housing developments accommodated under the proposed HEU would not be exposed to intermittent noise levels from overhead flight patterns from airports in the city as there are none located within the City. Furthermore, while the project would not emphasize building housing in the immediate vicinity of the airport, all residential development would, nonetheless, be required to incorporate noise insulation features per State and local standards to reduce interior noise levels to below 45 dBA. Therefore, the impact of airport or airstrip operations on new development would be less than significant.

4.3.14 Population and Housing

Impact POP-1. This EIR assumes full buildout of 19,098 residential units in Berkeley through 2031, which equates to a population increase of an estimated 47,443 residents compared to the existing population. However, growth resulting from the project is anticipated and would not constitute substantial unplanned population growth. This impact would be less than significant.

Impact POP-2. Implementation of proposed project would not result in the displacement of substantial numbers of people or housing. The proposed project would facilitate the development of new housing in accordance with State and local housing requirements, while preserving existing residential neighborhoods. This impact would be less than significant.

4.3.15 Public Services and Recreation

Impact PS-1. Development facilitated by the proposed HEU would result in an increase of population and buildings within Berkeley. The projected population increase would increase demand for fire protection services and potentially create the need for a new or altered fire station. However, compliance with policies in the 2020 General Plan would reduce impacts related to fire service facilities to a less than significant level.

Impact PS-2. Development facilitated by the proposed HEU would result in an increase in the City's population. The projected population increase would increase demand for police protection services and potentially create the need for new or altered police service facilities. However, compliance with policies in the 2020 General Plan would reduce impacts related to police facilities to a less than significant level.

Impact PS-3. Development facilitated under the proposed HEU would result in an increase in population in Berkeley, resulting in the need for additional or expanded school facilities. However, Government Code 65995 (b) would require funding for the provision or expansion of new school facilities to offset impacts from new residential development. Therefore, this impact would be less than significant.

Impact PS-4. Development associated with the proposed HEU would increase the population of Berkeley and the use of existing parks and recreational facilities. However, additional recreational opportunities are available adjacent to the City and donation of parkland pursuant to the Quimby Act would be required prior to occupancy

of individual projects. No plans for the expansion or construction of new parks or recreational facilities are anticipated. Therefore, this impact would be less than significant.

4.3.16 Transportation

Impact TRA-1. The proposed HEU would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This impact would be less than significant.

Impact TRA-2. The proposed HEU not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). This impact would be less than significant.

Impact TRA-3. The proposed HEU would not substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This impact would be less than significant.

Impact TRA-4. The proposed HEU would not have the potential to result in inadequate emergency access. This impact would be less than significant.

4.3.17 Utilities and Service Systems

Impact UTIL-1. Development under the proposed HEU would require utility service and connections for water supply, wastewater conveyance, and stormwater conveyance, as well as telecommunications, electricity, and natural gas. Existing utility systems for water, wastewater, stormwater, electric power, natural gas, and telecommunications facilities in Berkeley have sufficient capacity to serve the project. Relocation or construction of new or expanded facilities resulting in significant environmental impacts would not occur, and adequate wastewater capacity exists to serve the project's projected demand in addition to the provider's existing commitments. impacts would be less than significant.

Impact UTIL-2. Development under the proposed HEU would result in an increase in water demand. However, this increase in demand can be served by the East Bay Municipal Utility District (EBMUD) with demand management measures required by EBMUD. This impact would be less than significant.

Impact UTIL-3. Development facilitated by the project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. The project would not impair the attainment of solid waste reduction goals and would comply with federal, State, and local statutes and regulations related to solid waste. Impacts would be less than significant.

4.4 CUMULATIVE IMPACTS

An EIR is required to discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. CEQA Guidelines §15130(a). "Cumulatively considerable" means that the incremental effects of the project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. CEQA Guidelines § 15065(a)(3); Pub. Resources Code § 21083(b)(2). Section 4, *Environmental Impact Analysis,* of the Draft EIR includes analyses of the cumulative impacts of the project in combination with reasonably foreseeable probable future projects which described in Section 3, *Environmental Setting,* of the Draft EIR. The findings in this section are based on the Draft EIR, the discussion and analysis in which is hereby incorporated in full by this reference.

The City finds that the proposed project will result in cumulatively considerable impacts to Cultural Resources, Noise, and Wildfire.

Development pursuant to the Housing Element Update and the University of California Berkeley Long Range Development Plan (LRDP) would have the potential to impact historical resources. Historic-period resources could be vulnerable to development activities that could result in damage to or demolition of cultural resources.

As explained in Impact CUL-2 in Section 4.4, *Cultural Resources,* of the Draft EIR, the proposed project would result in significant and unavoidable impacts to historical resources. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce or avoid some but not all potential impacts to historical resources in Berkeley. Therefore, cumulative historical resources impacts would be significant, and the project's contribution would be cumulatively considerable.

As discussed in Section 4.11, *Noise,* of the Draft EIR, construction of future development projects in Berkeley would produce temporary noise impacts that would be localized to construction on a project site and sensitive receivers within the immediate vicinity. Therefore, only sensitive receivers located in close proximity to each construction site would be potentially affected. Nonetheless, construction activities associated with individual housing development projects accommodated under the proposed Housing Element Update may overlap for some time with construction activities for other development projects. Based on the locations of the potential housing sites, this could substantially increase noise levels at specific neighboring noise-sensitive receivers since many sites are located in proximity to each other. As a result, concurrent construction of development projects accommodated under the proposed Housing Element Update could result in cumulatively considerable impacts. This impact would be cumulatively considerable and cumulative impacts would be significant and unavoidable.

The proposed LRDP update would involve improvements and development in Campus Park, the Hill Campus West, the Hill Campus East, the Clark Kerr Campus, and the City Environs Properties, areas of which fall within the VHFHSZ. Development within this area could exacerbate wildfire risks. Like development under the proposed HEU, new development under the LRDP would be subject to statewide standards for fire safety in the California Fire Code. Nonetheless, because the proposed HEU could exacerbate wildfire risk in a VHFHSZ and development under the proposed LRDP update could also exacerbate such risks, a cumulative impact would occur and the proposed projects' contribution would be cumulative considerable.

4.5 GROWTH INDUCING IMPACTS

An EIR is required to discuss growth inducing impacts, which consist of the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. *CEQA Guidelines* § 15126.2(d); Public Resources Code § 21100(b)(5). Direct growth inducement would result, for example, if a project involves the construction of substantial new housing that would support increased population in a community or establishes substantial new permanent employment opportunities. This additional population could, in turn, increase demands for public utilities, public services, roads, and other infrastructure. Indirect growth inducement would result if a project stimulates economic activity that requires physical development or removes an obstacle to growth and development (e.g., increasing infrastructure capacity that would enable new or additional development). It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment (*CEQA Guidelines* § 15126.2(d)).

Section 5, *Other CEQA Required Sections*, of the Draft EIR analyzes the growth inducing impacts of the Project. The discussion and analysis in which is hereby incorporated in full by this reference.

State law requires the City to promote the production of housing to meet its RHNA. The proposed project would address the RHNA of 8,934 units, of which 3,854 units must be for lower income households and could provide a buffer. To meet the objectives of the RHNA and provide sufficient capacity for housing development, the Housing Element identifies sites suited for residential development, and identifies implementation programs and zoning policies to encourage additional housing for all segments of the population. This includes the already-accomplished rezoning for the North Berkeley and Ashby BART stations, programs to encourage additional residential development in the R-1, R-1A, R-2, R-2A, and MU-R districts, and zoning map and height amendments in the Southside area for additional student housing development. Therefore, the Housing Element Update would align with ABAG's RHNA determination and the State's statutory requirements, which are established based on anticipated growth within the city and region. Growth anticipated under the proposed HEU is intended to meet regional housing needs over the longer term. Given that the State is currently in an

ongoing housing crisis due to an insufficient housing supply and mismatched incomes and housing costs, the additional units and affordability programs would further assist in addressing the existing crisis and meeting housing needs. Therefore, the project would not result in substantial unplanned population growth, either directly or indirectly. In addition, because infrastructure is largely in place and future development would be required to comply with the City's General Plan, Zoning regulations and standards for public services and utilities; secondary or indirect effects associated with this growth do not represent a new significant environmental impact which has not already been addressed in the individual resource chapters of this EIR

SECTION 5: FEASIBILITY OF PROJECT ALTERNATIVES

5.1 Project Alternatives

The Draft EIR analyzed three alternatives, examining the environmental impacts and feasibility of each alternative, as well as the ability of the alternatives to meet project objectives. The project objectives are listed in Section 2, *Project Description,* of the Draft EIR; the potentially significant environmental effects of the Project, including feasible mitigation measures identified to avoid these impacts, are analyzed throughout Section 4, *Environmental Impact Analysis,* of the Draft EIR; and the alternatives are described in detail in Section 6, *Alternatives,* of the Draft EIR. Brief summaries of the alternatives are provided below. A brief discussion of the Environmentally Superior Alternative follows the summaries of the alternatives. The findings in this section are based on the Draft EIR, the discussion and analysis in which is hereby incorporated in full by this reference.

Based on the project objectives and anticipated environmental consequences, and pursuant to Section 15126.6 of the *CEQA Guidelines*, the following project alternatives were selected for analysis:

- **Alternative 1: No Project Alternative.** The "No Project" Alternative involves continued implementation of the existing 2015-2023 Housing Element as well as the City's existing plans and policies that would accommodate development in accordance with the existing land use designations. This alternative assumes development of 12,450 units, or approximately 6,648 fewer units than the assumed development under the proposed HEU of 19,098 units.
- **Alternative 2: No Rezoning in the Hillside Overlay.** One of the implementation programs of the proposed HEU is to increase density in the R-1 District. This alternative would allow increases in the total number of units allowed on a lot, increase the total achievable floor area on a lot, and encourage a mix of unit sizes and densities, adjusting the level of discretion to allow approval of such projects with a Zoning Certificate. Under Alternative 2, this program would not apply to portions of the R-1 district within the Hillside Overlay (R-1H district). Without the rezoning in the R-1H district, approximately 150 units in the hillside area would not be built compared to buildout under the proposed HEU. However, if the R-1H district remains single family residential, SB 9 would apply there. SB 9, signed into law in 2021 and codified as Government Code sections 65852.21, 66411.7, and 66452.6, requires agencies to ministerially approve to up to two residential units on a parcel within a single-family residential zone if the development meets specific objective criteria. SB 9 also allows splitting one lot into two lots within a single-family residential zone and permitting up to two units on each parcel (four total dwelling units on what was formerly a single-unit lot) if the development complies with specific objective criteria. Based on SB 9 trends, it is anticipated that overall this alternative would not decrease development in the hillside overlay zone compared to buildout assumed under the proposed HEU.
- **Alternative 3: No Middle Housing Rezoning.** The Middle Housing Rezoning program of the proposed HEU is intended to increase density in the R-1, R-1A, R-2, R-2A and MU-R districts. The program would include Zoning Ordinance amendments that would allow increases in the total number of units allowed on a lot, increase the total achievable floor area on a lot, encourage a mix of unit sizes and densities, and adjust the level of discretion to approve such projects with a Zoning Certificate. The Middle Housing Rezoning program was projected to result in 1,745 units over the Housing Element

period. Under Alternative 3, the Middle Housing Rezoning program would not be included in the Housing Element Update. Without Middle Housing Rezoning as part of the proposed project, approximately 975 units fewer units would be constructed compared to buildout under the proposed HEU due to the effect of not rezoning the R-1A, R-2, R-2A and MU-R districts. As noted above in Alternative 2, the number of additional units in the R-1 district would remain the same (770), whether as a result of rezoning or through development of additional units as allowed by SB 9. Accordingly, the 770 units attributed to the R-1 district are not removed in the analysis of this Alternative. This alternative would meet all of the project objectives, but to a lesser degree than the proposed project, because it includes fewer units**.**

The City hereby concludes that the Final EIR sets forth a reasonable range of alternatives to the City of Berkeley 2023-2031 Housing element Update that address the significant impacts of the project, so as to foster informed public participation and informed decision making. The City finds that the alternatives identified and described in the Final EIR were considered and further finds the No Project Alternative (Alternative 1) is infeasible for the specific economic, social, or other considerations set forth below pursuant to Public Resources Code section 21081(b). The City finds that Alternative 2 and 3 are not infeasible, because they would meet the CEQA project objectives and would result in the same or less environmental impacts.

5.1.1 Alternative 1 - No Project Alternative. The No Project Alternative (Alternative 1) assumes continued implementation of the existing 2015-2023 Housing Element. Alternative 1 also assumes that the City's existing plan and policies would continue to accommodate development in accordance with existing land use designations.

Findings: This alternative would result in less impacts with respect to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and recreation, tribal cultural resources, utilities and service systems, and wildfire due to the decrease in residential units developed. However, impacts relating to transportation would be greater than under the Project as this alternative would not prioritize development in Priority Development Areas or near transit corridors, and therefore would not decrease VMT since fewer residents would be in proximity to transit, jobs, and services. In addition, this alternative would not eliminate the unavoidably significant impacts related to historical resources, construction noise, and wildfire. Furthermore, Alternative 1 would not fulfill Project Objective 1 because the continued implementation of the existing 2015-2023 Housing Element would result in the development of fewer residential units and therefore, would not accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2031 to the same extent as under the proposed HEU. In addition, Alternative 1 would not fulfill Project Objectives 2 and 3 because continued implementation of the existing 2015-2023 Housing Element would not address the need for additional affordable housing options throughout Berkeley in a manner that affirmatively furthers fair housing.

Alternative 1 is hereby rejected because it would not fulfill Project Objectives 1, 2, or 3.

5.1.2 Alternative 2 – No Rezone in the Hillside Overlay: Alternative 2 would include the same development as the proposed HEU; therefore, impacts would be equal to that of the proposed HEU.

Findings: Alternative 2 would include the same development as the proposed HEU; therefore, impacts would be equivalent to the impacts of the proposed HEU. Therefore, the significant and unavoidable project and cumulative impacts related to historical resources, construction noise, and wildfire would remain. Similar to the proposed project, Alternative 2 would achieve all of the Project Objectives because it would be able to accommodate employment, housing, and population growth projections forecast through the planning horizon year of 2031; increase affordable housing options throughout the city; and place housing in proximity to transit, jobs, services, and community benefits.

Alternative 2 is hereby rejected, because this alternative would not reduce any of the significant unavoidable project and cumulative impacts of the proposed project related to historical resources, construction noise, and wildfire to a less-than-significant level.

5.1.3 Alternative 3 – No Middle Housing Rezoning. Alternative 3 includes approximately 975 fewer units than the buildout included in the analysis of the proposed project.

Findings: This alternative would result in reduced impacts with respect to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and recreation, tribal cultural resources, utilities and service systems and wildfire due to the decrease in residential units developed. However, impacts relating to transportation would be greater than under the proposed HEU because this alternative would not prioritize development near Transit Priority Areas or major transit corridors, and therefore would not decrease VMT since fewer new residents would live in proximity to transit, jobs, and services. Also, because the alternative makes no changes to the proposed project within the City's Very High Fire Hazard Severity Zones (VHFHSZ), wildfire impacts would be the same as under the proposed project. In addition, this alternative would not eliminate the significant unavoidable project and cumulative impacts of the proposed project related to historical resources, construction noise, and wildfire to a less-than-significant level.

Alternative 3 is hereby rejected because it would not eliminate any of the significant and unavoidable impacts of the proposed project related to historical resources, construction noise, and wildfire.

5.2 Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be identified from among the alternatives evaluated in the EIR. In accordance with *CEQA Guidelines* Section 15126.6(e)(2), if the environmentally superior alternative is the No Project alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

Among the development options, Alterative 3, the No Middle Housing Rezoning Alternative, is considered the environmentally superior alternative because it would reduce impacts to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and recreation, tribal cultural resources, utilities and service systems and wildfire due to the reduced number of residential units developed compared to the proposed project

SECTION 6: STATEMENT OF OVERRIDING CONSIDERATIONS

As set forth above, the City has found that the proposed project will result in project and cumulative significant adverse environmental impacts related to historical resources, construction noise, and wildfire that cannot be avoided following adoption, incorporation into the proposed project, and implementation of mitigation measures described in the EIR. In addition, there are no feasible project alternatives that would mitigate or avoid all of the proposed project's significant environmental impacts. CEQA Guidelines §15093(b) provides that when the decision of the public agency results in the occurrence of significant impacts that are not avoided or substantially lessened, the agency must state in writing the reasons to support its actions. See also Public Resources Code Section 21081(b). Having balanced the economic, legal, social, technological or other benefits of the proposed project, including region-wide or statewide environmental benefits, against its significant and unavoidable environmental impacts, the City finds that the proposed project benefits outweigh its unavoidable adverse environmental effects, and that the adverse environmental effects are therefore acceptable.

The following statement identifies the reasons why, in the City's judgment, specific benefits of the proposed project outweigh the significant and unavoidable effects. The substantial evidence supporting the benefits of the Project can be found in the preceding sections of these Findings, in the Project itself, and in the record of proceedings as defined in Section [##], above. The City further finds that each of the project benefits discussed below is a separate and independent basis for these findings. The reasons set forth below are based on the Final EIR and other information in the administrative record.

The City further finds that these significant unavoidable impacts are outweighed by the benefits of the proposed project, each of which, independently of the others, constitutes overriding consideration warranting approval of the proposed project. Those benefits, and additional considerations related to this finding, are as follows:

- The proposed project will ensure that the City of Berkeley meets its State-mandated RHNA requirements, including the required buffer to comply with the State Housing Element Law.
- The proposed project will encourage affordable housing, which is desired by the community and will contribute toward alleviating a shortage of housing in Berkeley and the region.
- The proposed project will encourage development of a variety of types of housing at a range of income levels.
- The proposed project will encourage the development of housing with access to transit, jobs, services, and community benefits in a manner that distributes affordable and special needs housing, including in in high resource neighborhoods, and affirmatively furthers fair housing.

On balance, the City finds that there are specific economic, legal, social, technological, or other benefits of the City of Berkeley 2023-2031 Housing Element Update serves to override and outweigh the significant unavoidable effects of the City of Berkeley 2023-2031 Housing Element Update. Therefore, pursuant to *CEQA Guidelines* Section 15093(b), the City finds that these significant adverse environmental effects are considered acceptable.

SECTION 7: INCORPORATION BY REFERENCE

These findings incorporate the text of the Final Environmental Impact Report for the City of Berkeley 2023-2031 Housing Element Update by reference and in its entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of mitigation measures, the basis for determining the significance of impacts, the comparative analysis of alternatives, the determination of the environmentally superior alternative, and the reasons for approving the Project in spite of the potential for associated significant and unavoidable adverse impacts.

SECTION 8: RECIRCULATION NOT REQUIRED

No significant new information was added to the Draft EIR or the Final EIR as a result of the public comment process. The Final EIR responds to comments, and clarifies, amplifies, and makes insignificant modifications to the Draft EIR. It does not identify any new significant effects on the environment or a substantial increase in the severity of an environmental impact requiring major revisions to the Draft EIR. Similarly, the revised project would not result in new or substantially more severed significant impacts than disclosed previously in the Draft EIR. Therefore, recirculation of the EIR is not required.

SECTION 9: RECORD OF PROCEEDINGS

Various documents and other materials related to the project constitute the record of proceedings upon which the City bases its findings and decisions contained herein. Those documents and materials are located in the offices of the custodian for the documents and materials, which is the City of Berkeley Department of Planning and Development, 1947 Center Street, 2nd floor, Berkeley, CA 94704.

SECTION 10: SUMMARY

A. Based on the foregoing Findings and the information contained in the record, the City has made one or more of the following Findings with respect to each of the significant effects of the Project:

1. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effects identified in the Final EIR.

2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other public agency.

3. Specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measures or alternatives identified in the Final EIR that would otherwise avoid or substantially lessen the identified significant environmental effects of the Project.

B. Based on the foregoing Findings and the information contained in the record, the City determines that:

1. All significant effects on the environment due to the approval of the Project have been eliminated or substantially lessened where feasible.

2. Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations in Section 6, above.

City of Berkeley 2023-2031 Housing Element Update

Draft Environmental Impact Report

prepared by

City of Berkeley
Land Use Planning Division
1947 Center Street, 2nd Floor
Berkeley, California 94704
Contact: Grace Wu, Acting Principal Planner

prepared with the assistance of

Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612

August 2022

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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Table of Contents

Tables

Figures

Appendices

Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the City of Berkeley Housing Element Update (proposed project). This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures identified for the proposed project.

Project Synopsis

Lead Agency/Project Proponent

City of Berkeley
1947 Center Street, 2nd Floor
Berkeley, California 94704
(510) 981-7400

Lead Agency Contact Person

Grace Wu, Acting Principal Planner
(510) 981-7400

Project Description

This EIR has been prepared to examine the potential environmental effects of the 2023-2031 Housing Element Update (HEU), herein referred to as the "proposed HEU" or "proposed project." The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

The proposed HEU would amend the City of Berkeley's General Plan by replacing the current Housing Element with the proposed 2023-2031 Housing Element and amending the City's General Plan as needed for consistency and HEU implementation.

The proposed HEU establishes policies and programs to further the goal of meeting the existing and projected housing needs of all household income levels of the community. In addition, the sites inventory provides evidence of the City's ability to accommodate the Regional Housing Needs Allocation (RHNA) through the year 2031, as established by the Association of Bay Area Governments (ABAG). The City is required by the State Department of Housing and Community Development (HCD) to meet its RHNA and identify sufficient sites to accommodate 8,934 residential units to meet a fair share of the region's anticipated population growth between 2023 to 2031. In addition, HCD recommends that cities identify a "buffer" of 15 to 30 percent above RHNA for lower- and moderate-income categories to account for No Net Loss (SB 166). Thus, the overall sites inventory must accommodate between approximately 10,274 and 11,614 units. The sites must be zoned to allow for residential uses and the zoning standards must allow for the unit capacities assumed in the sites inventory.

The City assessed capacity in three categories to meet the RHNA: likely sites, pipeline sites, and opportunity sites. The Likely Sites, Pipeline Sites and Opportunity Sites together constitute the EIR Sites Inventory. The specific number and location of units actually developed during the Housing Element period will differ from those included in the EIR Sites Inventory, but any difference would

result in fewer total units and a reduction of total physical sites for housing development. The sites inventory includes a total of 15,153 units, which also accounts for 800 accessory dwelling units (ADUs) based on recent development trends.

The City has determined based on the sites inventory that rezoning is not needed to meet the RHNA. However, recent development activity suggests current zoning alone does not deliver the level of deed-restricted affordable housing and economic and geographic diversity that the HEU aims to achieve. Therefore, the HEU contains implementation programs and zoning policies to encourage additional housing, particularly affordable housing that supports a diversity of income levels and household types. These include:

- **Middle Housing Rezoning.** R-1 R-1A, R-2, R-2A and MU-R districts are anticipated to increase in density based on the State's adoption of SB 9 and a proposed HEU program to facilitate increased development in lower density districts. The City would review and amend the Zoning Code and applicable objective development standards to encourage a mix of dwelling types and sizes, housing for middle- and moderate-income households, and increase the availability of affordable housing in a range of sizes to reduce displacement risk for residents living in overcrowded units or experiencing high housing cost burden. Using HCD's methodology, and to ensure that proposed zoning would not result in a reduction in allowable residential development, the EIR assumes 770 additional units distributed throughout the R-1 districts for the 2023-2031 period. Additionally, based on current development trends and anticipated zoning changes, 975 additional units are distributed throughout the R-1A, R-2, R-2A and MU-R districts, for a total of 1,745 middle housing units in the 2023-2031 period.
- **Southside Zoning Modification Project.** Southside Zoning Modification Project proposes amendments that could facilitate an additional 1,000 units compared to existing Southside Plan Area zoning. These proposed zoning modifications and a proposed HEU program for a local density bonus are intended to increase housing capacity and production to better meet student housing demand in the Southside through changes in a targeted number of zoning parameters: building heights, building footprints (including setbacks and lot coverage), parking, ground-floor residential use, and adjustments to the existing zoning district boundaries. Given past development trends and the limited number of opportunity sites in the Southside, this EIR assumes an additional 1,000 units in portions of the C-T, R-S and R-SMU districts within the Southside for the 2023-2031 period.

For the purposes of the HEU CEQA analysis, this EIR assesses a higher amount of development potential than the total HEU sites inventory capacity in order to fully analyze possible environmental impacts based on proposed HEU implementation programs, account for the possibility that proposed projects could utilize State Density Bonus, and to account for a scenario in which development occurs at a rate higher than it has historically. The buildout projection for this EIR consists of a projection based on the EIR Sites Inventory of 15,153 units, an additional 1,200 units at the Ashby and North Berkeley BART stations, as well as projections for implementation programs related to the R-1, R-1A, R-2, R-2A and MU-R zoning districts and the Southside Zoning Modification Project, totaling 2,745 units. Overall, this EIR assumes 19,098 units associated with the proposed HEU.

The specific number and location of units actually developed during the Housing Element period will differ from those included in the EIR Projected Buildout, but any difference would result in fewer total units and a reduction of total physical sites for housing development. However, future development proposals would be reviewed to determine whether their impacts fall within the scope

of this EIR, or if additional site-specific environmental review will be required. Subsequent environmental documents, when required, could tier from the HEU EIR and focus on any new significant impacts in accordance with *CEQA Guidelines* Sections 15152 and 15385.

Project Objectives

The project presents a comprehensive set of housing policies and programs for the years 2023-2031 and will encompass the entire City of Berkeley. The project will be based on the Association of Bay Area Governments' (ABAG) 6th Cycle RHNA and will:

1. Adopt policies and programs that meet the City's RHNA with the required buffer, provide additional housing opportunities consistent with other City priorities, remove governmental constraints to the maintenance, improvement and development of housing, and ensure ongoing compliance with State Housing Element law and the No Net Loss provisions of State law through the eight-year cycle.
2. Adopt policies and programs to encourage the development of affordable housing at a range of income levels consistent with RHNA, including at least 2,450 units for Very Low-Income households, at least 1,400 units for Low Income households, and at least 1,400 units for Moderate Income households.
3. Encourage the development of housing with access to transit, jobs, services, and community benefits in a manner that distributes affordable and special needs housing in high resource neighborhoods and affirmatively furthers fair housing.
4. Identify housing policies and programs that will conserve and rehabilitate existing units, provide services to increase housing opportunities for all residents of Berkeley, and increase the energy efficiency of both current and future housing units.

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed project. Studied alternatives include the following three alternatives. Based on the alternatives analysis, Alternative 3 was determined to be the environmentally superior alternative.

- Alternative 1: No Project
- Alternative 2: No Rezoning in Hillside Overlay
- Alternative 3: No Middle Housing Rezoning

Alternative 1: No Project Alternative. The "No Project" Alternative 1 involves continued implementation of the existing 2015-2023 Housing Element. Alternative 1 also assumes that the City's existing plan and policies would continue to accommodate development in accordance with existing land use designations. This alternative would result in less impacts to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and recreation, tribal cultural resources, utilities and service systems, and wildfire due to the decrease in residential units developed. However, impacts relating to transportation would be greater than under the Project as this alternative would not prioritize development in Priority Development Areas or near transit corridors, and therefore would not decrease VMT since fewer residents would be in proximity to transit, jobs, and services. In addition, this alternative would not eliminate the unavoidably significant impacts related to historical

resources, construction noise, and wildfire. Furthermore, Alternative 1 would not fulfill Project Objective 1 because the continued implementation of the existing 2015-2023 Housing Element would result in the development of fewer residential units and therefore, would not accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2031 to the same extent as under the proposed HEU. In addition, Alternative 1 would not fulfill Project Objectives 2 and 3 because continued implementation of the existing 2015-2023 Housing Element would not address the need for additional affordable housing options throughout Berkeley in a manner that affirmatively furthers fair housing.

Alternative 2: the No Rezoning in the Hillside Overlay. An implementation program of the proposed HEU is to increase density in the R-1, R-1A, R-2, R-2A and MU-R districts. Under this alternative, this program would not apply to portions of the R-1 district within the Hillside Overlay (R-1H district). Alternative 2 would include the same development as the proposed HEU; therefore, impacts would be equal to that of the proposed HEU. Alternative 2 would continue to fulfill Project Objectives as it would be able to accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2031; increase affordable housing options throughout the city; and place housing in proximity to transit, jobs, services, and community benefits.

Alternative 3: No Middle Housing Rezoning. This alternative includes approximately 975 fewer units than the buildout included in the analysis of the proposed project. This alternative would result in less impacts to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and recreation, tribal cultural resources, utilities and service systems and wildfire due to the decrease in residential units developed. However, impacts relating to transportation would be greater than under the proposed HEU as this alternative would not prioritize development near in Transit Priority Areas or major transit corridors, and therefore would not decrease VMT since fewer residents would be in proximity to transit, jobs, and services. Also, as the alternative makes no changes to the proposed project within the City's Very High Fire Hazard Severity Zones (VHFHSZ), wildfire impacts would be the same as under the proposed project. In addition, this alternative would not eliminate the unavoidably significant impacts related to historical resources, construction noise, and wildfire. Nevertheless, as Alternative 3 slightly reduces the severity of impacts resulting from the proposed project, it is the environmentally superior alternative.

Refer to Section 6, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

The EIR scoping process identified several areas of known controversy for the proposed project including transportation and biological resources impacts. Responses to the Notice of Preparation of a Draft EIR and input received at the EIR scoping meeting held by the City are summarized in Section 1, *Introduction*.

Issues to be Resolved

There are no issues to be resolved that have been identified.

Issues Not Studied in Detail in the EIR

Due to the unique conditions of the City, there is no substantial evidence that significant impacts would occur related to agricultural and forestry resources and mineral resources. All other CEQA topics are discussed in the EIR.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Although distinct from mitigation measures, project design features (PDFs) are also listed because they will be included as conditions of approval by the City to avoid potential biological and geological impacts. Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per *CEQA Guidelines* Section 15093.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under *CEQA Guidelines* Section 15091.
- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure (s)	Residual Impact
Aesthetics		
Impact AES-1. Implementation of the proposed HEU would alter the development pattern of the city such that scenic views of and from public viewpoints could be adversely affected. Potential future new development throughout the city could block views of a scenic vista from some public viewpoints. However, this would occur on individual sites and would be limited. This impact would be less than significant.	None required.	Less than Significant
Impact AES-2. There are no designated or eligible Scenic Highways in Berkeley or with substantial views of Berkeley. Implementation of the proposed HEU not damage scenic resources visible from a Scenic Highway. No impact would occur.	None required.	Less than Significant
Impact AES-3. Berkeley is urbanized and future development under the proposed HEU would not conflict with applicable zoning and other regulations governing scenic quality. This impact would be less than significant.	None required.	Less than Significant
Impact AES-4. Development facilitated by the proposed HEU would create new sources of light or glare that could adversely affect daytime or nighttime views in the area. However, Berkeley is already largely built out with sources of light and glare throughout the city and development would not substantially add to existing light and glare. With compliance with existing regulations, this impact would be less than significant.	None required.	Less than Significant
Air Quality		
Impact AQ-1. The proposed HEU would not conflict with the control measures within the 2017 Clean Air Plan, and VMT increase from the project would be less than the project's project population increase. Therefore, this impact would be less than significant.	None required.	Less than Significant
Impact AQ-2. Construction facilitated by the project would temporarily increase air pollutant emissions, which would affect local air quality. Adherence to Mitigation Measure AQ-1 and the City's Standard Conditions of Approval would reduce construction emissions. This impact would be less than significant with mitigation incorporated.	**AQ-1 Construction Emissions Reduction Measures.** As part of the City's development approval process, the City shall require applicants for future development projects within the project sites to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM10 (Table 8-2, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the May 2017 BAAQMD CEQA Guidelines), outlined below.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
	1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper conditions prior to operation. 8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.	
Impact AQ-3. Construction activities for individual projects lasting longer than two months or located within 1,000 feet of sensitive receptors could expose sensitive receptors to substantial pollutant concentrations. Additionally, development facilitated by the project would site new sensitive land uses near Interstate 580/80 which may expose them to substantial pollutant concentrations. This impact would be less than significant with mitigation.	**AQ-2 Construction Health Risk Assessment.** For individual projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize Tier 4 and/or alternative fuel construction equipment, the project applicant shall prepare a construction health risk assessment (HRA). The HRA shall determine potential risk and compare the risk to the following BAAQMD thresholds:	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
	▪ Non-compliance with Qualified Community Risk Reduction Plan; ▪ Increased cancer risk of > 10.0 in a million; ▪ Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or ▪ Ambient $PM_{2.5}$ increase of > 0.3 µg/m^3 annual average **AQ-3 TAC Exposure Reduction Building Measures**. The following design features shall be incorporated for residential development located within 1,000 feet of I-580/80 or on a lot that fronts on a section of roadway with 10,000 vehicles per day or more in order to reduce exposure of proposed residences to TACs from vehicles and stationary combustion engines (i.e., generators): 1. If the proposed buildings would use operable windows or other sources of infiltration of ambient air, the development shall install a central HVAC system that includes high efficiency particulate filters (HEPA). These types of filters are capable of removing approximately 99.97 percent of the DPM emissions from air introduced into the HVAC system (U.S. EPA 2022). The system may also include a carbon filter to remove other chemical matter. Filtration systems must operate to maintain positive pressure within the building interior to prevent entrainment of outdoor air indoors. 2. If the development limits infiltration through non-operable windows, a suitable ventilation system shall include a ventilation system with filtration specifications equivalent to or better than the following: (1) American Society of Heating, Refrigerating and Air- Conditioning Engineers MERV-13 supply air filters, (2) greater than or equal to one air exchanges per hour of fresh outside filtered air, (3) greater than or equal to four air exchanges per hour recirculation, and (4) less than or equal to 0.25 air exchanges per hour in unfiltered infiltration. These types of filtration methods are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system. 3. Windows and doors shall be fully weatherproofed with caulking and weather-stripping that is rated to last at least 20 years. Weatherproof should be maintained and replaced by the property owner, as necessary, to ensure functionality for the lifetime of the project.	

Impact	Mitigation Measure (s)	Residual Impact
	4. Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). 5. Prepare an ongoing maintenance plan for the HVAC and filtration systems, consistent with manufacturers' recommendations. The applicant shall inform occupants regarding the proper use of any installed air filtration system.	
Impact AQ-4. Development facilitated by the project would not create objectionable odors that could affect a substantial number of people. This impact would be less than significant.	None required.	Less than Significant
Biological Resources		
Impact BIO-1. Development facilitated by the proposed HEU may result in direct or indirect impacts to special-status species or their associated habitats, and impacts to nesting birds. This impact would be less than significant.	None required.	Less than Significant
Impact BIO-2. Implementation of the proposed HEU may directly or indirectly impact riparian habitat, sensitive natural communities, or protected wetlands in the City of Berkeley. Implementation of federal, State, and local regulations and policies would ensure riparian habitat and wetlands are not significantly impacted. This impact would be less than significant.	None required.	Less than Significant
Impact BIO-3. Implementation of the proposed HEU may result in impacts to state or federally protected wetlands. This impact would be less than significant.	None required.	Less than Significant
Impact BIO-4. Implementation of the proposed HEU would not substantially impede the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors with compliance with existing and proposed regulations. This impact would be less than significant.	None required.	Less than Significant
Impact BIO-5. Implementation of the proposed HEU would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact would be less than significant.	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
Impact BIO-6. Implementation of the proposed HEU would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. No impact would occur.	None required.	No Impact
Cultural Resources		
Impact CUL-1. Development accommodated by the proposed Housing Element Update could adversely affect known and previously unidentified historic-period resources. Impacts to historic-period resources would be significant and unavoidable with mitigation.	**CUL-1 Historic Context Statement, Cultural Resources Survey and Designations.** During the period of this Housing Element, the City should conduct a citywide historic context statement and a cultural resource survey to identify historic resources, with priority given to sites in the EIR Site Inventory, to determine if there are designed built environment features which are over 40 years of age proposed to be altered or demolished. Designation of historic or cultural resources should be conducted by the Landmarks Preservation Commission pursuant to 3.24.260 of the Berkeley Municipal Code. **CUL-2 Historical Resources Discretionary Review**. For projects that are subject to discretionary review that occur during the Housing Element period where a historical-age building or structure that has not been previously evaluated is present, a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level survey in accordance with the California Office of Historic Preservation guidelines to determine if the property qualifies for federal, state, or local historical resources designation. All age eligible properties shall be evaluated within their historic context and documented in a technical memorandum with Department of Parks and Recreation Series 523 Forms. Should a property be found to be a qualifying historical resource, the project shall be subject to the City's regulations for permit review, including by the Preservation Landmarks Commission pursuant to Chapter 3.24.260, and/or by the Zoning Adjustments Board pursuant to Chapter 23.326 of the City of Berkeley Municipal Code. Efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources built environment	Significant and Unavoidable

Impact	Mitigation Measure (s)	Residual Impact
	assessment shall also identify and specify the treatment of character-defining features and construction activities. Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR § 15126.4(b)(1)). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the report shall demonstrate how the project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits. If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These may include documentation of the resource in a manner consistent with the standards of the Historic American Building Survey (HABS). Documentation should include full descriptive and historical narrative, measured drawings, and medium format photographs, all in archivally stable format.	
Impact CUL-2. Development accommodated by the housing element update could adversely affect identified and previously unidentified archaeological Resources. Impacts would be less than significant with required adherence to the City's Standard Conditions of Approval for archaeological resources.	None required.	Less than Significant
Impact CUL-3. Ground-disturbing activities associated with development under the housing element update could result in damage to or destruction of human burials. Impacts would be less than significant through adherence to state health and safety code section 7050.5 and public resources code section 5097.98.	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
Cumulative Impact: Development pursuant to the Housing Element Update and the LRDP would have the potential to impact historical resources. Historic-period resources could be vulnerable to development activities that could result in damage to or demolition of cultural resources. As noted above in CUL-2, the proposed project would result in significant and unavoidable impacts to historical resources. Adherence to Mitigation Measures CUL-1 and CUL-2 would reduce or avoid some but not all potential impacts to historical resources in Berkeley. Therefore, cumulative historical resources impacts would be significant, and the project's contribution would be cumulatively considerable.	No feasible mitigation measures have been identified.	Cumulatively considerable impact.
Energy		
Impact E-1. Project construction and operation would require temporary and long-term consumption of energy resources. However, with adherence to State and local regulations, the project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. This impact would be less than significant.	None required.	Less than Significant
Impact E-2. The proposed HEU would be consistent with the State plans and General Plan policies related to energy efficiency and utilizing renewable energy. This impact would be less than significant.	None required.	Less than Significant
Geology and Soils		
Impact GEO-1. A portion of Berkeley is located within the Hayward Fault zone. Development facilitated by the proposed HEU is subject to seismically-induced ground shaking and other seismic hazards, including liquefaction and landslides, which could damage structures and result in loss of property and risk to human health and safety. However, implementation of State-mandated building standards and compliance with the Alquist-Priolo Act Earthquake Fault Act, the CBC, the Berkeley General Plan's policies and actions, and the BMC would reduce impacts to a less than significant level.	None required.	Less than Significant
Impact GEO-2. With adherence to applicable laws and regulations, the proposed project would not result in substantial soil erosion or the loss of topsoil. Therefore, this impact would be less than significant.	None required.	Less than Significant
Impact GEO-3. Portions of Berkeley are located on expansive soils. However, with required implementation of standard engineering practices, impacts associated with unstable or expansive soils would be less than significant.	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
Impact GEO-4. The proposed project would not include septic tanks or alternative wastewater disposal systems. No impact would occur.	None required.	Less than Significant
Impact GEO-5. Development facilitated by the proposed HEU has the potential to impact paleontological resources. This impact would be less than significant with mitigation incorporated.	**GEO-1 Protection of Paleontological Resources**. If ground disturbance below the level of prior disturbance and into native soils is proposed to occur in areas mapped as Pleistocene alluvial fan and fluvial deposits (Qpaf), Orinda Formation (Tor), or Knoxville Formation (Kjk), then the City shall require the following to be implemented: **Retention of Qualified Professional Paleontologist. P**rior to initial ground disturbance, the project applicant shall retain a Qualified Professional Paleontologist, as defined by Society of Vertebrate Paleontology (SVP) (2010), to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards. If underlying formations are found to have a high potential for paleontological resources, the Qualified Professional Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements: If underlying formations are found to have a high potential for paleontological resources, the Qualified Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements: **Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff should fossils be discovered by construction staff. **Paleontological Monitoring.** Full-time paleontological monitoring shall be conducted during ground disturbing construction activities (i.e., grading, trenching, foundation work) in sediments assigned a high paleontological sensitivity. Paleontological monitoring shall be conducted by a qualified Paleontological Resources Monitor, as defined by the SVP (2010). The duration and timing of the monitoring will be determined by the Qualified Professional Paleontologist based on the observation of the geologic setting from initial ground disturbance, and subject to the review and approval by the City. If the Qualified Professional Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may	Less than Significant with Mitigation

Impact	Mitigation Measure (s)	Residual Impact
	recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Professional Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Professional Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Professional Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources. Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.	
Greenhouse Gas Emissions		
Impact GHG-1. Future development under the proposed HEU would not directly or indirectly generate GHG emissions that would have a significant effect on the environment. GHG emissions from the project would not exceed BAAQMD 2031 interpolated thresholds. This impact would be less than significant.	None required.	Less than Significant
Impact GHG-2. The proposed HEU would not conflict with GHG reduction goals and policies in the 2017 Scoping Plan, Plan Bay Area 2050, the City's General Plan, or the City's CAP. This impact would be less than significant.	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
Hazards and Hazardous Materials		
Impact HAZ-1. Implementation of the proposed HEU would facilitate new residential development in Berkeley. Proposed new residential uses would not involve the routine transportation, use, or disposal of hazardous materials. However, construction of new residences could result in an increase in the overall routine, transport, use and disposal of hazardous materials in Berkeley for construction activities. Nonetheless, required compliance with applicable regulations related to hazardous materials and compliance with General Plan policies would minimize the risk of releases and exposure to these materials. Impacts would be less than significant.	None required.	Less than Significant
Impact HAZ-2. Implementation of the proposed HEU may result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. However, compliance with existing regulatory requirements would minimize risks to schools and students, resulting in a less than significant impact.	None required.	Less than Significant
Impact HAZ-3. Implementation of the proposed HEU would accommodate development on or near hazardous materials sites. However, compliance with applicable regulations and the City's Standard Conditions of Approval requiring site characterization and cleanup would minimize hazards from development on contaminated sites. This impact would be less than significant.	None required.	Less than Significant
Impact HAZ-4. There are no airports within two miles of the Berkeley, and Berkeley is not within the influence area of an airport. No impact would occur.	None required.	Less than Significant
Impact HAZ-5. The proposed HEU would not result in physical changes that could interfere with or impair emergency response or evacuation. Therefore, the project would not result in interference with these types of adopted plans. This impact would be less than significant.	None required.	Less than Significant.

Impact	Mitigation Measure (s)	Residual Impact
Hydrology and Water Quality		
Impact HYD-1. Future development under the proposed HEU would involve ground-disturbing activities and the use of heavy machinery that could release materials, including sediments and fuels, which could adversely affect water quality. Operation of potential future development could also result in discharges to storm drains that could be contaminated and affect downstream waters. However, compliance with required permits and existing regulations, and implementation of Best Management Practices contained therein, would ensure that potential water quality impacts would be less than significant.	None required.	Less than Significant
Impact HYD-2. Future development facilitated under the proposed HEU would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. Further, implementation of low impact development measures and on-site infiltration required under the C.3 provisions of the MRP, and compliance with the Berkeley Municipal Code would increase the potential for groundwater recharge. Impacts would be less than significant.	None required.	Less than Significant
Impact HYD-3. Development under the proposed HEU would not substantially alter the existing drainage pattern of future development sites, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in flooding or exceed the capacity of stormwater drainage systems. Impacts related to drainage patterns would be less than significant.	None required.	Less than Significant
Impact HYD-4. Development under the proposed HEU would place housing and other structures within FEMA-designated Flood Hazard Areas and tsunami zones. However, compliance with the General Plan, the BMC, and the California Health and Safety Code would reduce potential effects associated with flood events. This impact would be less than significant.	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
Land Use and Planning		
Impact LU-1. The proposed HEU includes policies and programs to encourage housing development on underutilized and vacant sites and along established commercial corridors and neighborhoods. Development under the proposed HEU would not physically divide an established community. No impact would occur.	None required.	No Impact
Impact LU-2. The proposed HEU would be consistent with the goals and policies of Plan Bay Area 2050, the Berkeley General Plan, and the BMC. This impact would be less than significant.	None required.	Less than Significant
Noise		
Impact NOI-1. Construction associated with housing development accommodated under the proposed HEU would be required to comply with the allowed daytime construction hours as set forth in the Berkeley Municipal Code and therefore, would not occur during nighttime hours when people are more sensitive to noise. Larger developments could involve construction with lengthy durations, substantial soil movement, use of large, heavy-duty equipment, and/or pile driving near noise-sensitive land uses that would exceed the applicable FTA daytime noise limits. implementation of City Standard Conditions of Approval for construction noise would reduce construction noise levels, but may not reduce them to below thresholds for every project. Therefore, impacts generated by temporary construction noise would be significant and unavoidable.	No feasible mitigation measures have been identified.	Significant and Unavoidable
Impact NOI-2. Housing development accommodated under the proposed HEU could include mechanical equipment (i.e., HVAC), delivery and trash trucks, and other noise-generating activities. However, such activities would be similar to the existing noise environment. In addition, on-site activities would be required to comply with applicable noise standards in the Berkeley Municipal Code. Furthermore, while housing development would generate vehicle trips in the city, the increase in mobile noise would not result in a perceptible (3-dBA or greater) noise increase. Permanent noise increases due to operation of new development under the proposed HEU would be less than significant.	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
Impact NOI-3. Housing development accommodated under the proposed HEU would not involve operational activities that would result in substantial vibration levels (e.g., use of heavy equipment or machinery). Construction activities would be required to implement the City's Standard Conditions of Approval that control vibration. This impact would be less than significant.	None required.	Less than significant.
Impact NOI-4. Housing developments accommodated under the proposed HEU would not be exposed to intermittent noise levels from overhead flight patterns from airports in the city as there are none located within the City. Furthermore, while the project would not emphasize building housing in the immediate vicinity of the airport, all residential development would, nonetheless, be required to incorporate noise insulation features per State and local standards to reduce interior noise levels to below 45 dBA. Therefore, the impact of airport or airstrip operations on new development would be less than significant.	None required.	Less than Significant
Cumulative Impact: Construction of future development projects in Berkeley would produce temporary noise impacts that would be localized to a project site and sensitive receivers within the immediate vicinity. Therefore, only sensitive receivers located in close proximity to each construction site would be potentially affected by each activity. Nonetheless, construction activities associated with individual housing development projects accommodated under the proposed Housing Element Update may overlap for some time with construction activities for other development projects. Based on the locations of the potential housing sites displayed in Figure 2-4 of Section 2, Project Description, this could substantially increase noise levels at specific neighboring noise-sensitive receivers since many sites are located in proximity to each other. Therefore, concurrent construction of development projects accommodated under the proposed Housing Element Update could result in cumulatively considerable impacts. This impact would be cumulatively considerable and cumulative impacts would be significant and unavoidable.	No feasible mitigation measures have been identified.	Cumulatively considerable impact.

Impact	Mitigation Measure (s)	Residual Impact
Population and Housing		
Impact POP-1. This EIR assumes full buildout of 19,098 residential units in Berkeley through 2031, which equates to a population increase of an estimated 47,443 residents compared to the existing population. However, growth resulting from the project is anticipated and would not constitute substantial unplanned population growth. This impact would be less than significant.	None required.	Less than Significant
Impact POP-2. Implementation of proposed project would not result in the displacement of substantial numbers of people or housing. The proposed project would facilitate the development of new housing in accordance with State and local housing requirements, while preserving existing residential neighborhoods. This impact would be less than significant.	None required.	Less than Significant
Public Services and Recreation		
Impact PS-1. Development facilitated by the proposed HEU would result in an increase of population and buildings within Berkeley. The projected population increase would increase demand for fire protection services and potentially create the need for a new or altered fire station. However, compliance with policies in the 2020 General Plan would reduce impacts related to fire service facilities to a less than significant level.	None required.	Less than Significant
Impact PS-2. Development facilitated by the proposed HEU would result in an increase in the City's population. The projected population increase would increase demand for police protection services and potentially create the need for new or altered police service facilities. However, compliance with policies in the 2020 General Plan would reduce impacts related to police facilities to a less than significant level.	None required.	Less than Significant
Impact PS-3. Development facilitated under the proposed HEU would result in an increase in population in Berkeley, resulting in the need for additional or expanded school facilities. However, Government Code 65995 (b) would require funding for the provision or expansion of new school facilities to offset impacts from new residential development. Therefore, this impact would be less than significant.	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
Impact PS-4. Development associated with the proposed HEU would increase the population of Berkeley and the use of existing parks and recreational facilities. However, additional recreational opportunities are available adjacent to the City and donation of parkland pursuant to the Quimby Act would be required prior to occupancy of individual projects. No plans for the expansion or construction of new parks or recreational facilities are anticipated. Therefore, this impact would be less than significant.	None required.	Less than Significant
Transportation		
Impact TRA-1. The proposed HEU would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This impact would be less than significant.	None required.	Less than Significant
Impact TRA-2. The proposed HEU not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). This impact would be less than significant.	None required.	Less than Significant
Impact TRA-3. The proposed HEU would not substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This impact would be less than significant.	None required.	Less than Significant
Impact TRA-4. The proposed HEU would not have the potential to result in inadequate emergency access. This impact would be less than significant.	None required.	Less than Significant
Tribal Cultural Resources		
Impact TCR-1. Development during the planning period of the proposed HEU could adversely impact tribal cultural resources due to ground disturbing activity during construction. This impact would be less than significant with mitigation incorporated.	**TCR-1 Tribal Cultural Monitoring.** For future projects that are determined through tribal consultation to potentially affect tribal cultural resources, in order to mitigate potential adverse impacts to Native American cultural objects and human remains discovered during construction, tribal cultural monitors will be retained to monitor work done in areas of Tribal concern, as determined through tribal consultation. If Native American cultural objects and/or human remains are discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by tribal cultural monitors and a qualified archaeologist meeting the Professional Qualifications Standards of the Secretary of the Interior (36 CFR Part 61). The archaeologist shall, in accordance with the appropriate Guidelines, identify and evaluate the	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
	significance of the discovery and develop recommendations for treatment in consultation with the affected Tribe to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in consultation with the affected Tribe consistent with the CEQA Guidelines for Determining the Significance of and Impacts to Cultural Resource, Archaeological Historic and Tribal Cultural Resources. Such mitigation may include, but is not limited to, additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that a TCR might be encountered.	
Utilities and Service Systems		
Impact UTIL-1. Development under the proposed HEU would require utility service and connections for water supply, wastewater conveyance, and stormwater conveyance, as well as telecommunications, electricity, and natural gas. Existing utility systems for water, wastewater, stormwater, electric power, natural gas, and telecommunications facilities in Berkeley have sufficient capacity to serve the project. Relocation or construction of new or expanded facilities resulting in significant environmental impacts would not occur, and adequate wastewater capacity exists to serve the project's projected demand in addition to the provider's existing commitments. impacts would be less than significant.	None required.	Less than Significant
Impact UTIL-2. Development under the proposed HEU would result in an increase in water demand. However, this increase in demand can be served by the East Bay Municipal Utility District (EBMUD) with demand management measures required by EBMUD. This impact would be less than significant.	None required.	Less than Significant
Impact UTIL-3. Development facilitated by the project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. The project would not impair the attainment of solid waste reduction goals and would comply with federal, State, and local statutes and regulations related to solid waste. Impacts would be less than significant.	None required.	Less than Significant

Impact	Mitigation Measure (s)	Residual Impact
Wildfire		
Impact W-1. Development during the planning period of the proposed HEU would occur in hillside areas located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. The city employs multiple strategies to reduce the impairment the HEU would have on emergency response and evacuation. Nonetheless, this impact would be significant and unavoidable.	No feasible mitigation measures have been identified.	Significant and Unavoidable
Impact W-2. Implementation of the proposed HEU would encourage development in the hillside areas located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. New development would be required to comply with extensive regulations and fire safety provisions in the Berkeley Municipal Code, including the Fire Code. Based on the existing regulatory framework and project review process with Berkeley Fire Department, impacts would be generally avoided. However, it remains possible that even with existing regulations, construction or other human activities related to development in or near an SRA or in a VHFHSZ could exacerbate wildfire risk and expose existing and new residents to pollutant concentrations and uncontrolled spread of a wildfire. Additionally, by increasing the population of the WUI area, more people will be directly threatened when a wildland fire occurs. Therefore, this impact would be significant and unavoidable	No feasible mitigation measures have been identified.	Significant and Unavoidable
Impact W-3. Implementation of the proposed HEU would encourage development of housing on inventory sites and in the Hillside Overlay district located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. The proposed HEU could expose people and structures to risk due to the terrain and slope in the Berkeley hills. This could result in potential risks such as landslides. This impact would be significant and unavoidable.	No feasible mitigation measures have been identified.	Significant and Unavoidable

Impact	Mitigation Measure (s)	Residual Impact
Impact W-4. Implementation of the proposed HEU would encourage development of housing on inventory sites and in the R-, R-2, and R-2a districts located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. However, the area is already developed and served by existing infrastructure and it is not anticipated that installation of new infrastructure or a substantial increase in the maintenance of existing infrastructure would occur. Should additional maintenance or construction of such infrastructure occur, implementation of Mitigation Measure w-1 would reduce the risk of fire during construction. Overall, this impact would be significant and unavoidable.	**W-1 Undergrounding of Power Drops in the VHFHSZs.** The City shall require that new or upgraded power drops located in the very high fire hazard severity zone be installed underground. Prior to the issuance of a building permit, the applicant shall submit plans for undergrounding of power drops.	Significant and Unavoidable
Cumulative Impact: In and near Berkeley, the VHFHSZs are located largely along the WUI borders with the hilly northwestern areas. Within the geographic scope for this cumulative analysis wildfire-related impacts could be significant if development is in or near Berkeley's VHFHSZ. The proposed LRDP update would involve improvements and development in Campus Park, the Hill Campus West, the Hill Campus East, the Clark Kerr Campus, and the City Environs Properties, areas of which fall within the VHFHSZ. Development within this area could exacerbate wildfire risks. Like development under the proposed HEU, new development under the LRDP would be subject to statewide standards for fire safety in the California Fire Code. Nonetheless, because the proposed HEU could exacerbate wildfire risk in a VHFHSZ and development under the proposed LRDP update could also exacerbate such risks, a cumulative impact would occur and the proposed projects' contribution would be cumulative considerable.	No feasible mitigation measures have been identified.	Cumulatively considerable impact.

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1 Introduction

This document is a Program Environmental Impact Report (EIR) that analyzes the City of Berkeley's proposed Housing Element Update (hereafter also referred to as the "proposed HEU" or "proposed project"). This section discusses: (1) the purpose of this Program EIR; (2) the type of environmental document prepared and future streamlining opportunities; (3) the legal basis for preparing an EIR; (4) the public review and participation process; (5) the scope and content of the Program EIR; (6) the issue areas found not to be significant; (7) the lead, responsible, and trustee agencies pursuant to the California Environmental Quality Act (CEQA); and (8) an overview of the environmental review process required under CEQA. The proposed project is described in detail in Section 2, *Project Description*.

1.1 Statement of Purpose

This Program EIR has been prepared in compliance with the CEQA Statutes and Guidelines (see *CEQA Guidelines* Section 15121[a]). In general, the purpose of an EIR is to:

1. Analyze the environmental effects of the adoption and implementation of the project;
2. Inform decision-makers, responsible and trustee agencies and members of the public as to the range of the environmental impacts of the project;
3. Recommend a set of measures to mitigate significant adverse impacts; and
4. Analyze a range of reasonable alternatives to the proposed project.

As the lead agency for preparing this Program EIR, the City of Berkeley will rely on the EIR analysis of environmental effects in its review and consideration of the proposed project prior to approval.

1.2 Environmental Impact Report Background

This document is a Program EIR. *CEQA Guidelines* Section 15168(a) states that:

> A Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically; (2) as logical parts in a chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria, to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

As a programmatic document, this EIR presents a citywide assessment of the impacts of the proposed project. Analysis of site-specific impacts of individual projects is not required in a Program EIR, unless components of the program are known in sufficient detail. No specific projects are currently defined to the level that would allow for such an analysis. Individual specific environmental analysis of each housing development project will be performed as necessary by the City prior to each project being considered for approval. This Program EIR serves as a first-tier CEQA environmental document supporting second-tier environmental documents, if required.

Project applicants implementing subsequent projects may undertake future environmental review depending on the results of the analysis in this Program EIR and requirements of the mitigation

measures. If project applicants are required to prepare subsequent environmental documents, they may reference the appropriate information from this Program EIR regarding secondary effects, cumulative impacts, broad alternatives and other relevant factors. If the City finds that implementation of a later activity would have no new effects and that no new mitigation measures would be required, that activity would require no additional CEQA review and a consistency finding would be prepared. Where subsequent environmental review is required, such review would focus on significant effects specific to the project, or its site, that have not been considered in this Program EIR (*CEQA Guidelines* Section 15168).

CEQA Guidelines Section 15151 provides the following standards related to the adequacy of an EIR:

> An Environmental Impact Report should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to decide which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts have looked not for perfection; but for adequacy, completeness, and a good faith effort at full disclosure.

CEQA Guidelines Section 15146 provides the following additional standards related to the adequacy of an EIR:

> The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.
>
> (a) An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.
>
> (b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption, or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

1.3 Purpose and Legal Authority

The proposed project requires the discretionary approval of the Berkeley City Council; therefore, the project is subject to the environmental review requirements of CEQA. In accordance with *CEQA Guidelines* Section 15121 (California Code of Regulations, Title 14), the purpose of this EIR is to serve as an informational document that:

> "...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."

This Program EIR is to serve as an informational document for the public and City of Berkeley decision makers. The process will include public hearings conducted by the Planning Commission and City Council to consider certification of a Final Program EIR and approval of the proposed project.

1.4 Public Review and Participation Process

The City of Berkeley distributed a Notice of Preparation (NOP) of a Draft EIR for a 30-day agency and public review period commencing January 14, 2022 and closing February 14, 2022. In addition, the City held a virtual scoping meeting on February 9, 2022. The meeting, held at 7 p.m., provided information about the proposed project to members of public agencies, interested stakeholders and residents/community members and provided an opportunity for interested parties to submit verbal comments on the scope of the environmental issues to be addressed in the EIR. Due to the COVID-19 pandemic, the virtual meeting was held through an online meeting platform and a call-in number. No members of the public provided verbal comments at the scoping hearing, but several Planning Commissioners provided verbal comments.

The City received letters from seven agencies, individuals, and organizations in response to the NOP during the public review period. The NOP and scoping comment letters are presented in Appendix NOP of this Program EIR. Table 1-1 summarizes the content of the letters and where the issues raised are addressed in the Program EIR.

Table 1-1 NOP Comments and EIR Response

Commenter	Comment/Request	How and Where It Was Addressed
Comment Letters from Public Agencies		
East Bay Municipal Utility District (EBMUD)	▪ Water service for new multi-unit structures shall be individually metered or sub-metered in compliance with Senate Bill 7. ▪ EBMUD will not install pipes or conduct service in contaminated soils. ▪ EBMUD's Main Wastewater Treatment Plan and interceptor system have adequate capacity to accommodate the proposed wastewater flow in dry conditions. However, additional wastewater infrastructure may be required to accommodate proposed wastewater flow in wet conditions. ▪ Project sponsors are required to provide an estimate of expected water demand for potential recycled water uses for each project in the HEU to explore options and requirements related to recycled water use. ▪ Requests City include compliance with AB 325 "Model Water Efficient Landscape Ordinance" as condition of approval on individual projects within the HEU.	Section 4.16, *Utilities and Service Systems,* includes an analysis of wastewater capacity and water efficiency requirements.
Native American Heritage Commission (NAHC)	▪ Recommends consultation with all California Native American tribes traditionally and culturally affiliated with the project according to AB 52 and SB 18.	Consultation required by AB 52 and SB 18 was carried out by the City of Berkeley. A summary of the process and an analysis of impacts to tribal cultural resources are discussed in Section 4.4, *Cultural Resources*, of this EIR.
Alameda County Transportation Commission (ACTC)	▪ States if the project generates at least 100 p.m. peak hour trips over existing conditions, the Congestion Management Program (CMP) Land Use Analysis Program requires the City to conduct a transportation impact analysis of the project utilizing the Alameda Countywide Travel Demand Model for CMP Land Use Analysis.	Transportation impact analyses are included in Section 4.14, *Transportation*.

Commenter	Comment/Request	How and Where It Was Addressed
	▪ Identifies Metropolitan Transportation System facilities, service operators in area and requests all potential impacts to these facilities, operators, and users be addressed in the DEIR. ▪ Discusses mitigation measure requirements and suggestions, including multimodal tradeoffs, TDM measures, and consistency with transportation plans.	
Comment Letters from Organizations		
East Bay for Everyone/East Bay YIMBY	▪ Suggests goals and policies to be considered in the HEU and that the EIR explore the consequences of the recommended policies.	The commenter's opinions on the proposed HEU will be taken into consideration by City decision-makers but do not pertain to the EIR analysis. The purpose of the EIR is to consider the implication of HEU policies to meet RHNA goals as well as additional zoning changes to encourage housing in the City, and the environmental consequences of HEU implementation are analyzed throughout this EIR.
Summary of Verbal and Written Comments by Topic Area		
HEU components	▪ Several commenters provided recommendations for goals, policies, or programs to be included in the HEU, or expressed support for additional housing in the City.	The commenters' opinions on the proposed HEU will be taken into consideration by City decision-makers but do not pertain to the EIR analysis.
Alternatives	▪ The EIR should consider an alternative with a greater number of units.	Alternatives are analyzed in Section 6, *Alternatives.*
Biological Resources	▪ Concern about wildlife impacts ▪ Suggestion to use bird safe glass ▪ Suggestion to use landscaping that provides habitat and food for area wildlife.	Section 4.3, *Biological Resources,* includes an analysis of impacts to biological resources including birds and wildlife.
Transportation	▪ Concerns about a lack of parking in the City ▪ Concerns about traffic in the City ▪ Concerns about impacts of ride sharing and additional traffic impacts. ▪ Concerns about rider capacity for public transit including AC Transit and BART	Section 4.14, *Transportation,* includes an analysis of transportation-related impact for those items required under CEQA. Parking and traffic impacts are not environmental issues pursuant to CEQA.

1.5 Scope and Content

As discussed in Section 1.4, a NOP was prepared and circulated (Appendix NOP), and responses received on the NOP were considered when setting the scope and content of the environmental information in this EIR. Sections 4.1 through 4.17 address the resource areas outlined in the bullet points below. Section 5, *Other CEQA Required Discussions*, covers topics including growth-inducing effects, irreversible environmental effects, and significant and unavoidable impacts. Environmental topic areas addressed in this EIR include:

1. Aesthetics
2. Air Quality
3. Biological Resources
4. Cultural Resources
5. Energy
6. Geology and Soils
7. Greenhouse Gas Emissions
8. Hazards and Hazardous Materials
9. Hydrology and Water Quality
10. Land Use and Planning
11. Noise
12. Population and Housing
13. Public Services and Recreation
14. Transportation
15. Tribal Cultural Resources
16. Utilities and Service Systems
17. Wildfire

In preparing the EIR, use was made of pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents. A full reference list can be found in Section 7, *References and Preparers*.

The alternatives section of the EIR (Section 6) was prepared in accordance with *CEQA Guidelines* Section 15126.6 and focuses on alternatives capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" alternative and three alternative development scenarios for the project area.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. *CEQA Guidelines* Section 15151 (summarized above in Section 1.2) provides the standard of adequacy on which this document is based.

1.6 Issues Found to be Less than Significant

The following issue areas are determined to have less-than-significant impacts due to the unique conditions of the City of Berkeley and thus are not analyzed in detail beyond the discussion included below.

1.6.1 Agriculture and Forestry Resources

The City of Berkeley lacks agricultural lands or forest. Neither agriculture nor forestry lands are a General Plan designation, zoning classification or use in the City (City of Berkeley 2001). According to the California Department of Conservation's (DOC) Farmland Mapping and Monitoring program, the City of Berkeley is classified as urban and built-up land (DOC 2016). Additionally, there is no Williamson Act contract land within the City (DOC 2017).

The proposed HEU would not: lead to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use; conflict with existing zoning for agricultural use, or a Williamson Act contract; conflict with existing zoning for or cause rezoning of forest land or timberland; result in loss of forest land or conversion of forest land to non-forest use; or otherwise convert Farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, there would be no impacts on agriculture and forestry resources.

1.6.2 Mineral Resources

The City of Berkeley does not have significant mineral resources or active mining sites within its boundaries. The proposed HEU applies to an urban area which is not compatible with, identified for, or used for mineral extraction. In addition, mineral resources are not addressed in the City's General Plan (City of Berkeley 2001).

Development under the proposed HEU would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan or other land use plan. Therefore, there would be no impacts related to mineral resources.

1.7 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Berkeley is the lead agency for the project because it holds principal responsibility for approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. The California Department of Housing and Community Development (HCD) reviews and determines whether the proposed HEU complies with State law but is not a responsible agency involved with CEQA. There are no responsible agencies for this project.

A trustee agency refers to a State agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the proposed HEU or Program EIR. Implementation of the proposed project would not directly cause development in areas where trustee agencies mentioned in *CEQA Guidelines* Section 15386 have jurisdiction. However, future development projects could be located lands under trustee agency jurisdiction, at which time subsequent environmental review would occur.

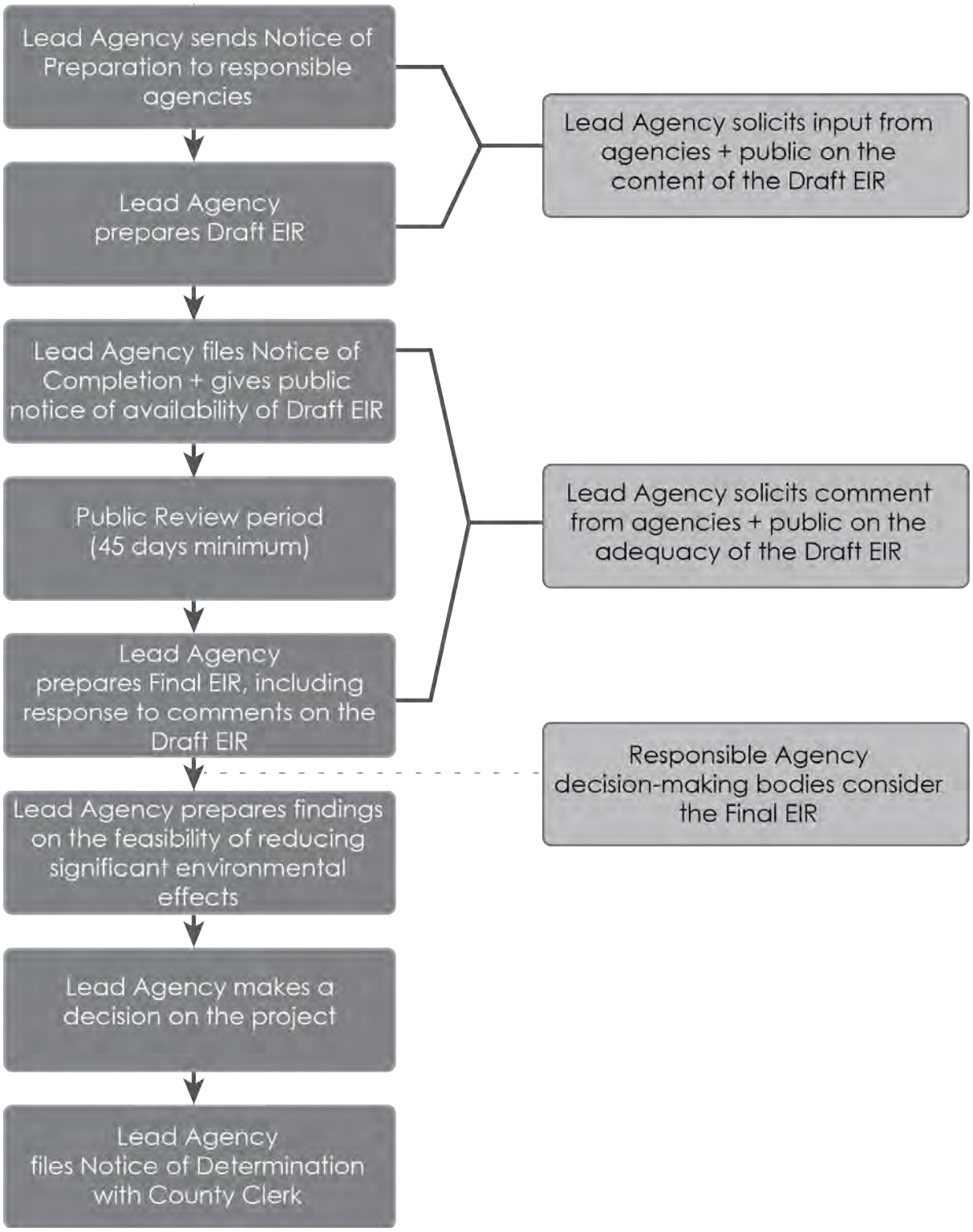
1.8 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

1. **Notice of Preparation (NOP)**. After deciding that an EIR is required, the lead agency (City of Berkeley) must send a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days.
2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.

3. **Notice of Completion (NOC).** The lead agency must send a NOC to the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public and respond in writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091).
4. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) a list of persons and entities commenting; and d) responses to comments.
5. **Certification of Final EIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision making body reviewed and considered the information in the Final EIR prior to approving the project (*CEQA Guidelines* Section 15090).
6. **Lead Agency Project Decision.** The lead agency may: a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations**. For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
9. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

Figure 1-1 Environmental Review Process



2 Project Description

The proposed 2023-2031 Housing Element Update (HEU), herein referred to as the "proposed HEU" or "proposed project," would amend the City of Berkeley's General Plan by replacing the current Housing Element with the proposed 2023-2031 Housing Element and amending the City's General Plan as needed for consistency and HEU implementation.

The proposed HEU establishes policies and programs to further the goal of meeting the existing and projected housing needs of all household income levels of the community. In addition, the sites inventory provides evidence of the City's ability to accommodate the Regional Housing Needs Allocation (RHNA) through the year 2031, as established by the Association of Bay Area Governments (ABAG). Although no rezoning is needed to meet the RHNA, the City is considering focused rezoning as part of the implementation programs to achieve local objectives.

The Berkeley General Plan

Element 1. Land Use

Element 2. Transportation

Element 3. Housing

Element 4. Disaster Preparedness and Safety

Element 5. Open Space and Recreation

Element 6. Environmental Management

Element 7. Economic Development and Employment

Element 8. Urban Design and Preservation

Element 9. Citizen Participation

This section describes the proposed project, including the project location, major project characteristics, project objectives, and discretionary actions needed for approval.

2.1 Lead Agency Name, Address, and Contact

City of Berkeley
1947 Center Street, 2nd Floor
Berkeley, California 94704
(510) 981-7400

Contact: Grace Wu, Acting Principal Planner, HousingElement@CityofBerkeley.info

2.2 Project Location and Setting

The City of Berkeley is located in northern Alameda County in the East Bay portion of the San Francisco Bay Area region and is surrounded by urbanized areas to the north and south and primarily open space in the hillsides to the east. The regional location is shown in Figure 2-1. The City is bordered by the City of Albany and the unincorporated community of Kensington to the north, by Contra Costa County and the City of Oakland to the east, the cities of Oakland and Emeryville to the south, and San Francisco Bay to the west. Berkeley encompasses approximately 17.7 square miles, of which approximately 7.2 square miles is underwater in the San Francisco Bay. The city limits are shown on Figure 2-2.

The City is highly urbanized and developed with a mix of land uses, including single-family residential neighborhoods, mixed-use and multi-family residential areas, offices, retail, faith-based and cultural institutions, schools, hotels, parking, recreational uses, and public streets. Figure 2-3 shows a map of existing land uses in Berkeley.

Figure 2-1 Regional Location

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Project Location

N

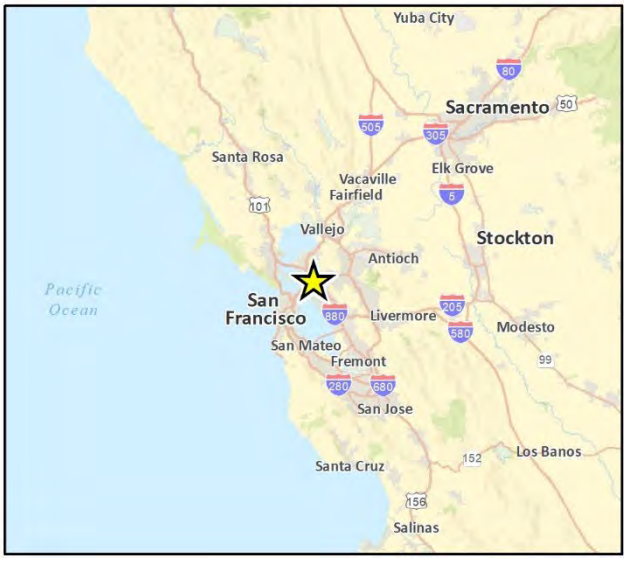
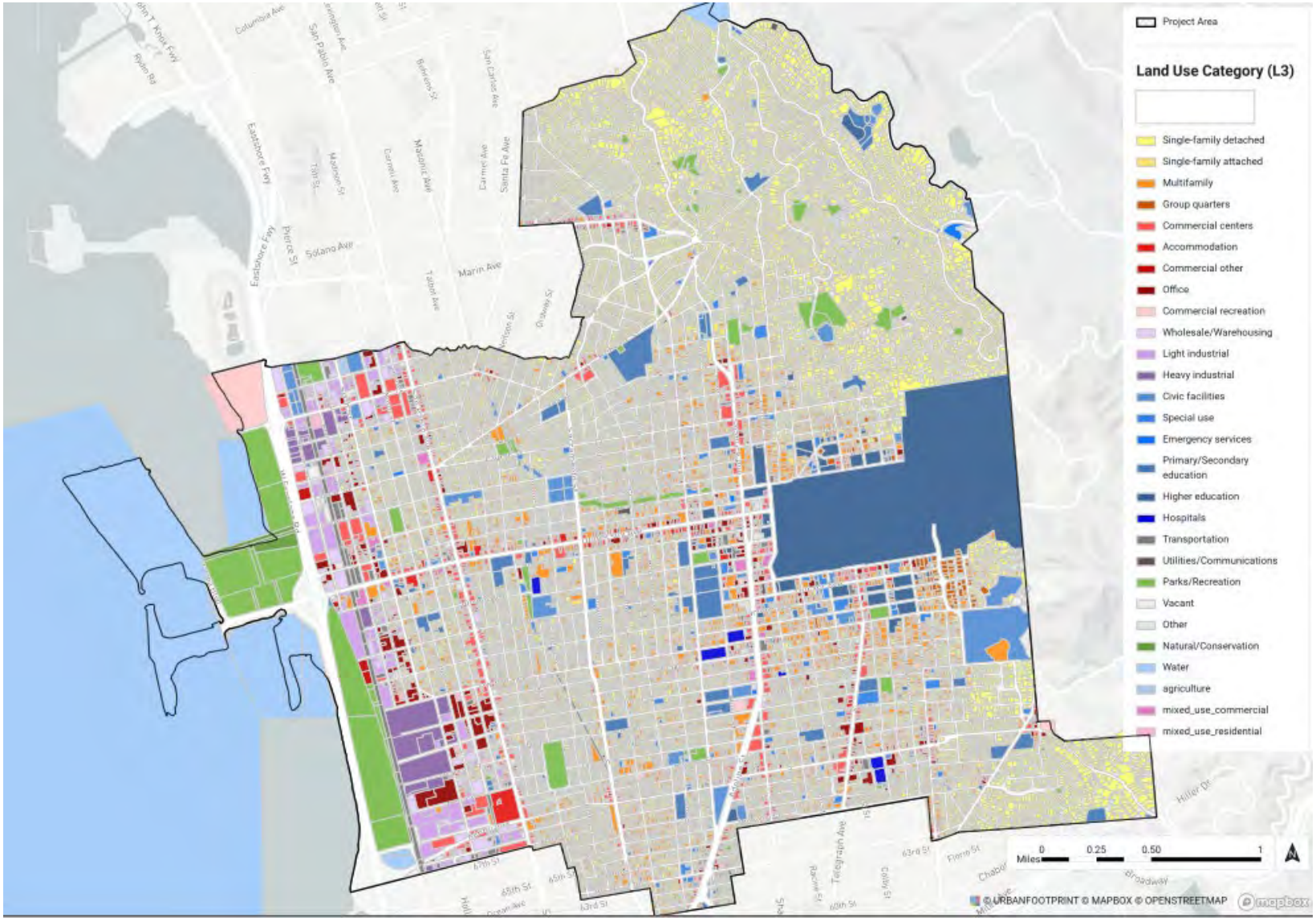


Figure 2-2 City of Berkeley Location

Imagery provided by Microsoft Bing and its licensors © 2021.

Figure 2-3 Map of Land Uses in the City of Berkeley



Commercial activity is primarily distributed between Downtown, West Berkeley, the neighborhood and avenue commercial districts of North Shattuck, Elmwood, Solano, Shattuck/Adeline, and Telegraph Avenue, and the commercial strips along San Pablo and University Avenues. Industrial areas are primarily located in West Berkeley along the railroad and San Pablo Avenue corridors. Institutional uses are primarily located around the University of California, Berkeley. Residential development and accompanying commercial services and public facilities are located throughout the city.

Currently the City has a population of approximately 124,563 and 52,921 housing units (California Department of Finance 2022).

2.3 Project Objectives

The project presents a comprehensive set of housing policies and programs for the years 2023-2031 and will encompass the entire City of Berkeley. The project will be based on the Association of Bay Area Governments' (ABAG) 6th Cycle RHNA and will:

1. Adopt policies and programs that meet the City's RHNA with the required buffer, provide additional housing opportunities consistent with other City priorities, remove governmental constraints to the maintenance, improvement and development of housing, and ensure ongoing compliance with State Housing Element law and the No Net Loss provisions of State law through the eight-year cycle.
2. Adopt policies and programs to encourage the development of affordable housing at a range of income levels consistent with RHNA, including at least 2,450 units for Very Low-Income households, at least 1,400 units for Low Income households, and at least 1,400 units for Moderate Income households.
3. Encourage the development of housing with access to transit, jobs, services, and community benefits in a manner that distributes affordable and special needs housing in high resource neighborhoods and affirmatively furthers fair housing.
4. Identify housing policies and programs that will conserve and rehabilitate existing units, provide services to increase housing opportunities for all residents of Berkeley, and increase the energy efficiency of both current and future housing units.

2.4 Project Characteristics

The project analyzed in this EIR involves an update to the Housing Element of the City's General Plan and would include adoption of General Plan amendments related to housing that would apply Citywide for the 2023-2031 planning period.

The City is required by the State Department of Housing and Community Development (HCD) to meet its RHNA and identify sufficient sites to accommodate 8,934 residential units to meet a fair share of the region's anticipated population growth between 2023 to 2031. In addition, HCD recommends that cities identify a "buffer" of 15 to 30 percent above RHNA for lower- and moderate-income categories to account for No Net Loss (SB 166). Thus, the overall sites inventory must accommodate between approximately 10,274 and 11,614 units. The sites must be zoned to allow for residential uses and the zoning standards must allow for the unit capacities assumed in the sites inventory.

For the purposes of the HEU CEQA analysis, this EIR assesses a higher amount of development potential than the total HEU sites inventory capacity in order to fully analyze possible environmental impacts based on proposed HEU implementation programs, account for the possibility that proposed projects could utilize State Density Bonus, and to account for a scenario in which development occurs at a rate higher than it has historically. However, future development proposals would be reviewed to determine whether their impacts fall within the scope of this EIR, or if additional site-specific environmental review will be required. Subsequent environmental documents, when required, could tier from the HEU EIR and focus on any new significant impacts in accordance with *CEQA Guidelines* Sections 15152 and 15385.

2.4.1 Housing Element Update

The Housing Element is one of the State-mandated elements of the General Plan. The current Housing Element was adopted in 2015 and is in effect through 2023. The Housing Element identifies the City's housing conditions and needs, and establishes the policies and programs that comprise the City's housing strategy to accommodate projected housing needs, including the provision of adequate housing for low-income households and for special-needs populations (e.g., unhoused people, seniors, single-parent households, large families, and persons with disabilities).

The 2023-2031 Housing Element would bring the element into compliance with State legislation passed since adoption of the 2015-2023 Housing Element and with the current Association of Bay Area Governments' (ABAG's) Regional Housing Needs Allocation (RHNA). On December 16, 2021, the ABAG Executive Board adopted the 6th Cycle Final RHNA, which includes a "fair share" allocation for meeting regional housing needs for each community in the ABAG region.

The 2023-2031 Housing Element includes the following components, as required by State law

- Assessment of the City's population, household, and housing stock characteristics, existing and future housing needs by household types, and special needs populations.
- Analysis of resources and constraints related to housing production and preservation, including governmental regulations, infrastructure requirements and market conditions such as land, construction, and labor costs as well as restricted financing availability.
- Identification of the City's quantified objectives for the 6th cycle RHNA and inventory of sites determined to be suitable for housing.
- Creation or maintenance of opportunities for energy conservation in residential development. State housing element law requires cities to identify opportunities for energy conservation in residential development.
- Review of the 2013-2021 Housing Element to identify progress and evaluate the effectiveness of previous policies and programs.
- A Housing Plan to address the City's identified housing needs, including housing goals, policies, and programs to facilitate the 2023 Housing Element Update (6th Cycle).

2.4.2 Regional Housing Needs Allocation (RHNA)

ABAG has allocated the nine-county region's 441,176 housing unit growth needs among each city and county in its region through a process called the Regional Housing Needs Allocation (RHNA). As shown in Table 2-1, Berkeley's RHNA for the 2023-2031 planning period (6th RHNA cycle) is 8,934 units, which is distributed among four income categories. The RHNA represents the minimum

number of housing units that the City's sites inventory must accommodate for in its Housing Element, through its General Plan and zoning.

Table 2-1 RHNA and Percentage of Income Distribution for Berkeley

Income Level	Percent of Area Median Income (AMI)	Units	Percent
Very Low	<50%	2,446	27.4%
Low	50-80%	1,408	15.8%
Moderate	80-120%	1,416	15.8%
Above Moderate	>120%	3,664	41.0%
Total	**–**	**8,934**	**100%**

Source: ABAG 2021a

For the prior RHNA cycle, the City was allocated a total of 2,959 units to be accommodated in its Housing Element inventory of adequate sites.

2.4.3 Meeting the RHNA

The City has identified an inventory of sites and a set of implementation programs to meet its RHNA and to further other local policy objectives.

EIR Sites Inventory

The City assessed capacity in three categories to meet the RHNA: likely sites, pipeline sites, and opportunity sites. The Likely Sites, Pipeline Sites and Opportunity Sites together constitute the EIR Sites Inventory. The specific number and location of units actually developed during the Housing Element period will differ from those included in the EIR Sites Inventory, but any difference would result in fewer total units and a reduction of total physical sites for housing development. Figure 2-4 includes the location of the parcels used in the EIR Sites Inventory.

The sites inventory includes a total of 15,153 units, which also accounts for 800 accessory dwelling units (ADUs) based on recent development trends.

Likely Sites

Likely Sites include housing projects that received their land use entitlement since 2018 but did not receive their certificate of occupancy prior to June 2022. For these projects, the affordability breakdown reflects actual project plans, including density bonus units. HCD also allows jurisdictions to include ADUs in the "likely sites" category based on recent development trends and assumed levels of affordability based on ABAG's Affordability of ADUs report (ABAG 2021b).

The Likely Sites include an estimated 4,685 units, which includes, based on information from previous years and trends, an estimated 800 ADUs to be developed during the 2023-2031 planning period.

Pipeline Sites

Pipeline Sites include projects that are under review or actively engaging with the City in anticipation of submitting an application for review. Affordability levels reflect proposed project plans to the extent they are known.

The North Berkeley and Ashby BART stations are included under "pipeline sites" based on current planning and rezoning efforts. The sites inventory estimates 1,200 units to be developed at the two BART sites during the 6th cycle, with 35 percent of the units targeted to Very Low- and Low-Income affordability levels.

The Pipeline Sites include an estimated 2,415 units.

Opportunity Sites

Opportunity Sites are currently vacant and/or underutilized sites and are not associated with actual development proposals. Site selection is conducted based on an analysis of site-specific constraints, including General Plan land use and zoning, access to utilities, location, development potential, and whether the site is identified in a previous Housing Element. To count toward the RHNA, sites must be in a land use category that meets a minimum residential density standard, have a minimum lot size, be either vacant or not developed to the maximum capacity allowed by zoning, and provide the potential for more residences.

Berkeley's zoning districts, with the exception of the C-AC district, do not have maximum density standards expressed in dwelling units per acre as density is typically controlled through other development standards. As a result, unit assumptions for opportunity sites were calculated using the average of the *base* density[1] from recent entitlement projects within the district (or districts with similar zoning standards if there were no recent projects within the district to analyze).

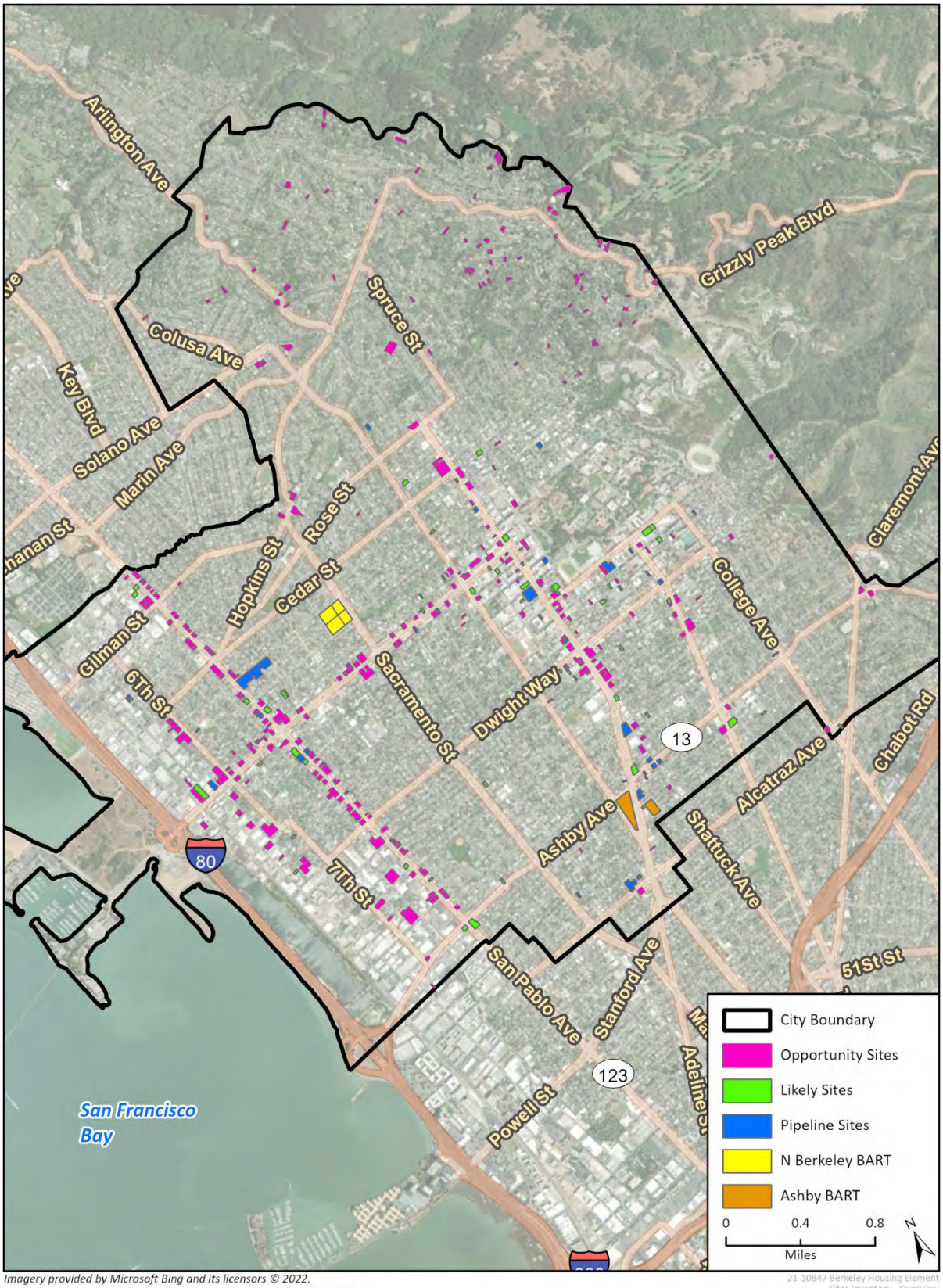
The Housing Element in and of itself does not develop housing – it is a plan. This housing plan must be supported by consistent zoning standards. The pace of development is difficult to predict, and it is unlikely that all of these units will be built, but the inventory demonstrates sufficient capacity to meet the 6th cycle RHNA including the buffer. In addition, the sites inventory does not include all potential residential development sites within the City limits and the sites may or may not be developed at the allowable densities. The placement and design of buildings on specific sites cannot be determined until the City receives an application for a specific project.

The sites identified in the HEU sites inventory analysis are generally located in areas near major transportation corridors and existing residential and commercial development. The sites identified in the HEU sites inventory do not make up all of the new housing capacity anticipated in the 6th cycle, as the HEU includes implementation programs, which are discussed below.

The Opportunity Sites include an estimated 8,053 units.

[1] A project's "base" density is the density of a project before the application of any density added to a project pursuant to the State Density Bonus Law. Per HCD Housing Element Sites Inventory Guidebook, May 2020, the analysis of "appropriate zoning" should not include residential buildout projections resulting from the implementation of a jurisdiction's inclusionary program or potential increase in density due to a density bonus.

Figure 2-4 EIR Sites Inventory Locations



Implementation Programs

The City has determined based on the sites inventory that rezoning is not needed to meet the RHNA. However, recent development activity suggests current zoning alone does not deliver the level of deed-restricted affordable housing and economic and geographic diversity that the HEU aims to achieve. Therefore, the HEU contains implementation programs and zoning policies to encourage additional housing, particularly affordable housing that supports a diversity of income levels and household types.

Middle Housing Rezoning

R-1 R-1A, R-2, R-2A and MU-R districts are anticipated to increase in density based on the State's adoption of SB 9 and a proposed HEU program to facilitate increased development in lower density districts. The City would review and amend the Zoning Code and applicable objective development standards to encourage a mix of dwelling types and sizes, to promote housing for middle- and moderate-income households and increase the availability of affordable housing in a range of sizes to reduce displacement risk for residents living in overcrowded units or experiencing high housing cost burden.

The Terner Center's SB 9 modeling indicates that the City of Berkeley could anticipate approximately 1,100 total new market-feasible units through SB 9 (Terner Center 2021). Using HCD's methodology, and to ensure that proposed zoning would not result in a reduction in allowable residential development, the EIR assumes 770 additional units distributed throughout the R-1 districts for the 2023-2031 period. Additionally, based on current development trends and anticipated zoning changes, 975 additional units are distributed throughout the R-1A, R-2, R-2A and MU-R districts, for a total of 1,745 middle housing units in the 2023-2031 period. Current locations of the R-1, R-1A, R-2, R-2A and MU-R districts are shown on Figure 2-5. For the purposes of this analysis, the R-1, R-1A, R-2, R-2A, and MU-R districts are referred to as the "middle housing rezoning districts."

Southside Zoning Modification Project

Southside Zoning Modification Project proposes amendments that could facilitate an additional 1,000 units compared to existing Southside Plan Area zoning. These proposed zoning modifications and a proposed HEU program for a local density bonus are intended to increase housing capacity and production to better meet student housing demand in the Southside through changes in a targeted number of zoning parameters: building heights, building footprints (including setbacks and lot coverage), parking, ground-floor residential use, and adjustments to the existing zoning district boundaries. Given past development trends and the limited number of opportunity sites in the Southside, this EIR assumes an additional 1,000 units in the portions of the C-T, R-S and R-SMU districts within the Southside Area for the 2023-2031 period. The location of the Southside Plan Area is shown on Figure 2-6.

Figure 2-5 Middle Housing Rezoning Districts

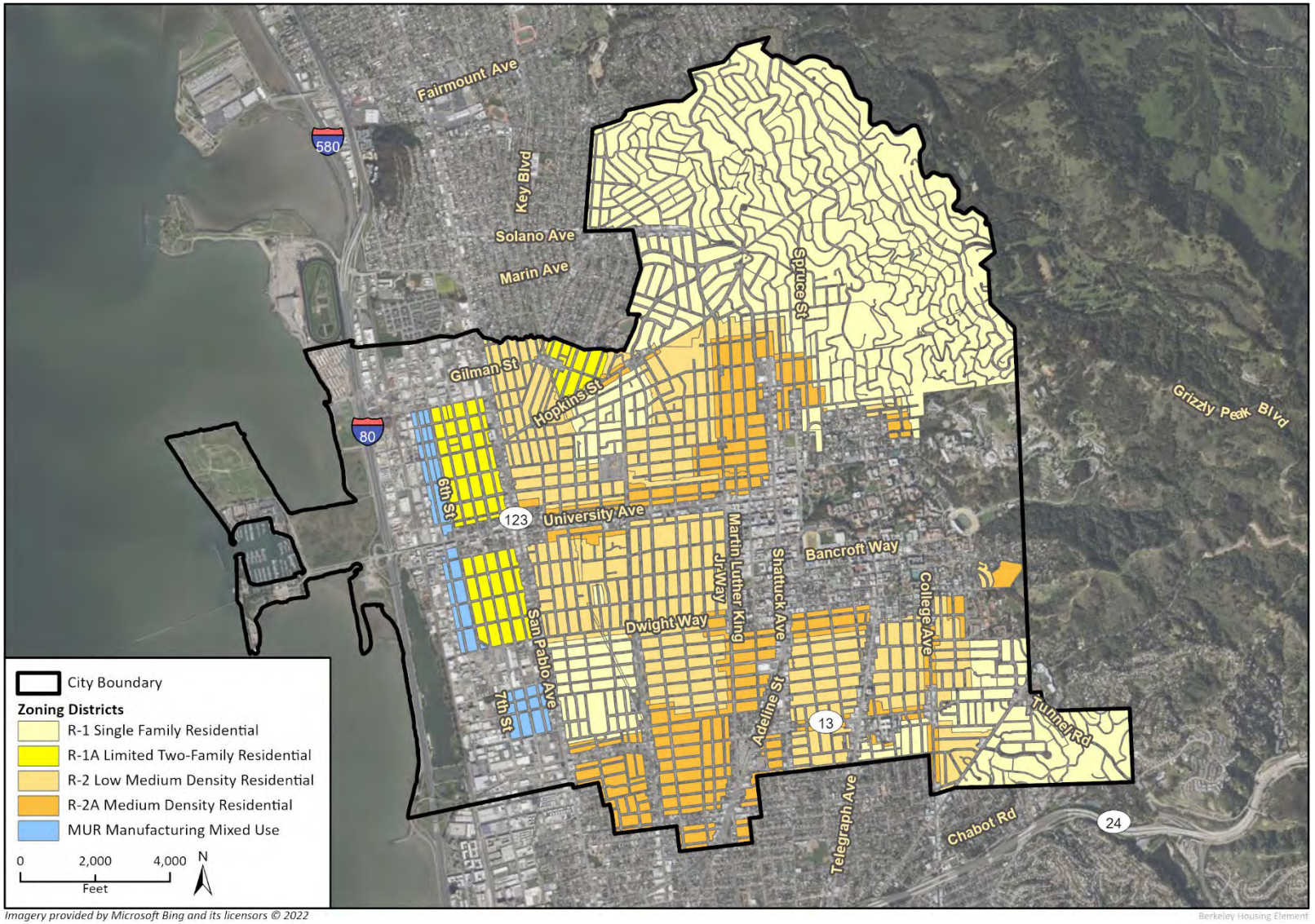


Figure 2-6 Southside Area

Imagery provided by Microsoft Bing and its licensors © 2022.

2.4.4 EIR Projected Buildout

Table 2-2 summarizes the projected buildout utilized for the analysis in this EIR. It consists of a projection based on the EIR Sites Inventory of 15,153 units, an additional 1,200 units at the Ashby and North Berkeley BART stations, as well as projections for implementation programs related to the R-1, R-1A, R-2, R-2A and MU-R zoning districts and the Southside Zoning Modification Project, totaling 2,745 units. Overall, this EIR assumes 19,098 units associated with the proposed HEU. The specific number and location of units actually developed during the Housing Element period will differ from those included in the EIR Projected Buildout, but any difference would result in fewer total units and a reduction of total physical sites for housing development.

Table 2-2 EIR Projected Buildout

	Total New Units
EIR Sites Inventory	
Likely Sites[1]	4,685
Pipeline Sites[2]	2,415
Opportunity Sites	8,053
Implementation Programs	
Middle Housing Rezoning[3]	1,745
Southside Zoning Modification Project[4]	1,000
Ashby and North Berkeley BART Stations[5]	**1,200**
Overall EIR Growth Assumption	**19,098**

Notes:

[1] Likely Sites includes an estimated 800 ADUs

[2] Pipeline Sites include 1,200 units at the Ashby and North Berkeley BART stations.

[3] This EIR assumes 770 additional units distributed throughout the R-1 districts, and 975 units in the R-1A, R-2, R-2A and MU-R, to account for SB 9 and proposed HEU policies to facilitate increased development in lower density districts.

[4] This EIR assumes an additional 1,000 units to accommodate increased height and lot coverage zoning standards in the C-T, R-S and R-SMU districts.

[5] The EIR Sites Inventory assumes 1,200 units at the Ashby and North Berkeley BART stations as part of the pipeline sites. For the purposes of this EIR, we include a total of 2,400 units at both BART stations, as analyzed in the *Ashby and North Berkeley BART Stations Zoning Standards Project EIR*.

The EIR Projected Buildout does not include units included in the University of California, Berkeley Long Range Development Plan (LRDP). The LRDP Environmental Impact Report (EIR) includes the addition of approximately 11,073 student beds and 549 employee housing units within the City of Berkeley (University of California, Berkeley 2021). As stated in Section 3, *Environmental Setting,* development associated with the LRDP is analyzed in the cumulative impact analysis throughout the EIR.

State Density Bonus

Residential projects proposed in the 2023-2031 Housing Element cycle may be eligible to utilize provisions of the State Density Bonus (California Government Code Sections 65915 – 65918). The State Density Bonus encourages the development of affordable and senior housing, including up to a 50 percent increase in project densities for most projects, depending on the amount of affordable housing provided, and up to an 80 percent increase in density for certain projects which are 100 percent affordable. The State Density Bonus also includes a package of incentives intended to help

make the development of affordable and senior housing economically feasible. These include waivers and concessions, such as reduced setback, increased height or modified open space and other requirements.

Whether an individual project will utilize the State Density Bonus, or which aspects of State Density Bonus law an individual project would utilize, is difficult to predict. However, based on recent trends, multi-family residential projects in higher density residential and commercial zoning districts are most likely to utilize the State Density Bonus. As explained above, this EIR assesses a development potential greater than the projected housing need (RHNA) of 8,934 units, including units that could be built using State Density Bonus.

Change in Housing Units from Existing Conditions

According to the California Department of Finance, as of May 2022 there were an estimated 52,921 housing units in Berkeley. As shown in Table 2-2, the HEU analyzes the development of up to 19,098 net additional units by 2031, representing an increase of approximately 36 percent in the number of housing units in the city. If all units were to be permitted, there would be a total of 72,031 housing units in Berkeley by 2031. The pace of development is difficult to predict, and it is unlikely that all of these units will be built, but the inventory demonstrates more than sufficient capacity to meet the 6th cycle RHNA.

2.4.5 Zoning Ordinance Amendments

The project would include amendments to the Berkeley Municipal Code (BMC). BMC Chapters that would likely be amended include:

- Chapter 23.108 Zoning Districts and Map, to reflect any amended or consolidated zoning districts;
- Chapter 23.202 Residential Districts, to reflect changes in allowable development capacity in the R-1, R-1A, R-2, R-2A zoning districts, and the R-S, R-SMU and R-3 zoning districts in the Southside Plan Area;
- Chapter 23.204 Commercial Districts, to reflect changes in allowable development capacity in the C-T district in the Southside Plan Area; and
- Chapter 23.206 Manufacturing Districts, to reflect changes in allowable development capacity in the MU-R district; and
- Chapter 23.304 General Development Standards, to reflect revised development capacity consistent with the changes in the zoning districts above.

2.4.6 Land Use Element Update

The Land Use Element is a guide for the City's future development. It designates the distribution and general location of land uses, such as residential, retail, industrial, open space, recreation, and public uses. The Land Use Element also addresses the permitted density and intensity of the various land use designations as reflected on the City's General Plan Land Use Map.

The Land Use Element would be amended to include new policies and modifications to land use classifications to maintain consistency with the policies and zoning amendments in the updated Housing Element.

2.5 Required Approvals

With recommendations from the Planning Commission, the City of Berkeley City Council would need to take the following discretionary actions in conjunction with the HEU:

- Certification of the EIR;
- Adoption of a resolution amending the General Plan to update the Housing Element;
- Adoption of an ordinance (two readings) amending the City's zoning ordinance and the City's zoning map, and
- Adoption of a resolution making corresponding changes to the Land Use Element and General Plan Land Use Map required to preserve internal consistency and to reflect the location and density of land uses permitted by the Housing Element and City's zoning ordinance.

The 2023-2031 Housing Element will be submitted to HCD for review and comment prior to review and recommendation by the Planning Commission, followed by action and adoption by the City Council.

2.6 California Native American Tribal Consultation

The Confederated Villages of Lisjan requested consultation pursuant to Public Resources Code Section 21080.3.1. As a result of the City's consultation with Confederated Villages of Lisjan, a mitigation measure related to Tribal Cultural Resources has been included in Section 4.15, *Tribal Cultural Resources,* of this EIR.

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3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 City of Berkeley Setting

The City of Berkeley is located in northern Alameda County in the East Bay of the San Francisco Bay Area. It is regionally accessible via Interstate 580/80, State Route 123 (SR 123), State Route 13 (SR 13) and State Route 24 (SR 24). Berkeley itself is approximately 17.2 square miles, approximately 7.2 square miles of which is underwater in the San Francisco Bay. Most of Berkeley sits on a rolling sedimentary plain that increases slightly in elevation from sea level to the bottom of Berkeley Hills. The elevation increases more sharply along the base of the Berkeley Hills up to the ridgeline/city limit, east of the Hayward Fault. The highest peak along the ridge line above Berkeley is Grizzly Peak, sitting at an elevation of 1,754 feet.

Berkeley is highly urbanized and developed with a mix of land uses, including single-family residential neighborhoods, mixed-use and multi-family residential areas, offices, retail, religious and cultural institutions, schools, hotels, parking, recreational uses, and public streets. Commercial activity is primarily distributed between Downtown, West Berkeley, the neighborhoods and commercial districts of North Shattuck, Elmwood, Solano, Shattuck/Adeline, and Telegraph Avenue, and the commercial strips along San Pablo and University Avenues. Industrial areas are primarily located in West Berkeley along the railroad and San Palo Avenue corridors. Institutional uses include the University of California and other educational institutions in its vicinity, as well as numerous arts and theater venues and several medical facilities. Residential development and accompanying commercial services and public facilities including parks, schools and libraries are located throughout Berkeley.

Currently Berkeley has an estimated population of 124,563 and 52,921 housing units (California Department of Finance 2022). Berkeley is surrounded by urbanized areas to the north and south, and primarily open space in the hillsides to the east, with the San Francisco Bay to the west.

The Mediterranean climate of the region and coastal influence produce moderate temperatures year-round, with rainfall concentrated in the winter months. Air quality in the Bay Area Air Quality Management District (BAAQMD) is in nonattainment for ozone, particulate matter equal to or less than 10 micrometers in diameter (PM_{10}), and particulate matter equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$) (BAAQMD 2017).

3.2 EIR Projected Buildout Setting

As shown in Table 2-3 in Section 2, *Project Description,* the projected buildout utilized for the analysis in this EIR consists of an EIR Sites Inventory, the Ashby and North Berkeley BART stations, as well as projections for implementation programs related to the middle housing rezoning (in the R-1, R-1A, R-2, R-2A, and MU-R districts) and the Southside Zoning Modification Project. Overall, this EIR assumes 19,098 units associated with the proposed HEU. Parcels included in the EIR Sites Inventory are shown on Figure 2-4 in Section 2, *Project Description.* These sites are located throughout

Berkeley, but mostly along existing commercial corridors such as San Pablo Avenue, University Avenue, Sixth Street, Seventh Street, Telegraph Avenue, and Shattuck Avenue as well as on the North Berkeley and Ashby BART station sites. Sites are also dispersed throughout the hillside area. The EIR Sites Inventory include undeveloped, underdeveloped, and developed parcels. This EIR also analyzes impacts associated with implementation programs that would apply in the middle housing rezoning districts and the Southside area. The locations of the middle housing rezoning districts are shown on Figure 2-5 in Section 2 and the location of the Southside area is shown on Figure 2-6 in Section 2.

3.3 Cumulative Development

In addition to the specific impacts of individual projects, the California Environmental Quality Act (CEQA) requires Environmental Impact Reports (EIRs) to consider potential cumulative impacts of the proposed project. CEQA defines "cumulative impacts" as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, noise impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis provides a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA Guidelines Section 15130 requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a summary of projections contained in an adopted planning document such as a general plan.

Some analyses including air quality, energy, greenhouse gas emissions, transportation, and population and housing, rely on much larger geographic areas such as the Bay Area region. For issues that may have regional cumulative implications, the cumulative impact analysis for this EIR is based on Plan Bay Area 2040, the Bay Area's most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Based on the forecasts in Plan Bay Area 2040, in 2040 Berkeley is estimated to have a population of 140,900, 55,400 housing units, and 121,700 jobs. Currently, Berkeley has an estimated population of 124,563, 52,921 housing units, and 116,435 jobs (see Tables 4.12-1 and 4.12-2 in Section 4.12, *Population and Housing*). Development under the proposed rezoning in conjunction with development forecasted in Plan Bay Area 2040 is accounted for in the cumulative impacts analysis.

For analyses that may have more localized or neighborhood implications (biological resources, cultural resources, noise, public services, utilities, wildfire), the cumulative impact analysis includes development proposed under the University of California, Berkeley's Long Range Development Plan (LRDP) and Housing Projects #1 and #2 as described in the Draft EIR dated March 8, 2021 (University of California, Berkeley 2021). The LRDP Update planning assumption for the campus population is 48,200 students and 19,000 faculty and staff in the 2036-37 academic year compared to 39,300 students and 15,400 faculty and staff in the 2018-19 academic year. The LRDP update also assumes 9,325,88 square feet of development on non-campus University properties throughout Berkeley (including Housing Projects #1 and #2) compared to 4,640,769 square feet of development in 2018-2019.

4 Environmental Impact Analysis

This section discusses the possible environmental effects of the proposed HEU for the specific issue areas that were identified through the scoping process as having the potential for significant effects. *CEQA Guidelines* Section 15382 provides the following guidance:

> "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the significance thresholds, which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each potential impact of the proposed HEU, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows one of the following determinations:

- **Significant and Unavoidable**. An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per *CEQA Guidelines* Section 15093.
- **Less than Significant with Mitigation Incorporated**. An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under *CEQA Guidelines* Section 15091.
- **Less than Significant**. An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if they are readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*. The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the proposed project.

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4.1 Aesthetics

This section evaluates the potential impacts related to aesthetics, including scenic vistas, scenic resources, visual character and quality, and light and glare associated with the implementation of the proposed Housing Element Update.

4.1.1 Setting

Scenic Vistas

The City of Berkeley General Plan lists significant views in the city as including views toward the Bay, the hills, and significant landmarks such as the Campanile on the University of California Berkeley campus, the Golden Gate Bridge, and Alcatraz Island. Scenic vistas within Berkeley are generally limited to the Berkeley Hills where some locations provide panoramic views southward towards downtown Oakland and westward toward the San Francisco Bay. Views of Marin County, San Francisco, and the Golden Gate Bridge are visible on the horizon to the west. There are a number of scenic viewpoints from places in the hills, especially along Grizzly Peak Boulevard and at public viewpoints on Grizzly Peak Boulevard. Other roadways in the hills may also provide scenic views, though views are generally intermittent and fleeting, and some east-west oriented streets within the flat area of Berkeley provide narrow views of the San Francisco Bay. Some east-west oriented streets within the flat area of Berkeley also provide scenic views towards the Berkeley Hills of the hillsides which are dominated by mature trees with glimpses of residential development through the trees.

Visual Character

Berkeley is a dense, urbanized area with the built environment set against the backdrop of the East Bay hills. Most of Berkeley sits on a flat plain (commonly known as the “flats”) that increases slightly in elevation from sea level near the Bay to the bottom of the Berkeley Hills. The elevation increases more sharply along the base of the Berkeley Hills. Development in the city began in the late nineteenth century. The visual character of Berkeley is characterized by a mix of land use types, including residential, commercial, institutional, office, warehouse/industrial, mixed-use, and parks and recreational spaces with mature trees throughout the city and historic buildings present in some locations. Berkeley includes a mix of building types and architectural styles.

Berkeley has a number of distinct neighborhoods. The most densely populated areas are the neighborhoods surrounding the University of California, Berkeley campus. These include the Downtown area west of campus, which is the City’s commercial core, and the Southside area south of campus, which includes student housing and the commercial corridor along Telegraph Avenue. Other neighborhoods include the Claremont District in the southeastern corner of Berkeley, the Elmwood District along College Avenue, South Berkeley, West Berkeley, North Berkeley, and the Berkeley Hills.

Light and Glare

Major sources of light in Berkeley include street lighting along major streets and highways and nighttime lighting of residences, commercial buildings, and industrial buildings. Typically, light from residences are screened by trees or other structures. More significant sources of light include

locations where nighttime events occur and large amounts of lighting is needed such as at sports fields, though this lighting is typically temporary and only when events occur.

4.1.2 Regulatory Setting

a. State Regulations

California Scenic Highway Program

The California Department of Transportation manages the State Scenic Highway Program. The program was created in 1963 with the goal of protecting the aesthetic significance of scenic highways throughout the state. According to the State Streets and Highways Code (Sections 260 through 263), a highway may be designated as scenic based on its scenic quality, how much of the natural landscape can be seen by travelers, and the extent to which development intrudes on the traveler's enjoyment of the view. The California Scenic Highway Program's Scenic Highway System List identifies scenic highways that are either eligible for designation or have already been designated as such within Alameda County, but none of these occur within Berkeley (California Department of Transportation [Caltrans] 2022). Eligible and officially designated state scenic highways in the vicinity of Berkeley include:

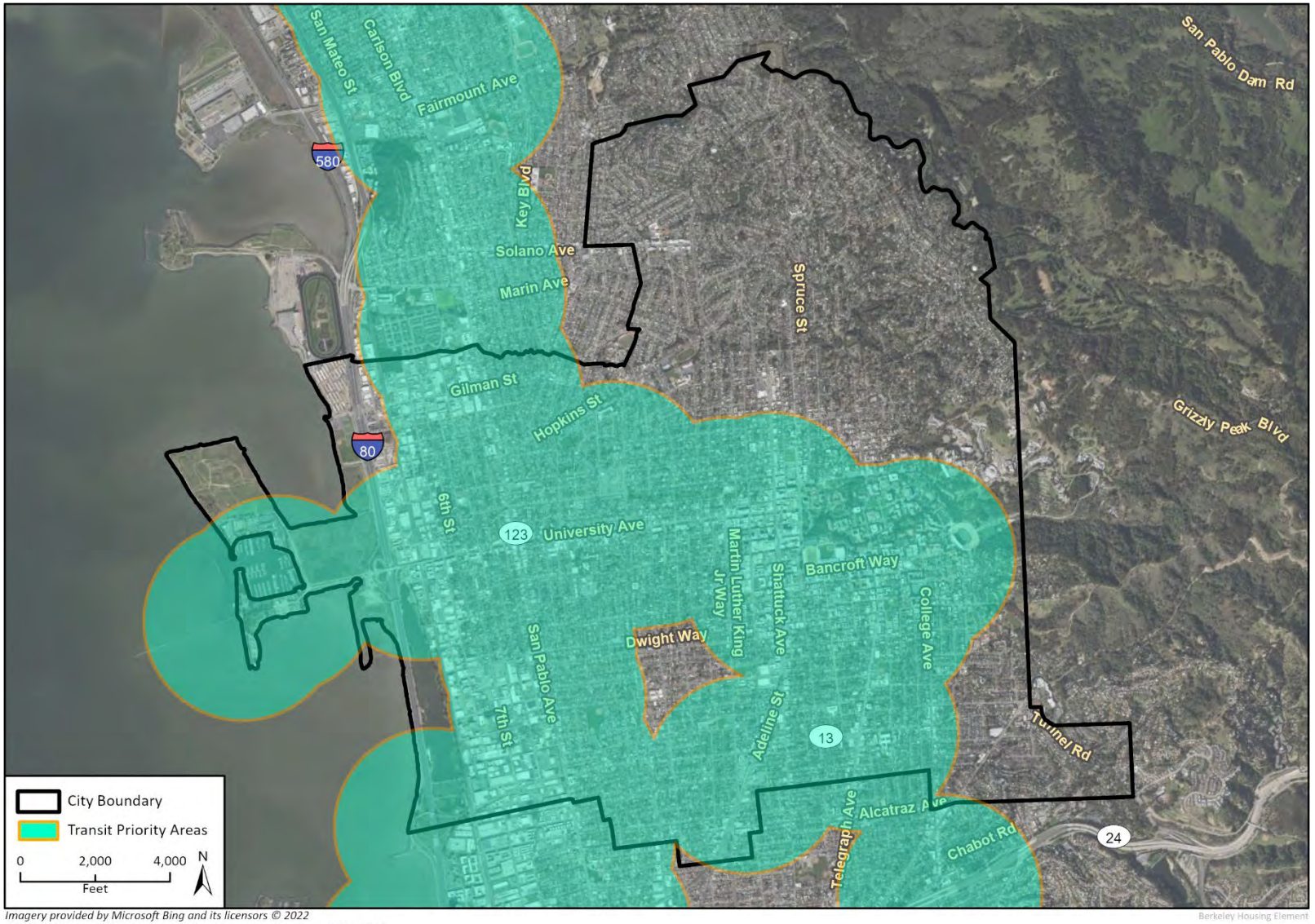
- **State Route (SR) 13 from SR 24 to I-580:** This route is eligible for listing and is located approximately 0.5 miles south of the closest point to the city limits.
- **I-80 from I-280 near First Street in San Francisco to SR 61 in Oakland**. This route is eligible for listing and is located approximately 1.5 miles south of the closest point to the city limits.
- **I-580 from San Leandro city limits to I-980 in Oakland**. This route is officially designated and is located approximately 1.6 miles south of the closest point to the city limits.
- **SR 24 from the eastern portal of the Caldecott Tunnel to I-680 near Walnut Creek.** This route is officially designated and is located approximately 1.5 miles east of the closest point to the city limits.

Senate Bill 743

Senate Bill 743 (California Public Resources Code Section 21099) passed in 2013, made changes to the CEQA for projects located in transit-oriented development areas. Among these changes are that a project's aesthetics impacts are no longer considered significant impacts on the environment if the project is a residential, mixed-use residential, or employment center project and if the project is located on an infill site within a transit priority area (TPA). Pursuant to Section 21099 of the California Public Resources Code, a "transit priority area" is defined in as an area within 0.5 mile of an existing or planned major transit stop. A "major transit stop" is defined in Section 21064.3 of the California Public Resources Code as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

Berkeley includes areas that are within a TPA including the downtown area, Southside area, and North Berkeley, and areas along major commercial corridors such as San Pablo Avenue, Shattuck Avenue, and Telegraph Avenue. Areas in Berkeley within a TPA are shown on Figure 4.1-1.

Figure 4.1-1 Transit Priority Areas in Berkeley



b. Local Regulations

City of Berkeley General Plan

The overall goal of the City's Urban Design and Preservation Element is to "Protect and enhance Berkeley's special built environment and cultural heritage by carefully conserving the numerous existing good buildings, areas, and other features and ensuring that new elements are so located and designed as to respect and strengthen the whole." Goals and policies related to scenic views and visual character include:

Policy UD-5: Architectural Features. Encourage, and where appropriate require, retention of ornaments and other architecturally interesting features in the course of seismic retrofit and other rehabilitation work.

Policy UD-16: Context. The design and scale of new or remodeled buildings should respect the built environment in the area, particularly where the character of the built environment is largely defined by an aggregation of historically and architecturally significant buildings.

Policy UD-17: Design Elements. In relating a new design to the surrounding area, the factors to consider should include height, massing, materials, color, and detailing or ornament.

Policy UD-18: Contrast and Cohesiveness. The overall urban experience should contain variety and stimulating contrasts achieved largely through contrast between different areas each of which is visually cohesive.

Policy UD-19: Visually Heterogeneous Areas. In areas that are now visually heterogeneous, a project should be responsive to the best design elements of the area or neighborhood.

Policy UD-20: Alterations. Alterations to a worthwhile building should be compatible with the building's original architectural character

Policy UD-22: Regulating New Construction and Alterations. Regulate new construction and alterations to ensure that they are individually well-designed and that they are so designed and located as to duly respect and where possible enhance the existing built environment.

Policy UD-23: Design Review. Ensure that the design review process ensures excellence in design and that new construction and alterations to existing buildings are compatible with the best elements of the character of the area.

Policy UD-24: Area Character. Regulate new construction and alterations to ensure that they are truly compatible with and, where feasible, reinforce the desirable design characteristics of the particular area they are in.

Policy UD-25: Facades and Exterior Features. Buildings should have significant exterior features and facades that stimulate the eye and invite interested perusal.

Policy UD-26: Pedestrian-Friendly Design. Architecture and site design should give special emphasis to enjoyment by, and convenience and safety for, pedestrians.

Policy UD-27: Relation to Sidewalk. Projects generally should be designed to orient the main entrance toward the public sidewalk, not a parking lot, and avoid confronting the sidewalk with a large windowless wall or tall solid fence.

Policy UD-28: Commercial Frontage. Commercial buildings on streets with public transit generally should have no appreciable setback from that street's sidewalk, except in the case of occasional plazas or sitting areas that enhance the area's pedestrian environment.

Policy UD-29: Signs. Signs should contribute aesthetically to, rather than detract from, the site they are on and the general streetscape.

Policy UD-31: **Views.** Construction should avoid blocking significant views, especially ones toward the Bay, the hills, and significant landmarks such as the Campanile, Golden Gate Bridge, and Alcatraz Island. Whenever possible, new buildings should enhance a vista or punctuate or clarify the urban pattern.

The Land Use Element of the General Plan also contains the following policies related to aesthetics.

Policy LU-3: Infill Development. Encourage infill development that is architecturally and environmentally sensitive, embodies principles of sustainable planning and construction, and is compatible with neighboring land uses and architectural design and scale.

Policy LU-4: Discretionary Review. Preserve and enhance the aesthetic, environmental, economic, and social character of Berkeley through careful land use and design review decisions.

City of Berkeley Municipal Code

Chapter 23 of the Berkeley Municipal Code (BMC) includes the City's Zoning Ordinance and regulates height, setbacks, and lot coverage for each of the City's zoning district. BMC Chapter 23 also contains several regulations pertaining to lighting and glare including:

- Section 23.304.100, Site Features in Residential Districts, requires that all exterior lighting shall be shielded and directed downward and away from lot lines to prevent excessive glare beyond the property on which the light is located. This section also states that lights on motion sensors may not be triggered by movement or activity located off the property on which the light is located.
- Section 23.322.110, Parking Lots in Residential Districts, states that Lighting fixtures must be oriented to direct the light away from adjacent lots.
- Section 23.304.130, Non-Residential Districts Abutting Residential Districts, requires that exterior lighting be shielded in a manner which avoids direct glare onto abutting lots in a Residential District.

4.1.3 Impact Analysis

a. Methodology and Significance Thresholds

The following thresholds of significance are based on *CEQA Guidelines* Appendix G. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would do any of the following:

1. Have a substantial adverse effect on a scenic vista;
2. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

3. In non-urbanized areas, substantially degrade existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or,
4. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

As described in the Section 4.1.2, Regulatory Setting, under Senate Bill 743 aesthetic impacts associated with residential projects in a TPA cannot be considered significant impacts on the environment. The proposed HEU provides a vision and planning framework to encourage the development of housing in accordance with State goals and to meet the RHNA. The proposed project identifies inventory sites where future housing development could occur and also assumes additional development at the North Berkeley and Ashby BART stations, in the R-1, R-1A, R-2, R-2A, and MU-R districts (middle housing rezoning districts), and in the Southside. Many of the inventory sites, the middle housing rezoning district sites, the BART station sites, and the Southside are within TPA as shown on Figure 4.1-1. These sites are either within 0.5 miles of a BART station or are served by multiple bus lines.

Because implementation of the proposed rezoning would facilitate residential development on infill sites within a TPA, aesthetics impacts of development of those locations within a TPA may not be considered significant impacts on the environment. Therefore, this analysis focuses on portions of Berkeley which are not within a TPA. This includes portions of North Berkeley and neighborhoods in the Berkeley Hills.

Pursuant to CEQA Statute Section 21099.d, "aesthetic impacts do not include impacts on historical or cultural resources." This analysis is included in Section 4.4, *Cultural Resources,* of this EIR. In addition, Section 4.10, *Land Use and Planning*, includes a discussion of the proposed rezoning's consistency with City plans and goals, including those applicable to design and aesthetics.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project have a substantial adverse effect on a scenic vista?

Impact AES-1 IMPLEMENTATION OF THE PROPOSED HEU WOULD ALTER THE DEVELOPMENT PATTERN OF THE CITY SUCH THAT SCENIC VIEWS OF AND FROM PUBLIC VIEWPOINTS COULD BE ADVERSELY AFFECTED. POTENTIAL FUTURE NEW DEVELOPMENT THROUGHOUT THE CITY COULD BLOCK VIEWS OF A SCENIC VISTA FROM SOME PUBLIC VIEWPOINTS. HOWEVER, THIS WOULD OCCUR ON INDIVIDUAL SITES AND WOULD BE LIMITED. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

As stated above under Methodology and Significance Thresholds and shown on Figure 4.1-1, because most of the sites of future development are within a TPA and aesthetic impacts in those areas cannot be considered significant impacts, this analysis focuses on the impacts associated with development in areas within the city that are not in a TPA. The proposed HEU would involve increases in allowed height for building in the Southside; however, the entirely of the Southside area is within a TPA. Therefore, potential impacts associated with the height increase in the Southside would be less than significant.

In addition, for the purposes of this analysis, a scenic vista is a view from a public place (roadway, designated scenic viewing spot, etc.) that is expansive and considered important by a jurisdiction or a community. It can be obtained from an elevated position (such as from the top of a hillside) or it can be seen from a roadway with a longer-range view of the landscape. An adverse effect would

occur if a proposed project would alter, block, or otherwise damage a scenic vista upon implementation.

Scenic vistas in Berkeley are available from the Berkeley Hills towards the flat part of the city and towards the San Francisco Bay. Scenic views are also available from the western part of the city towards the hills. City of Berkeley General Plan Policy US-31 lists significant views in the city as including views toward the Bay, the hills, and significant landmarks such as the Campanile on the University of California Berkeley campus, the Golden Gate Bridge, and Alcatraz Island.

Berkeley includes views from public streets in the Berkeley Hills towards the San Francisco Bay across the urbanized landscape of Berkeley to the west. Most of the development that would be facilitated by the proposed HEU would occur in concentrations along already developed commercial corridors such as San Pablo Avenue, University Avenue, Shattuck Avenue, and Telegraph Avenue. These areas area urbanized with development of varying heights. Additional development along these coordinators would not substantially alter or block views of the landscape and towards the Bay from public viewpoints in the hills, as building heights would be generally similar to existing and ongoing development on these corridors and the viewshed from the hills would remain available over such buildings. The proposed HEU would also involve development at scattered sites throughout the hills and in the R-1 district. However, development of these individual sites would also not substantially block public views from roadways in these areas as new buildings would be of a generally similar height as existing development and many of the views that would be affected are already fully or intermittently impeded by mature trees and buildings.

Views of the Bay to the west and of the hillsides to the east are also available from limited locations within the flat area of the city, especially along east-west streets. As stated previously, most of development under the HEU would be concentrated along commercial corridors. For the north-south oriented roadways, such as San Pablo Road, Shattuck Avenue, and Telegraph Avenue, views of the hills to the east and Bay to the west are already largely blocked by existing development, overhead transmission lines, and mature trees on private properties and beside roadways. For the east-west oriented roadways, such as University Avenue, the potential increase of development on either side of the roadway would not substantially block views that are currently available via the street corridors. Overall, in the limited areas where views are available from public roadways, these views are already blocked by existing urban development and an increase in that development would not directly block those views.

Overall, development associated with the proposed HEU would not substantially alter or block scenic vistas. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 2:	Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact AES-2 THERE ARE NO DESIGNATED OR ELIGIBLE SCENIC HIGHWAYS IN BERKELEY OR WITH SUBSTANTIAL VIEWS OF BERKELEY. IMPLEMENTATION OF THE PROPOSED HEU NOT DAMAGE SCENIC RESOURCES VISIBLE FROM A SCENIC HIGHWAY. NO IMPACT WOULD OCCUR.

The closest designated State Scenic Highway to the city is I-580 in Oakland approximately 1.6 miles from the city limits. The closest eligible State Scenic Highway is SR 13 located approximately 0.5 miles from the city limits. No parts of the city are visible from these locations. Future development under the proposed HEU would not damage scenic resources in or within clear view of this State-designated Scenic Highway. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 3:	Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact AES-3 BERKELEY IS URBANIZED AND FUTURE DEVELOPMENT UNDER THE PROPOSED HEU WOULD NOT CONFLICT WITH APPLICABLE ZONING AND OTHER REGULATIONS GOVERNING SCENIC QUALITY. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Berkeley can be categorized as an urban area as it is largely built out with a mix of residential neighborhoods, commercial areas and corridors, and industrial areas, and has a population of more than 100,000 residents (CEQA Statute Section 21071). The proposed HEU would provide a framework for introducing new housing at all levels of affordability that is within access to transit, jobs, services, and open spaces. The proposed project would meet the RHNA without rezoning for the inventory sites shown in Figure 2-4 in Section 2, *Project Description.* However, the proposed HEU would include zoning ordinance and zoning map amendments to increase the density of the middle housing rezoning districts to facilitate increased development in lower density residential districts. The project would also include zoning map and height amendments in the Southside Plan Area to change the following zoning parameters: building heights, building footprints (including setbacks and lot coverage), parking, ground-floor residential use, and adjustments to the existing zoning district boundaries. Overall, the proposed HEU would involve zoning changes, but future development under the program would not conflict with applicable zoning provisions regulating scenic quality such as height, lot coverage and setback requirements, as well as applicable design standards in effect at that time.

The proposed project would facilitate infill development on underutilized sites in order to increase density to accommodate a higher number of residents. Development facilitated by the project would be infill development and may enhance the visual quality of the affected sites in some cases by filling in vacant and underdeveloped visual areas with new development. Further, future development would be subject to design review as part of the project approval process. Individual future projects would be subject to the City's existing general development standards (BMC Chapter 23.304) to ensure that buildings are compatible with neighboring land uses and architectural design

and scale. Additionally, future development with two or more units would be required to comply with the City's proposed set of objective development standards which are anticipated to be adopted in Spring 2023. The objective standards will be tailored to streamline approval of housing projects under the HEU by providing a clear and consistent set of review rules and processes. Examples of standards that the City will define include building height, set back distances, and units allowed per acre. This would ensure that future development is compatible with the character and scale of Berkeley according to the City's standards (City of Berkeley 2022). There are no other applicable zoning regulations or other City regulations governing scenic quality.

Although the proposed HEU would increase building heights in the Southside, the Southside is within a TPA and therefore, as described above, aesthetic impacts would be less than significant.

Overall, for areas of the city not within a TPA, the proposed HEU would not conflict with regulations governing scenic quality. The impact would be less than significant.

Mitigation Measures

The impact would be less than significant. No mitigation measures are required.

Threshold:	Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Impact AES-4 DEVELOPMENT FACILITATED BY THE PROPOSED HEU WOULD CREATE NEW SOURCES OF LIGHT OR GLARE THAT COULD ADVERSELY AFFECT DAYTIME OR NIGHTTIME VIEWS IN THE AREA. HOWEVER, BERKELEY IS ALREADY LARGELY BUILT OUT WITH SOURCES OF LIGHT AND GLARE THROUGHOUT THE CITY AND DEVELOPMENT WOULD NOT SUBSTANTIALLY ADD TO EXISTING LIGHT AND GLARE. WITH COMPLIANCE WITH EXISTING REGULATIONS, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Berkeley is an urbanized city with commensurate level of light and glare. Development facilitated by the project would, in large part, occur as infill on already developed parcels or on vacant or underutilized sites within existing neighborhoods. New lighting could occur on buildings for safety and in pedestrian walkways, and light could be emitted from interior sources through windows on upper stories of tall buildings. The main source of glare would likely be from the sun shining on reflective or light-colored building materials and glazing.

Development facilitated by the proposed HEU would occur as redevelopment of existing built sites or infill development of unused parcels between existing built sites. When facilities such as parking lots are replaced with buildings, these replacements may reduce nighttime sources of light, because parking lots are often more brightly lit during the nighttime than most buildings. Development of underutilized or vacant parcels may result in new light sources, but they would likely be congruous with nearby light sources (e.g., lighting from residential windows). Furthermore, as the development facilitated by the project would be residential units, light from windows would be mostly filtered or obscured by window coverings. Light spillover from exterior residential lighting is typically blocked by adjacent structures or trees.

Further, Berkeley's Municipal Code has requirements to reduce the potential for new or substantial sources of light pollution in Berkeley. BMC Sections 23.304.100 and 23.304.130 require that exterior lighting be shielded to avoid light spillover onto adjacent residential properties.

Overall, new residential development would be in existing residential neighborhoods or along commercial corridors where sources of light and glare already exist. Development under the proposed HEU would not create new sources of substantial light or glare that would adversely affect daytime or nighttime views in the area and the impact therefore is less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

c. Cumulative Impacts

Development in Berkeley facilitated by the proposed HEU in conjunction with buildout under the University of California, Berkeley's LRDP could result in impacts to visual resources and aesthetic quality, although visual quality could improve with redevelopment of aging buildings and vacant sites. Implementation of the project would encourage increased housing development citywide, mainly in areas already developed with other uses. The Southside Plan area, the Ashby and North Berkeley BART stations, and most sites in the EIR Sites Inventory, would be within TPAs and therefore would not result in significant aesthetics impacts. Future projects in Berkeley that are not within TPAs may undergo analysis for impacts to aesthetics and visual resources. Potential impacts could be addressed by design guidelines, regulations, policies, and project-specific measures, thereby limiting impacts on existing visual resources and enhancing the visual quality of areas where development occurs. Consequently, development facilitated by the proposed HEU would not result in significant cumulative environmental impacts in conflict with requirements for preserving scenic vistas, scenic resources in State- or locally designated highways or drives, visual quality, and for limiting the effects of light and glare. Therefore, project implementation would not result in a cumulatively considerable contribution to impact on aesthetics.

4.2 Air Quality

This section analyzes the effects of the proposed HEU on air quality emissions and the associated impacts. This section analyzes both temporary air quality impacts relating to construction activity and possible long-term air quality impacts associated with buildout of the proposed project. The analysis herein is based partially on the vehicle miles traveled (VMT) data provided by Kittelson & Associates (2022).

4.2.1 Setting

a. Existing Air Quality Setting

Local Climate and Meteorology

Berkeley is located in the "Northern Alameda and Western Contra Costa Counties" climatological subregion of the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). This subregion is bordered on the east by the Oakland-Berkeley Hills and on the west by the San Francisco Bay (Bay). Marine air traveling through the Golden Gate is a dominant weather factor, and the Oakland-Berkeley Hills cause the westerly flow of air to split off the north and south of Oakland, which causes diminishing wind speeds. Air temperatures are moderated by the subregion's proximity to marine air. During the summer months, average maximum temperatures are in the mid-70 degrees Fahrenheit (°F), and during the winter months, average maximum temperatures are in the mid- to high 50°F (BAAQMD 2017a).

Air quality in the SFBAAB is affected by the emission sources located in the region and by natural factors. Air pollutant emissions in the SFBAAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are distributed widely and include those such as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be operated legally on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when high winds suspend fine dust particles.

Atmospheric conditions such as wind speed and direction, air temperature gradients, and local and regional topography influence air quality. Complex topographical features, the location of the Pacific high-pressure system, and varying circulation patterns associated with temperature gradients affect the speed and direction of local winds, which play a major role in the dispersion of pollutants. Strong winds can carry pollutants far from their source, but a lack of wind will allow pollutants to concentrate in an area. Air dispersion also affects pollutant concentrations. As altitude increases, air temperature normally decreases. However, inversions can occur when colder air becomes trapped below warmer air, restricting the air masses' ability to mix. Pollutants also become trapped, which promotes the production of secondary pollutants. Subsidence inversions, which can occur during the summer in the SFBAAB, result from high-pressure cells that cause the local air mass to sink, compress, and become warmer than the air closer to the earth. Pollutants accumulate as this stagnating air mass remains in place for one or more days (BAAQMD 2017a).

The air pollution potential in Northern Alameda and Western Contra Costa Counties climatological subregion is lowest in areas closest to the Bay due to good ventilation and lower influxes of pollutants from upwind sources. Air pollution potential in Berkeley is marginally higher than that of communities directly east of the Golden Gate because of the lower frequency of strong winds. This subregion contains a variety of industrial air pollution sources, some of which are close to residential areas, as well as congested major freeways, which are a major source of motor vehicle emissions (BAAQMD 2017a).

Air Quality Pollutants of Primary Concern

The federal and State clean air acts mandate the control and reduction of certain air pollutants. Under these laws, USEPA and CARB have established ambient air quality standards for certain criteria pollutants. Ambient air pollutant concentrations are affected by the rates and distributions of corresponding air pollutant emissions, and by the climate and topographic influences discussed above. Proximity to major sources is the primary determinant of concentrations of non-reactive pollutants, such as CO and suspended particulate matter. Ambient CO levels usually follow the spatial and temporal distributions of vehicular traffic. A discussion of each primary criterion pollutant is provided below.

Ozone

Ozone is produced by a photochemical reaction (i.e., triggered by sunlight) between nitrogen oxides (NO_X) and reactive organic gases (ROG).[1] NO_X is formed during the combustion of fuels, while ROG is formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

CO is an odorless, colorless gas and causes health problems such as fatigue, headache, confusion, and dizziness. The incomplete combustion of petroleum fuels by on-road vehicles and at power plants is a major cause of CO, which is also produced during the winter from wood stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the State CO standards are associated generally with major roadway intersections during peak-hour traffic conditions.

Localized CO “hotspots” can occur at intersections with heavy peak-hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high that the local CO concentration exceeds the NAAQS of 35.0 ppm or the CAAQS of 20.0 ppm.

[1] CARB defines VOC and ROG similarly as, “any compound of carbon excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions (CARB 2009). For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions and the term ROG is used in this report.[1] CARB defines VOC and ROG similarly as, “any compound of carbon excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions (CARB 2009). For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions and the term ROG is used in this report.

Nitrogen Dioxide

NO_2 is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. Nitric oxide is the principal form of nitrogen oxide produced by combustion, but nitric oxide reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. Nitrogen dioxide is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis may occur in young children at concentrations below 0.3 ppm. Nitrogen dioxide absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

Suspended Particulate Matter

PM_{10} is particulate matter measuring no more than 10 microns in diameter; $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates, and sulfates. Both PM_{10} and $PM_{2.5}$ are by-products of fuel combustion and wind erosion of soil and unpaved roads and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates (those 2.5 microns and below) can be very different.

The small particulates generally come from windblown dust and dust kicked up by mobile sources. The fine particulates are generally associated with combustion processes, and form in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Lead

Lead is a metal found in the environment and in manufacturing products. Historically, the major sources of lead emissions have been mobile and industrial sources. In the early 1970s, the USEPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The USEPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the USEPA's regulatory efforts to remove lead from gasoline, atmospheric lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Because of phasing out leaded gasoline, metal processing is now the primary source of lead emissions. The highest level of lead in the air is found generally near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers.

Toxic Air Contaminants

The California Health and Safety Code defines a toxic air contaminant (TAC) as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." Most of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being diesel particulate matter (DPM) from diesel-fueled engines. According to CARB, diesel engine emissions are believed to be

responsible for about 70 percent of California's estimated known cancer risk attributable to TACs and they make up about 8 percent of outdoor $PM_{2.5}$ (CARB 2021a).

Air Quality Standards

The federal and State governments have established ambient air quality standards for the protection of public health. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the State equivalent in the California Environmental Protection Agency (CalEPA). The BAAQMD provides local management of air quality in the City. CARB has established air quality standards and is responsible for the control of mobile emission sources, while the BAAQMD is responsible for enforcing standards and regulating stationary sources.

The USEPA has set primary National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM_{10}), fine particulate matter with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$), and lead. Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition, California has established health-based ambient air quality standards (CAAQS) for these and other pollutants, some of which are more stringent than the federal standards. Table 4.2-1 lists the current federal and State standards for regulated pollutants.

As a local air quality management agency, the BAAQMD must monitor air pollutant levels to ensure that State and federal air quality standards are met and, if they are not met, to develop strategies to meet them. Depending on whether standards are met or exceeded, a local air basin is classified as in "attainment" or "non-attainment." The SFBAAB is designated non-attainment for the federal standards for ozone and $PM_{2.5}$ and in non-attainment for the State standard for ozone, $PM_{2.5}$, and PM_{10}.

Table 4.2-1 Federal and State Ambient Air Quality Standards

		California Standards		National Standards	
Pollutant	Averaging Time	Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8 Hour	0.070 ppm	N	0.070 ppm	N
	1 Hour	0.09 ppm	N	-	-
Carbon Monoxide	8 Hour	9.0 ppm	A	9 ppm	A
	1 Hour	20 ppm	A	35 ppm	A
Nitrogen Dioxide	1 Hour	0.18 ppm	A	0.100 ppm	U
	Annual Arithmetic Mean	0.030 ppm	-	0.053 ppm	A
Sulfur Dioxide	24 Hour	0.04 ppm	A	0.14 ppm	A
	1 Hour	0.25 ppm	A	0.075 ppm	A
	Annual Arithmetic Mean	-	-	0.030 ppm	A
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	N	-	-
	24 Hour	50 µg/m^3	N	150 µg/m^3	U
Particulate Matter - Fine ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	N	12 µg/m^3	U/A
	24 Hour	-	-	35 µg/m^3	N
Sulfates	24 Hour	25 µg/m^3	A	-	-

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Lead	Calendar Quarter	-	-	1.5 µg/m^3	A
	Rolling 3 Month Average	-	-	0.15 µg/m^3	-
	30 Day Average	1.5 µg/m^3	-	-	A
Hydrogen Sulfide	1 Hour	0.03 ppm	U	-	-
Vinyl Chloride (chloroethene)	24 Hour	0.010 ppm	No information available	-	-
Visibility Reducing particles	8 Hour (10:00 to 18:00 PST)	-	U	-	-

A=Attainment N=Nonattainment U=Unclassified; mg/m^3=milligrams per cubic meter ppm=parts per million µg/m^3=micrograms per cubic meter

Source: BAAQMD 2017a, http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status

Current Air Quality

CARB and the U.S. EPA established ambient air quality standards for major pollutants, including ozone, CO, NO_2, SO_2, Pb, and PM_{10} and $PM_{2.5}$. Standards have been set at levels intended to be protective of public health. California standards are more restrictive than federal standards for each of these pollutants except for lead and the eight-hour average for CO.

The closest air quality monitoring station to the City is the Berkeley-Aquatic Park station at 1 Bolivar Drive. The Berkeley-Aquatic Park station monitors ozone, CO, NO_2, and $PM_{2.5}$. The San Pablo-Rumrill Boulevard station was used for PM_{10} measurements. Table 4.2-2 indicates the number of days that each of the air quality standards have been exceeded at the stations during the monitoring period from 2018 through 2020. $PM_{2.5}$ exceeded federal thresholds 13 times in 2018 and 7 times in 2020. PM_{10} exceeded state thresholds twice in 2018 and once in 2020, and also exceeded federal thresholds once in 2018. No other thresholds were exceeded in the years 2018 through 2020.

Table 4.2-2 Ambient Air Quality at Nearest Monitoring Stations

Pollutant	2018	2019	2020
Berkeley-Aquatic Park Station			
8-Hour Ozone (ppm), maximum	0.049	0.042	0.043
Number of days of state exceedances (>0.070 ppm)	0	0	0
Number of days of federal exceedances (>0.070 ppm)	0	0	0
1-hour Ozone (ppm), maximum	0.059	0.050	0.058
Number of days of state exceedances (>0.09 ppm)	0	0	0
Number of days of federal exceedances (>0.112 ppm)	0	0	0
Nitrogen dioxide (ppb), 1-hour maximum	72.6	49.8	46.9
Number of days of state exceedances (>180 ppb)	0	0	0
Number of days of federal exceedances (>100 ppb)	0	0	0
Particulate matter <2.5 microns, µg/m^3, 24-hour maximum	165.5	28.8	158.2
Number of days above federal standard (>35 µg/m^3)	13	0	7

Pollutant	2018	2019	2020
San Pablo- Rumrill Boulevard Station			
Particulate matter <10 microns, μg/m^3, 24-hour maximum	201	34.7	112.7
Number of days of state exceedances (>50 μg/m^3)	2	0	1
Number of days of federal exceedances (>150 μg/m^3)	1	0	0

ppm = parts per million

μg/m^3 = micrograms per cubic meter

Source: CARB 2021b

Sensitive Receptors

Ambient air quality standards have been established to represent the levels of air quality considered sufficient to protect public health and welfare, with a margin of safety. They are designed to protect that segment of the public most susceptible to the effects of air pollutants and subsequent respiratory distress, such as children under 14, the elderly over 65, persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases. The following locations contain sensitive receptors within Berkeley:

- Residences throughout the city
- Childcare centers, preschools, and K-12 schools
- Hospitals such as the Alta Bates Summit Medical Center and Sutter East Bay Medical Foundation
- Senior centers such as the North Berkeley Senior Center and the Judge Henry Ramsey Jr. South Berkeley Senior Center (City of Berkeley 2022)

4.2.2 Regulatory Setting

a. Federal Regulations

Federal Clean Air Act

The USEPA is charged with implementing national air quality programs. USEPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), passed in 1963 by the U.S. Congress and amended several times. The 1970 federal CAA amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including non-attainment requirements for areas not meeting NAAQS and the Prevention of Significant Deterioration program. The 1990 federal CAA amendments represent the latest in a series of federal efforts to regulate air quality in the United States.

National Ambient Air Quality Standards

The federal CAA requires USEPA to establish primary and secondary NAAQS for several criteria air pollutants. The air pollutants for which standards have been established are considered the most prevalent air pollutants known to be hazardous to human health. NAAQS have been established for ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and Pb. Table 4.2-1 under *Air Quality Standards* lists the current federal standards for regulated pollutants.

b. State Regulations

California Clean Air Act

The California CAA, signed into law in 1988, requires all areas of the State to achieve and maintain the CAAQS by the earliest practical date. CARB is the State air pollution control agency and is a part of CalEPA. CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California, and for implementing the requirements of the California CAA. CARB overseas local district compliance with federal and California laws, approves local air quality plans, submits the State implementation plans to the USEPA, monitors air quality, determines and updates area designations and maps, and sets emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

California Ambient Air Quality Standards

The California CAA requires CARB to establish ambient air quality standards for California, known as CAAQS. Similar to the NAAQS, CAAQS have been established for criteria pollutants and standards are established for vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates. In general, the CAAQS are more stringent than the NAAQS on criteria pollutants. Table 4.2-1 under *Air Quality Standards* lists the current State standards for regulated pollutants. The California CAA requires all local air districts to endeavor to achieve and maintain the CAAQS by the earliest practical date. The California CAA specifies that local air districts focus attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources.

CARB released a technical advisory on reducing air pollution near high-volume roadways to clarify the 500-foot recommendation from 2005 due to the increased focus on and benefits from infill development, which can often occur within 500 feet of a major roadway (CARB 2017). As described in the technical advisory, California has implemented various measures to improve air quality and reduce exposure to traffic emissions. These include the Diesel Risk Reduction Plan, which aims to reduce particulate matter emissions from diesel vehicles. The continued electrification of California's vehicle fleet would also reduce $PM_{2.5}$ levels, and ongoing efforts to reduce emissions from cars and trucks and to move vehicles towards "zero emission" alternatives will continue to drive down traffic pollution (CARB 2017).

As shown in Table 4.2-2, the nearest monitoring stations to the housing inventory sites have shown the area to have relatively clean air. $PM_{2.5}$ exceeded federal thresholds 13 times in 2018 and 7 times in 2020, while PM_{10} exceeded state thresholds twice in 2018 and once in 2020, and also exceeded federal thresholds once in 2018.

c. Regional and Local Regulations

Bay Area Air Quality Management District

The BAAQMD is the agency primarily responsible for assuring national and State ambient air quality standards are attained and maintained in the SFBAAB. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other

activities. The BAAQMD has jurisdiction over much of the nine-county Bay Area, including the including the City of Berkeley.

The BAAQMD adopted the 2017 Clean Air Plan as an update to the 2010 Clean Air Plan. The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate, which would apply to SFBAAB. To fulfill State ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—ROG and NO_X—and reduce transport of ozone and its precursors to neighboring air basins, such as stationary-source control measures to be implemented through the BAAQMD regulations; mobile-source control measures to be implemented through incentive programs and other activities; and transportation control measures to be implemented through transportation programs in cooperation with the Metropolitan Transportation Commission (MTC), local governments, transit agencies, and others. In addition, the 2017 Clean Air Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter and toxic air contaminants. The 2017 Clean Air Plan also represents the Bay Area's most recent triennial assessment of the region's strategy to attain the state 1-hour ozone standard (BAAQMD 2017b).

City of Berkeley General Plan

The City of Berkeley General Plan Environmental Management and Transportation elements contain the following policies specific to air quality (City of Berkeley 2003):

Policy EM-18 Regional Air Quality Action. Continue working with the BAAQMD and other regional agencies to:

1. Improve air quality through pollution prevention methods.
2. Ensure enforcement of air emission standards.
3. Reduce local and regional traffic (the single largest source of air pollution in the city) and promote public transit.
4. Promote regional pollution prevention plans for business and industry.
5. Promote strategies to reduce particulate pollution from residential fireplaces and wood-burning stoves.
6. Locate parking appropriately and provide signage to reduce unnecessary "circling" and searching for parking.

Policy T-19 Air Quality Impacts. Continue to encourage innovative technologies and programs such as clean-fuel, electric, and low-emission cars that reduce the air quality impacts of the automobile.

Policy T-29 Infrastructure Improvements. Facilitate mobility and the flow of traffic on major and collector streets, reduce the air quality impacts of congestion, improve pedestrian and bicycle access, and speed public transportation throughout the city by making improvements to the existing physical infrastructure.

Berkeley Municipal Code

In 2019, the Berkeley City Council added Chapter 12.80 to the Berkeley Municipal Code (BMC) via Ordinance No. 7,672-N.S., which prohibits the installation of natural gas infrastructure in newly constructed buildings unless the applicant can establish that it is not physically feasible to construct the building without natural gas infrastructure or if its use serves the public interest.

Berkeley has adopted the California Energy Code in BMC Chapter 19.36. In addition, BMC Section 19.36.040, includes a "reach code" that exceeds the energy efficiency standards of the California Energy Code.

4.2.3 Impact Analysis

a. Thresholds of Significance

To determine whether a project would result in a significant impact to air quality, Appendix G of the *CEQA Guidelines* requires consideration of whether a project would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard;
3. Expose sensitive receptors to substantial pollutant concentrations; or
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

BAAQMD Significance Thresholds

The plan-level thresholds specified in the May 2017 BAAQMD *CEQA Air Quality Guidelines* were used to determine whether the proposed project impacts exceed the thresholds identified in *CEQA Guidelines* Appendix G.

Consistency with the Air Quality Plan

Under BAAQMD's methodology, a determination of consistency with *CEQA Guidelines* thresholds should demonstrate that a project:

1. Supports the primary goals of the 2017 Clean Air Plan;
2. Includes applicable control measures from the 2017 Clean Air Plan; and
3. Does not disrupt or hinder implementation of any 2017 Clean Air Plan control measures.

Construction Emissions Thresholds

The BAAQMD's May 2017 *CEQA Air Quality Guidelines* have no plan-level significance thresholds for construction air pollutants emissions. However, they do include project-level screening and emissions thresholds for temporary construction-related emissions of air pollutants. These thresholds represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions and are discussed in detail below (BAAQMD 2017a). Construction emissions associated with plan implementation are discussed qualitatively to evaluate potential air quality impacts.

The BAAQMD developed screening criteria in the 2017 *CEQA Air Quality Guidelines* to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts. The screening criteria for residential land uses are shown in Table 4.2-3.

Table 4.2-3 BAAQMD Criteria Air Pollutant Screening Levels

Land Use Type	Operational Criteria Pollutant Screening Size (du)	Construction Criteria Pollutant Screening Size (du)
Single-family	325 (NO_X)	114 (ROG)
Apartment, low-rise	451 (ROG)	240 (ROG)
Apartment, mid-rise	494 (ROG)	240 (ROG)
Apartment, high-rise	510 (ROG)	249 (ROG)
Condo/townhouse, general	451 (ROG)	240 (ROG)
Condo/townhouse, high-rise	511 (ROG)	252 (ROG)
Mobile home park	450 (ROG)	114 (ROG)
Retirement community	487 (ROG)	114 (ROG)
Congregate care facility	657 (ROG)	240 (ROG)

du = dwelling unit; NO_X = oxides of nitrogen; ROG = reactive organic gases

Source: BAAQMD 2017a

If a project meets the screening criteria, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration (BAAQMD 2017a).

In addition to the screening levels above, several additional factors are outlined in the 2017 *CEQA Air Quality Guidelines* that construction activities must satisfy for a project to meet the construction screening criteria:

- All basic construction measures from the 2017 *CEQA Guidelines* must be included in project design and implemented during construction
- Construction-related activities would *not* include any of the following:
  - Demolition
  - Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously)
  - Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development)
  - Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity

For projects that do not meet the screening criteria above, the BAAQMD construction significance thresholds for criteria air pollutants, shown in Table 4.2-4, are used to evaluate a project's potential air quality impacts.

Table 4.2-4 BAAQMD Criteria Air Pollutant Significance Thresholds

Pollutant	Construction Thresholds Average Daily Emissions (lbs/day)	Operational Threshold Average Daily Emissions (lbs/day)	Operational Threshold Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	Not Applicable

lbs = pounds; NO_X = oxides of nitrogen; ROG = reactive organic gases; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns

Source: BAAQMD 2017a

For all projects in the SFBAAB, the BAAQMD 2017 *CEQA Air Quality Guidelines* recommends implementation of the Basic Construction Mitigation Measures listed in Table 8-2 of the Guidelines (BAAQMD 2017a). For projects that exceed the thresholds in Table 4.2-4, the BAAQMD 2017 *CEQA Air Quality Guidelines* recommends implementation of the Additional Construction Mitigation Measures listed in Table 8-3 of the Guidelines (BAAQMD 2017a).

Operation Emissions Thresholds

The BAAQMD's 2017 *CEQA Air Quality Guidelines* contain specific operational plan-level significance thresholds for criteria air pollutants. Plans must show the following over the planning period:

- Consistency with current air quality plan control measures, and
- Vehicle miles traveled (VMT) or vehicle trips increase is less than or equal to the plan's projected population increase.

If a plan can demonstrate consistency with both criteria, then impacts would be less than significant. The current air quality plan is the 2017 Clean Air Plan.

For project-level thresholds, the screening criteria for operational emissions are shown in Table 4.2-3. For projects that do not meet the screening criteria, the BAAQMD operational significance thresholds for criteria air pollutants, shown in Table 4.2-4, are used to evaluate a project's potential air quality impacts.

Carbon Monoxide Hotspots

BAAQMD provides a preliminary screening methodology to conservatively determine whether a proposed project would exceed CO thresholds. If the following criteria are met, the individual project would result in a less than significant impact related to local CO concentrations:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
2. Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and

3. Project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Toxic Air Contaminants

For health risks associated with TAC and $PM_{2.5}$ emissions, the BAAQMD May 2017 CEQA Air Quality Guidelines state a project would result in a significant impact if the any of the following thresholds are exceeded (BAAQMD 2017a):

- Non-compliance with Qualified Community Risk Reduction Plan;
- Increased cancer risk of > 10.0 in a million;
- Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
- Ambient $PM_{2.5}$ increase of > 0.3 $\mu g/m^3$ annual average

Lead

Projects would be required to comply with BAAQMD Regulation 11, Rule 1 (Lead), which is intended to control the emission of lead to the atmosphere.

Asbestos

Demolition of buildings would be subject to BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing). BAAQMD Regulation 11, Rule 2 is intended to limit asbestos emissions from demolition and the associated disturbance of asbestos-containing waste material generated or handled during these activities. This rule requires notification of BAAQMD of any regulated demolition activity, and contains specific requirements for surveying, notification, removal, and disposal of material containing asbestos. Impacts related to asbestos emissions from projects that comply with Regulation 11, Rule 2 are considered to be less than significant since the regulation would ensure the proper and safe disposal of asbestos containing material.

Odors

The BAAQMD provides minimum distances for siting of new odor sources shown in Table 4.2-5. A significant impact would occur if the project would result in other emissions (such as odors) affecting substantial numbers of people or would site a new odor source as shown in Table 4.2-5 within the specified distances of existing receptors.

Table 4.2-5 BAAQMD Odor Source Thresholds

Odor Source	Minimum Distance for Less than Significant Odor Impacts (in miles)
Wastewater Treatment Plant	2
Wastewater Pumping Facilities	1
Sanitary Landfill	2
Transfer Station	1
Composting Facility	1
Petroleum Refinery	2
Asphalt Batch Plant	2
Chemical Manufacturing	2

Odor Source	Minimum Distance for Less than Significant Odor Impacts (in miles)
Fiberglass Manufacturing	1
Painting/Coating Operations	1
Rendering Plant	2

Source: BAAQMD 2017a

b. Methodology

Construction Emissions

Construction-related emissions are temporary but may still result in adverse air quality impacts. Construction of development associated with the proposed project would generate temporary emissions from three primary sources: the operation of construction vehicles (e.g., scrapers, loaders, dump trucks, etc.); ground disturbance during site preparation and grading, which creates fugitive dust; and the application of asphalt, paint, or other oil-based substances.

At this time, there is not sufficient detail to allow project-level analysis and thus it would be speculative to analyze project-level impacts. Rather, consistent with the programmatic nature of the project and this program EIR, construction impacts for the proposed Housing Element Update are discussed qualitatively and emissions are not compared to the project-level thresholds.

Operation Emissions

Based on plan-level guidance from the BAAQMD 2017 *CEQA Air Quality Guidelines,* long-term operational emissions associated with implementation of the proposed project are discussed qualitatively by comparing the proposed project to the 2017 Clean Air Plan goals, policies, and control measures. In addition, comparing the rate of increase of plan VMT and population is recommended by BAAQMD for determining significance of criteria pollutants. If the proposed project does not meet either criterion then impacts would be potentially significant.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 THE PROPOSED HEU WOULD NOT CONFLICT WITH THE CONTROL MEASURES WITHIN THE 2017 CLEAN AIR PLAN, AND VMT INCREASE FROM THE PROJECT WOULD BE LESS THAN THE PROJECT'S PROJECT POPULATION INCREASE. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Project Consistency with the Current Air Quality Plan

A project that would not support the goals within the 2017 Clean Air Plan would not be consistent with the 2017 Clean Air Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the 2017 Clean Air Plan goals. Consistent with Policy H-15 and H-16 of the HEU, which encourages higher-density zoning and transit-oriented development, the project would encourage denser housing on housing inventory sites near transit corridors, BART stations, and Priority Development Areas such as the Southside Plan Area and the Downtown Plan Area at various levels of affordability. By allowing for the easier use of alternative modes of transportation through proximity to services, bus stops, the BART stations and bike routes,

development facilitated by the project would reduce the use of personal vehicles and subsequent mobile emissions than if housing inventory sites were placed farther from transit. In addition, development facilitated by the project would be required to comply with the latest Title 24 regulations, including requirements for residential indoor air quality. The analysis is based on compliance with 2019 Title 24 requirements although individual projects developed under the plan would be required to comply with the most current version of Title 24 at the time of project construction. These requirements currently mandate Minimum Efficiency Reporting Value 13 (or equivalent) filters for heating/cooling systems and ventilation systems in residences (Section 150.0[m]) or implementation of future standards that would be anticipated to be equal to or more stringent than current standards. Therefore, the project would improve air quality compared to development farther from transit and services through reducing VMT and would protect public health through stringent requirements for MERV-13 filters or equivalent indoor air quality measures, which would be consistent with the primary goals of the 2017 Clean Air Plan.

Table 4.2-6 Project Consistency with Applicable 2017 Plan Control Measures

Clean Air Plan Control Measures	Consistency
Transportation	
TR9: Bicycle and Pedestrian Access and Facilities. Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	**Consistent**: As a housing plan, the HEU in itself does not include bicycle or pedestrian improvements. However, future development facilitated under the proposed project must comply with residential bicycle parking requirements pursuant to BMC Section 23.322.090. Additionally, most housing inventory sites are generally located near or along transportation corridors served by Class II and Class III bicycle lanes, which would encourage the usage of bicycles and reduce reliance on single-occupancy vehicles. The City also has over 2,660 short-term bicycle parking spaces as well as bike corrals, lockers, and a bike station adjacent to the Downtown Berkeley BART station which future residents could utilize (City of Berkeley 2017). The BMC also includes required minimum bicycle parking requirements for residential developments.
Energy	
EN2: Decrease Electricity Demand. Work with local governments to adopt additional energy-efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.	**Consistent**: Future development facilitated under the proposed project would be required to comply with BMC Section 19.36.040, which is a "reach code" that exceeds the energy efficiency standards of the California Energy Code. Part 6 of Title 24 requires all new low-rise buildings to install photovoltaic (PV) panels that can generate an output greater or equal to the amount of electricity that is annually consumed. Furthermore, BMC Section 19.37.040 requires 20 percent of parking spaces to be electric vehicle charging spaces capable of supporting future electric vehicle chargers and 80 percent of parking spaces to include raceways to facilitate future electric vehicle supply equipment at all new multi-family developments; and for new one- and two-family dwelling units to accommodate a dedicated 208/240-volt branch circuit for a future EV charger. In addition, new construction would be required to be all electric per the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources.

Clean Air Plan Control Measures	Consistency
Buildings	
BL1: Green Buildings. Collaborate with partners such as KyotoUSA to identify energy-related improvements and opportunities for on-site renewable energy systems in school districts; investigate funding strategies to implement upgrades. Identify barriers to effective local implementation of the CALGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Work with ABAG's BayREN program to make additional funding available for energy-related projects in the buildings sector. Engage with additional partners to target reducing emissions from specific types of buildings.	**Consistent**: Future development facilitated by the proposed HEU would be required to comply with the energy and sustainability standards of Title 24 (including the California Energy Code and CALGreen) and the City's associated amendments that are in effect at that time. For example, the current 2019 CALGreen standards and the City's associated amendments in BMC Chapter 19.37 require a minimum 65 percent diversion of construction/demolition waste, use of low-pollutant emitting exterior and interior finish materials, and dedicated circuitry for electric vehicle charging stations. All new low-rise residential buildings would also be required to install solar PV panels. The Title 24 standards are updated every three years and become increasingly more stringent over time. Additionally, new construction would be required to be all electric per the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. Policy H-13 of the HEU would also ensure energy efficiency in new buildings in order to reduce energy costs and GHGs.
Water	
WR2: Support Water Conservation. Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	**Consistent**: Future development requiring new or expanded water service would be required to comply with East Bay Municipal Utility District's Section 31 water efficiency regulations, which include best practice requirements that are more stringent than CALGreen and the state's Model Water Efficiency Landscape Ordinance to reduce indoor and outdoor water use.

Source: BAAQMD 2017b

As shown in Table 4.2-6, the project would be consistent with the applicable measures as development facilitated by it would be required to comply with the latest Title 24 regulations and would increase density in urban areas, allowing for greater use of alternative modes of transportation. Development facilitated by the project does not contain elements that would disrupt or hinder implementation of a 2017 Clean Air Plan control measures. Therefore, the project would conform to this determination of consistency for the 2017 Clean Air Plan.

Project VMT and Population

According to the BAAQMD 2017 *CEQA Air Quality Guidelines,* the threshold for criteria air pollutants and precursors includes an assessment of the rate of increase of plan VMT versus population growth. As discussed above under Section 4.2.3(a), to result in a less than significant impact, the analysis must show that over the planning period, the proposed project's projected VMT increase would be less than or equal to its projected population increase. As shown in Table 4.2-7 under Impact 2, the proposed net percentage VMT increase associated with the proposed project (approximately 38 percent) would be less than the net percentage population increase (approximately 43 percent). Therefore, the project's VMT increase would not conflict with the BAAQMD's 2017 *CEQA Air Quality Guidelines* operational plan-level significance thresholds for criteria air pollutants and would be consistent with the 2017 Clean Air Plan. Accordingly, impacts would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 2:	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact AQ-2 CONSTRUCTION FACILITATED BY THE PROJECT WOULD TEMPORARILY INCREASE AIR POLLUTANT EMISSIONS, WHICH WOULD AFFECT LOCAL AIR QUALITY. ADHERENCE TO MITIGATION MEASURE AQ-1 AND THE CITY'S STANDARD CONDITIONS OF APPROVAL WOULD REDUCE CONSTRUCTION EMISSIONS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Construction

Buildout under the project may involve activities that result in air pollutant emissions. Construction activities such as demolition, grading, construction worker travel, delivery and hauling of construction supplies and debris, and fuel combustion by on-site construction equipment would generate pollutant emissions. These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants, particularly during site preparation and grading. The extent of daily emissions, particularly ROGs and NO_X emissions, generated by construction equipment, would depend on the quantity of equipment used and the hours of operation for each project. The extent of $PM_{2.5}$ and PM_{10} emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary. Dust emissions can lead to both nuisance and health impacts. According to the 2017 BAAQMD *CEQA Air Quality Guidelines,* PM_{10} is the greatest pollutant of concern during construction (BAAQMD 2017a).

As discussed above, BAAQMD's 2017 *CEQA Air Quality Guidelines* have no plan-level significance thresholds for construction air pollutant emissions that would apply to the project. However, the guidelines include project-level thresholds for construction emissions. If an individual project is subject to CEQA and has construction emissions that fall below the project-level thresholds, the project's impacts on regional air quality would be individually and cumulatively less than significant. The BAAQMD has also identified feasible fugitive dust control measures for construction activities. These Basic Construction Mitigation Measures are recommended for all projects (BAAQMD 2017a) and will be included as Mitigation Measure AQ-1 as described below under *Fugitive Dust Emissions*. In addition, the BAAQMD and CARB have regulations that address the handling of hazardous air pollutants such as lead and asbestos, which could be aerially disbursed during demolition activities. BAAQMD rules and regulations address both the handling and transport of these contaminants. Construction of development envisioned under the project would temporarily increase air pollutant emissions, possibly creating localized areas of unhealthy air pollution concentrations or air quality nuisances. Therefore, construction air quality impacts would be potentially significant. However, development projects in Berkeley are required to comply with Standard Conditions of Approval for use permits under the Zoning Ordinance. This includes the following:

> **Air Quality – Diesel Particulate Matter Controls During Construction**. All off-road construction equipment used for projects with construction lasting more than 2 months shall comply with **one** of the following measures:

A. The project applicant shall prepare a health risk assessment that demonstrates the project's on-site emissions of diesel particulate matter during construction will not exceed health risk screening criteria after a screening-level health risk assessment is conducted in accordance with current guidance from BAAQMD and OEHHA. The health risk assessment shall be submitted to the Public Works Department for review and approval prior to the issuance of building permits.
B. All construction equipment shall be equipped with Tier 2 or higher engines and the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board (CARB). The equipment shall be properly maintained and tuned in accordance with manufacturer specifications.

In addition, a Construction Emissions Minimization Plan (Emissions Plan) shall be prepared that includes the following:

- An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.
- A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract. The Emissions Plan shall be submitted to the Public Works Department for review and approval prior to the issuance of building permits.

Additionally, future development facilitated by the proposed project would be required to comply with Berkeley General Plan Policy EM-18 as detailed in Section 4.2.1c in order to reduce construction emissions.

Future development would be required to implement the City of Berkeley standard conditions of approval and General Plan Policy EM-18. Nonetheless, individual projects may be inconsistent with BAAQMD guidance if the Basic Construction Mitigation Measures are not implemented. This impact is potentially significant and mitigation is required.

Fugitive Dust Emissions

Site preparation and grading during construction activities facilitated by development under the proposed project may cause wind-blown dust that could contribute particulate matter into the local atmosphere. The BAAQMD has not established a quantitative threshold for fugitive dust emissions but rather states that projects that incorporate best management practices (BMPs) for fugitive dust control during construction would have a less-than-significant impact related to fugitive dust emissions. As described above, future development facilitated by the project would be required to implement the City's standard condition of approval to reduce construction emissions. However, these projects would not specifically be required to comply with BAAQMD's BMPs. Therefore, impacts related to fugitive dust emissions would be potentially significant.

Mitigation Measures

The following mitigation measure is required.

AQ-1 Construction Emissions Reduction Measures

As part of the City's development approval process, the City shall require applicants for future development projects within the project sites to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM_{10} (Table 8-2, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the May 2017 BAAQMD CEQA Guidelines), outlined below.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper conditions prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.

Significance After Mitigation

Impacts would be less than significant with implementation of Mitigation Measure AQ-1 to require the BAAQMD Basic Construction Measures and required application of the City's air quality Standard Condition of Approval.

Threshold 2:	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact AQ-2 VMT FROM THE PROJECT WOULD INCREASE AT A LOWER RATE COMPARED TO POPULATION GROWTH FACILITATED BY THE PROJECT. THEREFORE, OPERATIONAL IMPACTS RELATED TO CRITERIA POLLUTANTS WOULD BE LESS THAN SIGNIFICANT.

Operation

According to the BAAQMD 2017 *CEQA Air Quality Guidelines,* the threshold for criteria air pollutants and precursors requires an assessment of the rate of increase of plan VMT and population. Table 4.2-7 summarizes the net increase in population versus VMT based on VMT modeling performed by Kittelson & Associates (Appendix H). Because the VMT associated with project buildout would increase by approximately 38 percent, it would not exceed the rate of increase from the forecast population of approximately 43 percent. VMT increases at a lower percentage because the proposed project would change land uses to concentrate growth and residences to jobs and services to reduce singular vehicle trips and encourage alternative models of travel. Therefore, impacts concerning criteria pollutants generated from operation of the project would be less than significant.

Table 4.2-7 Increase in Population Compared to VMT Under Project

Scenario	2020 Without Project	2031 With Project	Net Increase	Percent Change
Population	128,004	182,651	54,647	+43%
Vehicle Miles Traveled	1,436,244	1,983,715	547,471	+38%

Source: Data provided by Kittelson & Associates, Inc 2022 (Appendix H)

Mitigation Measure

This impact would be less than significant. No mitigation measures are required.

Threshold 3:	Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 CONSTRUCTION ACTIVITIES FOR INDIVIDUAL PROJECTS LASTING LONGER THAN TWO MONTHS OR LOCATED WITHIN 1,000 FEET OF SENSITIVE RECEPTORS COULD EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS. ADDITIONALLY, DEVELOPMENT FACILITATED BY THE PROJECT WOULD SITE NEW SENSITIVE LAND USES NEAR INTERSTATE 580/80 WHICH MAY EXPOSE THEM TO SUBSTANTIAL POLLUTANT CONCENTRATIONS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. The entire Basin is in conformance with state and federal CO standards, as indicated by the recent air quality monitoring. There are no current exceedances of CO standards within the air district and

have not had a CO exceedance in the Bay Area since before 1994.[2] For 2019 the Bay Area's reported maximum 1-hour and average daily concentrations of CO were 5.6 ppm and 1.7 ppm respectively (BAAQMD 2019).[3] These are well below the respective 1-hour and 8-hour standards of 20 ppm and 9 ppm. Given the ambient concentrations, which includes mobile as well as stationary sources, a project in the Bay Area would need to emit concentrations three times the hourly maximum ambient emissions for all sources before project emissions would exceed the 1-hour standard. Additionally, the project would need to emit seven times the daily average for ambient concentrations to exceed the 8-hour standards. Typical development projects, even plan level growth, would not emit the levels of CO necessary to result in a localized hot spot. Therefore, impacts to CO hotspots would be less than significant.

Toxic Air Contaminants

Construction

Construction-related activities would result in short-term emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation (e.g., excavation, grading, and clearing), building construction, and other miscellaneous activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential non-cancer[4] health impacts (CARB 2021a).

Generation of DPM from construction typically occurs in a single area for a short period. Construction of development facilitated by the project would occur over approximately a decade but use of diesel-powered construction equipment in any one area would likely occur for no more than a few years for an individual project and would cease when construction is completed in that area. It is impossible to quantify risk without identified specific project details and locations.

The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period. According to the California Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the development (OEHHA 2015). BAAQMD use an exposure period of 30 years (BAAQMD 2016).

The maximum PM_{10} and $PM_{2.5}$ emissions would occur during demolition, site preparation and grading activities, which would only occur for a portion of the overall estimated timeframe of one to eight years for construction of housing units facilitated by the HEU. These activities would typically last for approximately two weeks to two years, depending on the extent of grading and excavation required (e.g., projects with subterranean parking structures or geological constraints require additional grading as compared to those without). PM_{10} and $PM_{2.5}$ emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less intensive construction equipment. While the maximum

[2] BAAQMD only has records for annual air quality summaries dating back to 1994.
[3] Data for 2019 was used as the data for 2020 and 2021 are not currently available.
[4] Non-cancer risks include premature death, hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma, increased respiratory symptoms, and decreased lung function (CARB 2021a).

DPM emissions associated with demolition, site preparation, and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent between 0.1 to 7 percent of the total 30-year exposure period for health risk calculation.

Each project developed under the plan would be required to be consistent with the applicable 2017 Clean Air Plan, BAAQMD regulatory requirements and control strategies, and the CARB In-Use Off-Road Diesel Vehicle Regulation, which are intended to reduce emissions from construction equipment and activities. Additionally, future development facilitated by the project would be required to comply with Mitigation Measure AQ-1 requiring implementation of construction emission measures which would reduce construction-related TACs. According to the OEHHA, construction of individual projects lasting longer than two months or placed within 1,000 feet of sensitive receptors could potentially expose nearby sensitive receptors to substantial pollutant concentrations and therefore could result in potentially significant risk impacts (OEHHA 2015). These projects could exceed BAAQMD's thresholds of an increased cancer risk of greater than 10.0 in a million and an increased non-cancer risk of greater than 1.0 Hazard Index (Chronic or Acute). Therefore, construction impacts from TAC emissions would be potentially significant and mitigation is required.

Operation

In the Bay Area, there are several urban or industrialized communities where the exposure to TACs is relatively high in comparison to others. The western portion of the City is located in an impacted community according to BAAQMD *CEQA Guidelines* (Figure 5-1) due to its proximity to the freeway, rail, and industry. Sources of TACs include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities (BAAQMD 2017a). Operation of development facilitated by the project would not involve these uses; therefore, it is not considered a source of TACs. In addition, residences do not typically include new stationary sources onsite, such as emergency diesel generators. However, if residences did include a new stationary source onsite, it would be subject to BAAQMD Regulation 2, Rule 2 (New Source Review) and require permitting. This process would ensure that the stationary source does not exceed applicable BAAQMD health risk thresholds. Additionally, BAAQMD employs the Community Air Risk Evaluation (CARE) Program, which applies strategies to reduce health impacts in impacted communities (BAAQMD 2014). CARE is currently activated in Berkeley since it is an impacted community. Therefore, Project-related TAC impacts during operation would be less than significant.

Asbestos

BAAQMD Regulation 11, Rule 2 is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities (BAAQMD 2017a). The rule addresses the national emissions standards for asbestos along with some additional requirements. The rule requires the Lead Agency and its contractors to notify BAAQMD of any regulated renovation or demolition activity. This notification includes a description of structures and methods utilized to determine whether asbestos-containing materials are potentially present. All asbestos-containing material found on the site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, including specific requirements for surveying, notification, removal, and disposal of material containing asbestos. Therefore, individual projects that comply with Regulation 11, Rule 2 would ensure that asbestos-containing materials would be disposed of

appropriately and safely. By complying with BAAQMD Regulation 11, Rule 2, thereby minimizing the release of airborne asbestos emissions, demolition activity would not result in a significant impact to air quality. Per the BAAQMD Guidelines, because BAAQMD Regulation 11, Rule 2 is in place, no further analysis about the demolition of asbestos-containing materials is needed in a CEQA document (BAAQMD 2017).

Project Siting

Development facilitated by the project would occur under the jurisdiction of BAAQMD. CARB screening methodology for project siting is used in this analysis. In 2005, CARB issued recommendations to avoid siting new residences within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day or close to known stationary TAC sources (CARB 2005). BAAQMD's average daily traffic (ADT) threshold is lower, at 10,000 vehicles per day (BAAQMD 2012).

Development facilitated by the project could place sensitive receptors living in housing within approximately 500 to 1,000 feet of Interstate 580 (I-580) and Interstate 80 (I-80). The only housing inventory sites within 500 feet of I-580 is the site located at 2031 Second Street. Two other sites at the locations 1834 Fourth Street and 1920 Fourth Street are located within 1,000 feet of the I-580. There is also the potential for development to occur within 500 feet of a roadway that has 10,000 vehicles per day or more such as University Avenue, Adeline Street, Telegraph Avenue, Claremont Avenue, and Gilman Street (Caltrans 2020). Development of these sites would create a potentially significant impact and implementation of Mitigation Measure AQ-3 would be required for future development.

Development facilitated by the project would be required to comply with the residential indoor air quality requirements in the Title 24 Building Energy Efficiency Standards, which currently require Minimum Efficiency Reporting Value 13 (or equivalent) filters for heating/cooling systems and ventilation systems in residences (Section 150.0[m]). These types of filters are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system. Therefore, the project would not expose its future sensitive receptors to substantial pollutant concentrations and related impacts would be less-than-significant.

Mitigation Measures

The following mitigation measure is required.

AQ-2 Construction Health Risk Assessment

For individual projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize Tier 4 and/or alternative fuel construction equipment, the project applicant shall prepare a construction health risk assessment (HRA). The HRA shall determine potential risk and compare the risk to the following BAAQMD thresholds:

- Non-compliance with Qualified Community Risk Reduction Plan;
- Increased cancer risk of > 10.0 in a million;
- Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
- Ambient $PM_{2.5}$ increase of > 0.3 $\mu g/m^3$ annual average

If risk exceeds the thresholds, measures such as requiring the use of Tier 4 and/or alternative fuel construction equipment shall be incorporated to reduce the risk to appropriate levels.

AQ-3 TAC Exposure Reduction Building Measures

The following design features shall be incorporated for residential development located within 1,000 feet of I-580/80 or on a lot that fronts on a section of roadway with 10,000 vehicles per day or more in order to reduce exposure of proposed residences to TACs from vehicles and stationary combustion engines (i.e., generators):

1. If the proposed buildings would use operable windows or other sources of infiltration of ambient air, the development shall install a central HVAC system that includes high efficiency particulate filters (HEPA). These types of filters are capable of removing approximately 99.97 percent of the DPM emissions from air introduced into the HVAC system (U.S. EPA 2022). The system may also include a carbon filter to remove other chemical matter. Filtration systems must operate to maintain positive pressure within the building interior to prevent entrainment of outdoor air indoors.
2. If the development limits infiltration through non-operable windows, a suitable ventilation system shall include a ventilation system with filtration specifications equivalent to or better than the following: (1) American Society of Heating, Refrigerating and Air- Conditioning Engineers MERV-13 supply air filters, (2) greater than or equal to one air exchanges per hour of fresh outside filtered air, (3) greater than or equal to four air exchanges per hour recirculation, and (4) less than or equal to 0.25 air exchanges per hour in unfiltered infiltration. These types of filtration methods are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system.
3. Windows and doors shall be fully weatherproofed with caulking and weather-stripping that is rated to last at least 20 years. Weatherproof should be maintained and replaced by the property owner, as necessary, to ensure functionality for the lifetime of the project.
4. Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (*i.e.*, 1 mph).
5. Prepare an ongoing maintenance plan for the HVAC and filtration systems, consistent with manufacturers' recommendations.
6. The applicant shall inform occupants regarding the proper use of any installed air filtration system.

Significance After Mitigation

Implementation of Mitigation Measure AQ-2 would require preparation of a construction HRA for projects with construction activities with timelines greater than two months, located within 1,000 feet of sensitive receptors, and would not utilize Tier 4 and/or alternative fuel construction equipment in order to reduce potential risk exposure to nearby sensitive receptors to a less than significant level. Implementation of Mitigation Measure AQ-3 would require implementation of design features 1 to 6 in order to reduce exposure of proposed residences to TACs from vehicles and stationary combustion engines and to reduce impacts to a less than significant level.

Threshold 4:	Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-4 DEVELOPMENT FACILITATED BY THE PROJECT WOULD NOT CREATE OBJECTIONABLE ODORS THAT COULD AFFECT A SUBSTANTIAL NUMBER OF PEOPLE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust both during normal use and when idling. However, these odors would be temporary and transitory and would cease upon completion. Therefore, development facilitated by the project would not generate objectionable odors affecting a substantial number of people.

Table 4.2-5 provides BAAQMD odor screening distances for land uses with the potential to generate substantial odor complaints. Those uses include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants. As development facilitated by the project would be residential, none of the uses identified in the table would occur on the sites. Therefore, development facilitated by the project would not generate objectionable odors affecting a substantial number of people during operation. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. Mitigation measures are not required.

d. Cumulative Impacts

The cumulative context for air quality is regional. The SFBAAB is in non-attainment for federal standards of ozone and $PM_{2.5}$ and in non-attainment for the State standard for ozone, $PM_{2.5}$, and PM_{10}. The SFBAAB is in attainment of all other federal and State standards. Development facilitated by the project would generate particulate matter and the ozone precursors (ROG and NO_X) in the area during construction and operation.

As described under Impact AQ-1, the project would be consistent with the 2017 Clean Air Plan control measures as development facilitated by the project would comply with the latest Title 24 regulations and would increase density in urban areas in proximity to transit, allowing for greater use of alternative modes of transportation. Additionally, the increase in VMT would not exceed the projected population increase per the BAAQMD *CEQA Air Quality Guidelines* for operational emissions from plans. Discussion of these impacts considers the cumulative nature of criteria pollutants in the region. Therefore, the project would not result in a cumulatively considerable contribution to a conflict with or obstruction of implementation of the applicable air quality plan.

As described under Impact AQ-2, project construction would temporarily increase air pollutant emissions, possibly creating localized areas of unhealthy air pollution levels or air quality nuisances. BAAQMD has identified feasible fugitive dust control measures for construction activities to minimize fugitive PM_{10} and $PM_{2.5}$. Therefore, temporary construction impacts citywide would be mitigated with Mitigation Measures AQ-1. Discussion of these impacts considers the cumulative nature of criteria pollutants in the region; therefore, with mitigation the project would not result in a cumulatively considerable net increase of a criteria pollutant from construction emissions.

As identified under Impact AQ-3, development facilitated by the project would not have a significant impact from CO hotspots or TACs with implementation of Mitigation Measures AQ-2 and AQ-3. Discussion of these impacts considers the cumulative nature of the pollutants in the region, e.g., the

cancer risk and non-cancer risk thresholds have been set per existing cancer risks in the area, and exceeding those thresholds would be considered a cumulative impact. As development facilitated by the project would not exceed those thresholds, it would not expose sensitive receptors to a cumulatively considerable amount of substantial pollutant concentrations from CO hotspots or TACs.

As identified under Impact AQ-4, development facilitated by the project would not have a significant impact from odor emissions. The consideration of cumulative odor impacts is limited to cases when projects constructed simultaneously are within a few hundred yards of each other because of the short range of odor dispersion. It is unlikely that construction of housing inventory sites would occur within a few hundred yards of major off-site construction. Therefore, development facilitated by the project would not result in a cumulatively considerable odor impact.

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4.3 Biological Resources

This section analyzes the effects of the proposed HEU on biological resources and the associated impacts. The impact analysis presented herein is intended to assess the potential impact the proposed project may have on biological resources, and where impacts are significant, to propose appropriate mitigation relative to the existing goals of the General Plan and with reference to federal, state, and local laws, regulations, and management policies addressing biological resources.

4.3.1 Existing Conditions

The following sections present the methods and results for determining the existing conditions for the proposed project with regard to biological resources. Except where specified below, the study area included the City of Berkeley, the area subject to the proposed HEU.

a. Land Cover

Based on a desktop review, nine land cover types were mapped within City boundaries using the California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationships habitat classification system (CDFW 2014). A description of each of the vegetation communities and land cover types adapted from A Guide to Wildlife Habitats of California (Mayer and Laudenslayer, Jr. 1988) is presented below. The land cover types are mapped on Figure 4.3-1. It should be noted that these vegetation communities and land cover types are broadly mapped, and site specific fine-scale variation in vegetation communities is likely to be present.

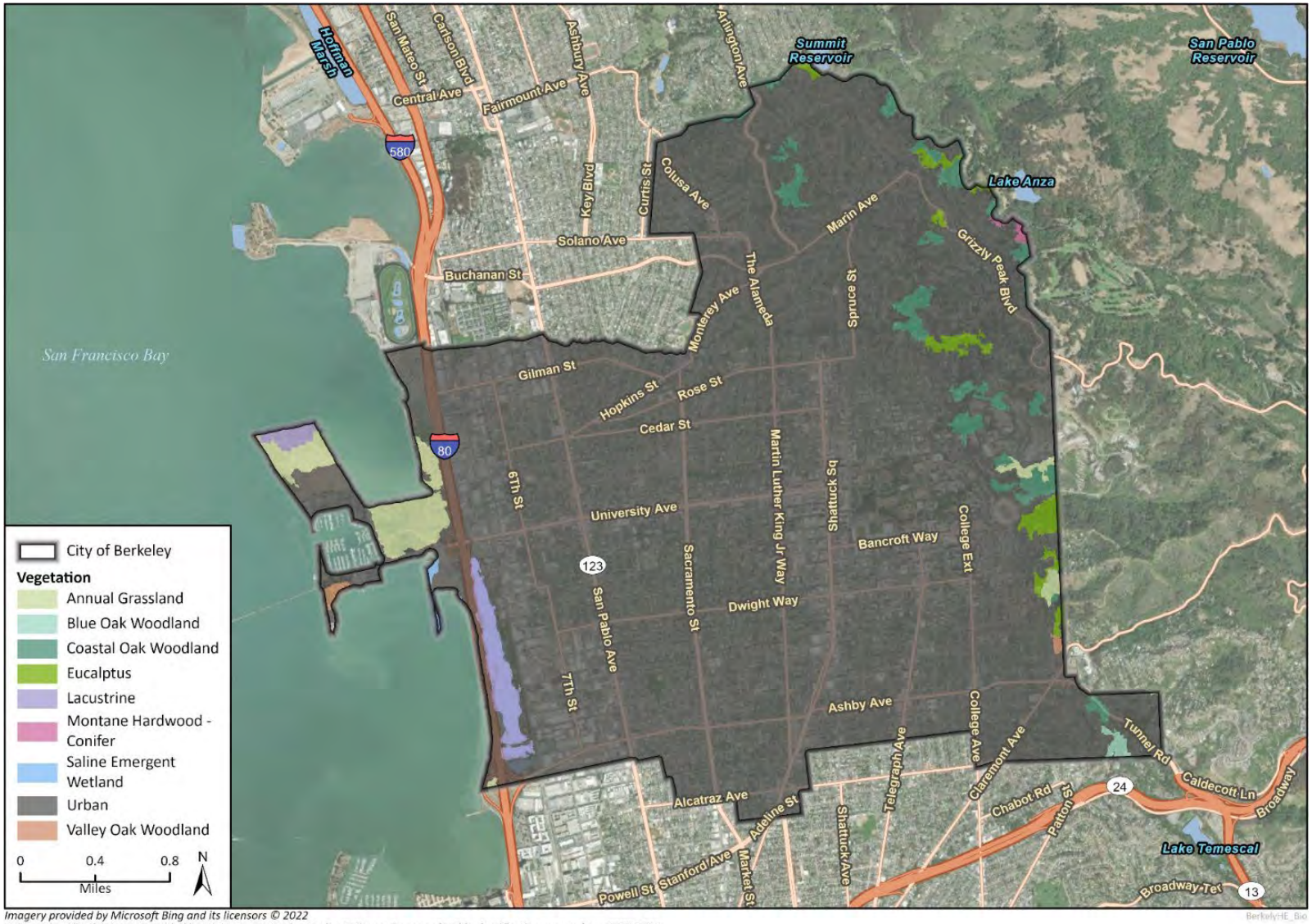
The majority of Berkeley is urbanized and the areas of the city that would be affected by the project generally do not include substantial areas of open space or undeveloped, unpaved land. Developed areas correspond with the “urban” land cover type described in the California Wildlife Habitat Relationships (California Department of Fish and Wildlife [CDFW], 2022c; Mayer and Laudenslayer, 1988). As such, vegetation is limited largely to ornamental landscaping and trees in commercial areas, residential neighborhoods, and along park strips and street medians. Plant species in urban areas are highly variable, and vegetation structure includes shade/street trees, lawns, and shrub cover.

Ruderal vegetation occurs along roadsides and vacant lots. Ruderal vegetation is associated with urban areas where substantial ground disturbance activities occur. Ruderal areas are often found along roadsides, fence-lines, and in areas undergoing urban development. Ruderal plant communities are not described by Holland (1986), Sawyer et al. (2009), or Mayer and Laudenslayer (1988). They are typically dominated by herbaceous plants (i.e., forbs) such as mustards (*Brassica spp*.), wild radish (*Raphanus sativus*), and mallows (*Malva spp*.), and include many non-native annual grasses such as ripgut brome (*Bromus diandrus*), wild oats (*Avena spp*.), and foxtail barley (*Hordeum murinum*).

The western boundary of Berkeley includes the marine environment of the San Francisco Bay, and lacustrine and saline emergent wetlands along the coast. The foothills on the eastern boundary of Berkely include annual and perennial grasslands and various woodlands.

The following sections describe the natural communities and land cover types in Berkeley. Generally, the proposed project would focus development in already-developed and disturbed urban areas.

Figure 4.3-1 Landcover Types in Berkeley



Imagery provided by Microsoft Bing and its licensors © 2022
CalVeg Classification Layer provided by USDA Forest Service Region 5. Source Imagery for this classification ranges from 2008-2015.

Urban

This land cover type is completely anthropogenic and is composed of residential, commercial, and industrial developed areas. Plant species within urban areas are typically comprised of ornamental plants and non-native invasive plant species, with large, developed areas lacking vegetation. The vast majority of the inventory sites, middle housing rezoning districts, and the Southside area are located within the Urban land cover type. Some parts of the R-1 and R-2 districts and some inventory sites are in other vegetation areas as mapped on Figure 4.3-1.

Annual and Perennial Grasslands

Annual and perennial grassland habitats are herbaceous communities composed primarily of annual and perennial grass and forb species. These vegetation communities exists in high abundance throughout the City, where introduced annual grasses are the dominant plant species. These include wild oats (*Avena* sp.), soft chess brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), red brome (*B. madritensis*), wild barley (*Hordeum murinum*), and foxtail fescue (*Festuca myuros*). Common forbs include broadleaf filaree (*Erodium botrys*), redstem filaree (*E. cicutarium*), turkey mullein (*Croton setiger*), true clovers (*Trifolium* spp.), bur clover (*Medicago polymorpha*), popcorn flowers (*Plagiobothrys* spp.), California poppy (*Eschscholzia californica*), and many others. Native perennial grasses, found in moist, lightly grazed, or relic prairie areas, are dominated by California oatgrass (*Danthonia californica*), Pacific hairgrass (*Deschampsia cespitosa holciformis*), and sweet vernal grass (*Anthoxanthum odoratum*).

Annual grassland communities and relic perennial grasslands within them occur in patches of various sizes throughout the State. Annual grassland habitat occurs mostly on flat plains to gently rolling foothills. Annual grasslands provide habitat for many wildlife species, including western fence lizard (*Sceloporus occidentalis*), common garter snake (*Thamnophis sirtalis*), western rattlesnake (*Crotalus oreganus oreganus*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae*).

Blue Oak Woodland

Blue oak woodlands occur in the City and vary in species composition. have an overstory of scattered trees, although the canopy can be nearly closed The canopy is dominated by broad-leaved trees 5 to 15 m (16 to 50 ft) tall, commonly forming open savanna-like stands on dry ridges and gentle slopes. Blue oaks may reach 25 m (82 ft) in height. Shrubs are often present but rarely extensive, often occurring on rock outcrops. Typical understory is composed of an extension of Annual Grassland vegetation. Blue oak woodlands provide habitat for a variety of wildlife species, including western gray squirrel (*Sciurus griseus*), eastern gray squirrel (*Sciurus carolinensis*), California scrub jays (*Aphelocoma californica*).

Coastal Oak Woodland

Coastal oak woodlands occur in the City and vary in species composition. The overstory consists of deciduous and evergreen hardwoods, mostly oaks (*Quercus* spp.) (15 to 70 feet tall) sometimes mixed with scattered conifers. In mesic sites, the trees are dense and form a closed canopy. In drier sites, the trees are widely spaced, forming an open woodland or savannah. The understory is equally variable. In some instances, it is composed of shrubs from adjacent chaparral or coastal scrub which forms a dense, almost impenetrable understory. More commonly, shrubs are scattered under and between trees. The soils and parent material on which coastal oak woodlands occur are

extremely variable (CDFW 2014). Coastal oak woodlands provide habitat for a variety of wildlife species, including California quail (*Callipepla californica*), turkey (*Meleagris gallopavo*), western gray squirrel (*Sciurus griseus*), eastern gray squirrel (*Sciurus carolinensis*), and Columbian black-tailed deer (*Odocoileus hemionus columbianus*).

Non-Native Vegetation

This land cover type is not a CHWR classification. Non-native vegetation occurs within the City and generally includes ruderal grasslands, landscaped areas, and stands of eucalyptus. These vegetation types are generally associated with landscaped areas and ornamental plantings and have been grouped together. The physical characteristics and species composition of non-native grasslands are variable. Common grass species include wild oats, soft chess brome, ripgut brome, and red brome. Some grasslands are utilized for livestock grazing and are differentiated from pasture vegetation types based on management and species composition. Landscaped areas include plantings of non-native ornamental and exotic species of trees, shrubs and ground covers and may include edible plants such as fruit trees. Eucalyptus stands are generally planted in rows for use as a wind break, and overtime, young trees may recruit into spaces between the planted trees. In most cases, eucalyptus forms a dense stand with a closed canopy. Blue gum eucalyptus (*Eucalyptus globulus*) and red gum eucalyptus (*E. camaldulensis*) are the most common eucalyptus species found in these stands.

Valley Oak Woodland

Remnant patches of this habitat are found in the Sacramento Valley from Redding south, in the San Joaquin Valley to the Sierra Nevada foothills, in the Tehachapi Mountains, and in valleys of the Coast Range from Lake County to western Los Angeles County. This habitat varies from savanna-like to forest-like stands with partially closed canopies, comprised mostly of winter-deciduous, broad-leaved species. Within the City this community occurs in open areas that are generally flat to rolling hills. Canopies of these woodlands are dominated almost exclusively by valley oaks (CDFW 2014). The shrub understory consists of poison oak, blue elderberry, toyon (*Heteromeles arbutifolia*), California coffeeberry, and California blackberry. Various species of wild oats, bromes (*Bromus* spp.), barleys (*Hordeum* spp.), ryegrasses (*Festuca* spp.), and needlegrasses (*Stipa* spp.) dominate the ground cover.

These woodlands provide food and cover for many species of wildlife, include European starling (*Sturnus vulgaris*), California quail, plain titmouse (*Baeolophus inornatus*), California scrub jay (*Aphelocoma californica*), rufous-sided towhee (*Pipilo erythrophthalmus*), Bewick's wren (*Thryomanes bewickii*), bushtit (*Psaltriparus minimus*), and acorn woodpecker (*Melanerpes formicivorus*).

Montane Hardwood Conifer

Montane Hardwood-Conifer habitat includes both conifers and hardwoods. The habitat often occurs in a mosaic-like pattern with small purestands of conifers interspersed with small stands of broad-leaved trees. This landcover consists of a broad spectrum of mixed, conifer and hardwood species. Typically, conifers up to 200 ft in height form the upper canopy and broad-leaved trees 30 to 100 ft in height comprise the lower canopy.

Relatively little understory occurs under the dense, canopy. However, considerable ground and shrub cover can occur in ecotones or following disturbance such as fire or logging.

Saline Emergent Wetland

Saline Emergent Wetlands are characterized as salt or brackish marshes consisting of perennial grasslike plants and forbs, along with algal mats. The component plants occur sometimes in zones but more often in patches or as a sequence of overlapping species along an elevational gradient. Vegetational coverage is complete or nearly so except where creeks and ponds are present or following disturbance Vegetational coverage is complete or nearly complete except where creeks and ponds are present.

Lacustrine

Lacustrine habitats are inland depressions or dammed riverine channels containing standing water. They may vary from small ponds less than one hectare to large areas covering several square kilometers. Depth can vary from a few centimeters to hundreds of meters. Typical lacustrine habitats include permanently flooded lakes and reservoirs (e.g., Lake Tahoe and Shasta Lake), intermittent lakes (e.g., playa lakes) and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent lacustrine systems support fish life; intermittent types usually do not.

b. Wetlands and Waterways

A query of the USFWS's National Wetland Inventory (NWI) (US Fish and Wildlife Service [USFWS] 2022c) was conducted. Aerial imagery and the U.S. Geological Service's National Hydrology Dataset (2022) was also reviewed to determine if aquatic resources potentially falling under the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), or CDFW (i.e., jurisdictional waters), such as federally and State protected wetlands, occur in the City.

Berkeley contains five principal creeks: Derby, Potter, Strawberry, Schoolhouse, and Codornices, all of which flow west from the Berkeley Hills into the San Francisco Bay. In addition, there are eight other creeks that are at least partially within the City limits (U.S. Fish and Wildlife Service [USFWS] 2022c). Due to urban development, once natural watercourses now flow through concrete ditches and culverts, in many cases flowing underground, and ultimately draining into the San Francisco Bay. Local parks may feature natural or man-made ponds and there are estuarine and marine wetlands along the San Francisco Bay. Figure 4.7-1 in Section 4.7, *Hydrology and Water Quality,* shows stormwater, drainage, and creeks in and in the vicinity of Berkeley.

c. Special-Status Species

For the purposes of this EIR, special-status species include:

- Species listed as threatened or endangered under the Federal Endangered Species Act (FESA); including proposed and candidate species
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA)
- Species designated as Fully Protected by the California Fish and Game Code (CFGC), and Species of Special Concern or Watch List by the California Department of Fish and Wildlife (CDFW)
- Plant species protected by the Native Plant Protection Act (NPPA) (State Rare)
- California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR) 1A, 1B, 2A and 2B

- Species designated as locally important by the Local Agency and/or otherwise protected through ordinance, local policy, or HCPs/NCCPs

Queries of the USFWS Information, Planning, and Conservation System (IPaC) (USFWS 2022a), California Natural Diversity Database (CNDDB) (CDFW 2022a), and California Native Plant Society (CNPS) online *Inventory of Rare and Endangered Plants of California* (CNPS 2022) were conducted to obtain comprehensive information regarding special-status species and sensitive vegetation communities known or having potential to occur in the study area. Query of the CNPS inventory included the *Oakland West*, *Oakland East, Briones Valley, and Richmond* California USGS 7.5-minute topographic quadrangle and/or surrounding 12 quadrangles (*San Leandro, Hunters Point, San Francisco South, San Francisco North, San Quentin, Walnut Creek*, *Las Trampas Ridge, Hayward, Mare Island, Petaluma Point, Benicia* and *Vine Hill*). Query of the CNDDB included the City of Berkeley plus a five-mile buffer. The results of these scientific database queries were compiled into Table B-1 and Table B-2 included in Appendix B. A query of the USFWS' Critical Habitat Portal (USFWS 2022b) was conducted to determine if any USFWS-designated critical habitat occurs in the proposed project area.

A total of 59 special-status plants were identified within the 16 quadrangles queried (CNPS 2022), and 51 special-status animals were identified within five miles of the City of Berkeley (CDFW 2022a). Appendix B presents lists of the special-status plant and animal species identified by the database queries. Many of these species have sensitivity ratings below the threshold for significant impacts from development in urban settings under CEQA, or there are no recent records of the species occurring within the City of Berkeley in the past ten years. Berkeley proper is urbanized and developed, it is lacking in suitable habitats for special-status plants, and with the exception of avian taxa, lacking in suitable habitat for special-status animals. However, the eastern and western borders of Berkeley feature marine and estuarian habitats and foothill woodlands and grasslands, respectively, where special-status species are more likely to occur. The vast majority of the inventory sites, the middle housing rezoning districts, and the Southside are not located in these habitat types.

d. Sensitive Vegetation Communities and Critical Habitat

No natural vegetation communities considered sensitive by the CDFW occur in the City of Berkeley; however, the following four sensitive natural communities occur within a 5-mile radius (CDFW 2022a):

- Northern Coastal Salt Marsh
- Northern Maritime Chaparral
- Serpentine Bunchgrass
- Valley Needlegrass grassland

No USFWS-designated critical habitat occurs in the City of Berkeley; however, critical habitat for the following five species occurs within a 5-mile radius of the City of Berkeley (USFWS 2022b):

- Alameda Whipsnake (*Masticophis lateralis*)
- California red-legged frog (*Rana draytonii*)
- Chinook Salmon (*Oncorhynchus tshawytscha*)
- Green sturgeon (*Acipenser medirostris*)
- Santa Cruz tarplant (*Holocarpha macradenia*)

e. Nesting Birds

Suitable substrates for avian species protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), including shrubs, trees, man-made structures, and the ground surface, occur throughout the proposed project area. Some species prefer vegetation, including ornamental vegetation, and some species can be found nesting in man-made structures, such as power poles or the eaves of buildings. Nesting birds may occur during the breeding season (generally February 1 through August 31; beginning January 1 for some raptor species).

f. Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Wildlife movement corridors can be both large and small scale. One essential connectivity area is mapped by the Biogeographic Information and Observation System (BIOS) along the eastern border of the City of Berkeley (CDFW 2022b). The corridor connects several natural landscape blocks in the east San Francisco Bay Area. From the foothills southeast of San Pablo Bay it extends southeast, parallel with the San Francisco Bay, and connects with the Diablo Range east of Fremont. This essential connectivity area as a part of the bay area hills may serve as a movement corridor for the state provisionally protected Southern California/Central Coast ESU of mountain lion. CDFW characterizes the value of essential connectivity areas based on permeability to wildlife movements. As mapped in BIOS, the edges of the nearest connectivity area become increasingly less permeable as they extend toward Berkeley and developed areas of Alameda County.

4.3.2 Regulatory Setting

a. Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) and subsequent amendments provide for the conservation of endangered and threatened species, and the ecosystems upon which they depend.

FESA is intended to prevent the unlawful “take” of listed fish, wildlife, and plant species. Section 9(a)(1)(B) specifically states take of species listed as threatened or endangered is unlawful. Take is

defined as any action that would harass, harm, pursue, hunt, wound, shoot, kill, trap, capture, or collect any threatened or endangered species.

Section 10 of the FESA allows the United States Fish and Wildlife Service (USFWS) to issue incidental take permits if take of a listed species may occur during otherwise lawful activities. Section 10(a)(1)(B) requires a Habitat Conservation Plan for an incidental take permit on non-federal lands. Section 7 of the FESA requires federal agencies to aid in the conservation of listed species, and to ensure that the activities of federal agencies will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. The USFWS and the National Oceanic and Atmospheric Administration (NOAA) are responsible for administration of the FESA and have regulatory authority over federally listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds, and prohibits the removal of nests occupied by migratory birds. The USFWS has regulatory authority for the MBTA.

Clean Water Act

The USACE, under provisions of Section 404 of the Clean Water Act (CWA) and USACE implementing regulations, has jurisdiction over the placement of dredged or fill material into "waters of the United States." Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." In practice, the boundaries of certain waters subject to USACE jurisdiction under Section 404 have not been fully defined. Previous regulations codified in 1986 defined "waters of the United States" as traditional navigable waters, interstate waters, all other waters that could affect interstate or foreign commerce, impoundments of waters of the United States, tributaries, the territorial seas, and adjacent wetlands.

On April 21, 2020, the USACE and U.S. Environmental Protection Agency (USEPA) published the Navigable Waters Protection Rule to define "Waters of the United States." This rule, effective on June 22, 2020, defines four categories of jurisdictional waters, documents certain types of waters that are excluded from jurisdiction, and clarifies some regulatory terms. Under the Navigable Waters Protection Rule, "waters of the United States" include:

1. Territorial seas and traditional navigable waters;
2. Perennial and intermittent tributaries that contribute surface flow to those waters;
3. Certain Lakes and ponds, and impoundments of jurisdictional waters, and;
4. Wetlands adjacent to jurisdictional waters.

Tributaries are defined as "a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to the territorial seas or traditional navigable waters in a typical year either directly or through one or more tributaries, jurisdictional lakes, ponds, and impoundments of jurisdictional waters, or adjacent wetlands." The tributary category also includes a ditch that "either relocates a tributary, is constructed in a tributary, or is constructed in an adjacent wetland as long as the ditch is perennial or intermittent and contributes surface water flow to a traditional navigable water or territorial sea in a typical year."

Adjacent wetlands are defined as wetlands that:

1. Abut, meaning to touch at least at one point or side of, a defined Water of the U.S.;
2. Are inundated by flooding from a defined Water of the U.S. in a typical year;
3. Are physically separated from a defined Water of the U.S. by a natural berm, bank, dune, or similar natural features or by artificial dike, barrier or similar artificial structures as long as direct hydrological surface connection to defined Waters of the U.S. are allowed; or,
4. Are impounded of Waters of the U.S. in a typical year through a culvert, flood or tide gate, pump or similar artificial structure.

The Navigable Waters Protection Rule states that the following areas not considered to be jurisdictional waters even where they otherwise meet the definitions described above:

1. Groundwater, including groundwater drained through subsurface drainage systems;
2. Ephemeral features that flow only in direct response to precipitation including ephemeral streams, swales, gullies, rills and pools;
3. Diffuse stormwater runoff and directional sheet flow over uplands;
4. Ditches that are not defined Waters of the U.S. and not constructed in adjacent wetlands subject to certain limitations;
5. Prior converted cropland;
6. Artificially irrigated areas that would revert to upland if artificial irrigation ceases;
7. Artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
8. Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
9. Stormwater control features constructed or excavated in uplands or in non-jurisdictional water to convey, treat, infiltrate, or stormwater run-off;
10. Groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and,
11. Waste treatment systems.

USACE jurisdictional limits are typically identified by the Ordinary High Water Mark (OHWM) or the landward edge of adjacent wetlands (where present). The OHWM is the “line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area” (33 CFR 328.3).

The USACE defines wetlands as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3). The USACE’s delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

b. State Regulations

California Endangered Species Act

The CDFW is responsible for administration of CESA. For projects that may affect both a State and federal listed species, compliance with the FESA will satisfy the CESA, provided the CDFW determines that the federal incidental take authorization is consistent with the CESA.

Take is defined in CFGC Section 86 as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The CESA allows for take incidental to otherwise lawful activities under CFGC Section 2081. Project proponents wishing to obtain incidental take permits are able to do so through a permitting process outlined in California Code of Regulations (CCR) Section 783. Additionally, some sensitive mammals and birds are protected by the state as Fully Protected Mammals or Fully Protected Birds, as described in the CFGC, Sections 4700 and 3511, respectively.

Projects that may result in a take of a California listed species require a take permit under the CESA. The federal and State acts lend protection to species considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or den locations, communal roosts, and other essential habitat. Unlike the FESA, the CESA prohibits the take of not just listed endangered or threatened species, but also candidate species (species petitioned for listing).

The CESA defines an endangered species as:

> …a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

A threatened species is defined as:

> …a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.

Candidate species are defined as:

> …a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species. Article 3, Sections 2080 through 2085 of the CESA addresses the taking of threatened or endangered species by stating:

> …no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission

determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.

California Fish and Game Code - Nesting Bird Protection

According to CFGC Section 3503 it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird [except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)]. Sections 3503 and 3513 prohibit the taking of specific birds, their nests, eggs, or any portion thereof during the nesting season. Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the federal MBTA, prohibiting the take or possession of any migratory nongame bird.

California Native Plant Protection Act

The California Native Plant Protection Act (NPPA) was enacted in 1977 and allows the California Fish and Wildlife Commission to designate plants as rare or endangered. Currently, 64 species, subspecies, and varieties of plants are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA permitting procedures (CFG Code Section 2081) would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference between regulations and protocols for plants listed under CESA and those listed under the NPPA.

Clean Water Act Section 401, Porter-Cologne Water Quality Control Act

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over “waters of the State,” which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering Section 401 of the CWA. In addition, where Federal jurisdiction is not asserted (for example, due to a lack of connectivity to a Relatively Permanent Waters [RPW] and Traditional Navigable Waters [TNW]), RWQCB assert jurisdiction over “waters of the State” pursuant to Section 13263 of the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. In this event, the SWRCB may issue general Waste Discharge Requirements (WDRs) regarding discharges to “isolated” waters of the State if limiting criteria are not exceeded (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the USACE to be Outside of Federal Jurisdiction) or project-specific WDRs.

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

(i) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;

the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and

the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's *Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State* (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

California Fish and Game Code Section 1600 *et seq.*

Pursuant to CFGC Section 1600, CDFW has authority over all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state, and requires any person, state or local governmental agency, or public utility to notify the CDFW before beginning any activity that would "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" that supports fish or wildlife resources.

A stream is defined as a "body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (California Code of Regulations, Title 14 Section 1.72). A Lake or Streambed Alteration Agreement may be required for any proposed project that would result in an adverse impact to a river, stream, or lake. CDFW jurisdiction typically extends to the top of the bank and out to the outer edge of adjacent riparian vegetation if present. However, CDFW can take jurisdiction over a body of flowing water and the landform that conveys it, including water sources and adjoining landscape elements that are byproducts of and affected by interactions with flowing water without regard to size, duration, or the timing of flow (Brady and Vyverberg 2013).

CDFW Special Animals List

Special-status wildlife species are those species included on the CDFW "Special Animals" list (CDFW 2020). "Special Animal" is a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. The CDFW considers the taxa on this list to be those of greatest conservation need. The species on this list generally fall into one or more of the following categories:

- Officially listed or proposed for listing under the CESA and/or FESA
- State or Federal candidate for possible listing
- Taxa that meet the criteria for listing, even if not currently included on any list, as described in *CEQA Guidelines* Section 15380

- Taxa considered by the Department to be a Species of Special Concern
- Taxa that are biologically rare, very restricted in distribution, declining throughout their range, or have a critical vulnerable stage in their life cycle that warrants monitoring
- Populations in California that may be on the periphery of a taxon's range but are threatened with extirpation in California

c. Local

City of Berkeley General Plan

The City of Berkeley's General Plan includes the Environmental Management Element which establishes policies for the management and conservation of Berkeley's natural resources. Several policies are intended to facilitate environmental protection and conservation by protecting, maintaining, and enhancing the urban forest (including street and park trees) and natural habitat areas. The policies and actions relevant for biological resources are shown below:

Policy EM-1: City of Berkeley Leadership. Maintain Berkeley's position as a leader in the adoption and implementation of environmental management programs.

Policy EM-3: Regional Coordination. Promote the City's environmental management and sustainability policies and programs and encourage other cities in the region to establish similar or better policies and programs.

Policy EM-5: "Green" Buildings. Promote and encourage compliance with "green" building standards.

Policy EM-23: Water Quality in Creeks and San Francisco Bay. Take action to improve water quality in creeks and San Francisco Bay.

Policy EM-24: Sewers and Storm Sewers. Protect and improve water quality by improving the citywide sewer system.

Policy EM-27: Creeks and Watershed Management. Whenever feasible, daylight creeks by removing culverts, underground pipes, and obstructions to fish and animal migrations.

Policy EM-28: Natural Habitat. Restore and protect valuable, significant, or unique natural habitat areas.

Policy EM-29: Street and Park Trees. Maintain, enhance, and preserve street and park trees to improve the environment and provide habitat.

Policy EM-30: Native Plants. Use native tree and plant species to enhance ecological richness.

City of Berkeley Municipal Code

The Berkeley Municipal Code (BMC) includes the following ordinances related to protection of biological resources:

- **BMC Chapter 6.52, Moratorium on the Removal of Coast Live Oak Trees**: This section of the BMC declares a moratorium on the removal of coast live oak trees, to prohibit any pruning of an oak that is excessive and injurious to the tree. Under this ordinance, the "removal of any single stem coast live oak tree of a circumference of 18 inches or more and any multi-stemmed coast live oak with an aggregate circumference of 26 inches or more at a distance of four feet up from the ground within the City of Berkeley" is prohibited. An exception may be made to this

ordinance if the City Manager finds that any tree is a potential danger to people or property due to its condition, and that the only reasonable mitigation would be tree removal.

- **BMC Chapter 17.08, Preservation and Restoration of Natural Watercourses:** This chapter of the BLC regulates: (1) building over or near culverted creeks; (2) building near open creeks; (3) the rehabilitation and restoration of natural waterways; and (4) the management of watersheds.
- **BMC Chapter 17.20, Discharge of Non-Stormwater Into the City's Storm Drain System-Reduction of Stormwater Pollution:** This chapter of the BMC includes a provision to prohibit discharges from rising groundwaters, springs, and flows from riparian habitats and wetlands.

4.3.3 Impact Analysis

a. Methodology and Significance Thresholds

The proposed project does not identify specific development projects occurring at a specific location or time; and the design and scope-of-work for such projects is unknown. The proposed project involves a policy change; specifically, an update to the City's Housing Element. Considering these circumstances, it is not possible to determine the specific impacts of future development projects that may occur as a result of the HEU. The following impact analysis serves to analyze the potential impacts of the HEU with the understanding that the existing policies and actions in the General Plan, and applicable federal, state, and local laws, regulations, and management policies would apply to future development proposals. Subsequent environmental documents, when required, could "tier" from the HEU EIR and focus its analysis on any new significant impacts per *CEQA Guidelines* Section 15152 and 15385.

The analysis is based on a biological baseline (i.e., existing conditions) derived from biological resource data collected from numerous sources, including relevant literature, aerial imagery and topographic maps, and data on special-status species and sensitive habitat information obtained from the CNDDB (2022a), BIOS (CDFW 2022b), CNPS *online Inventory of Rare and Endangered Plants of California* (CNPS 2022), and USFWS IPaC (2022a). The USFWS Critical Habitat Portal (2022b), U.S. Geological Service National Hydrology Data Set (2022) and National Wetlands Inventory (USFWS 2022c) were also queried. The methods and results are presented in detail above.

The following thresholds are based on Appendix G of the *CEQA Guidelines*. Impacts would be significant if the proposed project would result in any of the following:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites;

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact BIO-1 DEVELOPMENT FACILITATED BY THE PROPOSED HEU MAY RESULT IN DIRECT OR INDIRECT IMPACTS TO SPECIAL-STATUS SPECIES OR THEIR ASSOCIATED HABITATS, AND IMPACTS TO NESTING BIRDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

A total of 59 special-status plants were identified within the 16 quadrangles including and surrounding the City of Berkely (CNPS 2022), and 48 special-status animals were identified within five miles of the City of Berkeley (CDFW 2022a) (Appendix B). The highly developed and urbanized core of Berkeley generally lacks suitable habitats to support special-status plants and special-status animals; however, the grassland and oak woodland habitats on the eastern boundary of the City along with the marine habitat on the western border of Berkeley may support special-status species such as western bumble bee and green sturgeon respectively. Many of the special status species within the region have sensitivity ratings below the threshold for significant impacts from development in urban settings under CEQA, or there are no records of the species occurring within the City of Berkeley in the past ten years. Depending on the location and timing of future development projects, the potential occurrence of some special status species cannot be ruled out.

The core of the City of Berkeley is developed and lacking in habitats for most special-status species. The HEU does not include proposed development sites on the western boundary of Berkeley, where marine, estuarine, and lacustrine habitats may provide habitats for special-status species and native fish and wildlife. While the majority of the opportunity sites approved under the HEU would focus development in urbanized core of the City, some areas zoned R-1 and R-2 occur on the eastern boundary. Individual development projects in these areas may result in direct and indirect impacts to native vegetation and habitats potentially supporting native wildlife and special-status species.

Where special-status species occur, direct impacts from future development projects may include direct mortality of special-status species struck by construction equipment or vehicles during construction; crushing of burrows or habitat features providing shelter for special-status species; habitat impacts including trimming and removal of native vegetation, and grading; noise, vibration, and other disturbances that alter foraging and mating behaviors; and increased predation due to human presence and food subsidies. Habitat impacts may be permanent or temporary. Indirect impacts may include introduction and spread of nonnative species, fire, and fugitive dust, which alter habitat values; noise, lighting, and human presence which may alter migratory corridors, mating and foraging behavior; and other “edge effects” at the urban-wildland interfaces.

However, future development proposals would be subject to the Berkeley General Plan and its goals regarding the protection of biological resources. Generally, Policy EM-1 and Policy EM-3 create a framework for environmental policy and encouraging agencies, businesses, and households to focus on environmental management and sustainability. Further, Policy EM-5 encourages construction

projects to be sited, designed, constructed, and operated to minimize present and future impacts on the natural environment.

Future development projects would also be subject to state and federal laws, regulations, and management policies regarding biological resources (e.g., federal Endangered Species Act). Future development projects would be reviewed to determine whether their impacts fall within the scope of this EIR, or if additional site-specific environmental review will be required. Subsequent environmental documents, when required, could "tier" from the HEU EIR and focus analysis on the potential for new significant impacts per *CEQA Guidelines* Section 15152 and 15385.

Considering the policies and actions of the General Plan and required compliance with federal, State, and local laws, regulations, and management policies, impacts to special-status species would be less than significant.

Trees, shrubs, man-made structures, and the ground surface throughout Berkeley provide suitable nesting substrates for birds protected under the MBTA and CFGC. If construction of specific development projects implemented under the proposed project occurs during the breeding season, impacts to nesting birds may occur. Impacts may include direct impacts to active nests, including eggs or young, if nesting substrates are removed as part of the project. Indirect impacts may result if noise, vibration, and human presence cause adult birds to abandon the nests for prolonged periods of time, preventing them from incubating eggs, brooding chicks, and defending the nest from predators. However, development projects in Berkeley are required to comply with the following Standard Condition of Approval:

> Avoid Disturbance of Nesting Birds. Initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 30), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and January 31.

With compliance with City of Berkeley Standard Conditions of Approval, impacts to nesting birds would be less than significant.

Mitigation Measure

This impact would be less than significant. No mitigation measures are required.

Threshold 2:	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact BIO-2 IMPLEMENTATION OF THE PROPOSED HEU MAY DIRECTLY OR INDIRECTLY IMPACT RIPARIAN HABITAT, SENSITIVE NATURAL COMMUNITIES, OR PROTECTED WETLANDS IN THE CITY OF BERKELEY. IMPLEMENTATION OF FEDERAL, STATE, AND LOCAL REGULATIONS AND POLICIES WOULD ENSURE RIPARIAN HABITAT AND WETLANDS ARE NOT SIGNIFICANTLY IMPACTED. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The City of Berkeley is generally urbanized and developed. The dominant vegetation types include ornamental vegetation and ruderal areas. No natural vegetation communities considered sensitive by the CDFW occur in the City. Four sensitive natural community types occur within a five-mile radius of the City. Northern Coastal Salt Marsh is located within 1.5 miles to the north and south of the City of Berkeley; Northern Maritime Chaparral is located approximately three miles to the northeast of the City of Berkeley; serpentine bunchgrass is located approximately four miles to the southeast of the City of Berkeley; and valley needlegrass grassland is located approximately 1.5 miles north of the City of Berkeley. These sensitive natural vegetation communities would not be affected by development projects resulting from the proposed HEU due to their respective distances from future development that could occur under the proposed HEU.

Although some riparian areas may occur within or adjacent to the City of Berkeley, the specific development areas identified under the proposed HEU are in already developed urban areas. No impacts to riparian areas have been identified. If impacts to riparian areas are identified during the planning process for specific development projects associated with the proposed HEU, they would be subject to Berkeley's creek protection regulations (BMC Chapter 17.08) and permitting pursuant to CFGC Section 1600 *et seq*. Under BMC Chapter 17.08, obstructing or interfering with watercourses is prohibited and construction within 30 feet of a culverted creek must receive a permit from the City Engineer and comply with the provisions in the chapter to ensure the watercourse is protected. The elimination or degradation of significant in-stream or riparian corridor habitat is prohibited. With compliance with these regulations, this impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 3:	Would the project have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact BIO-3 IMPLEMENTATION OF THE PROPOSED HEU MAY RESULT IN IMPACTS TO STATE OR FEDERALLY PROTECTED WETLANDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Many of the housing opportunity sites are located on infill sites that are already developed with structures and/or parking and are not proximate to wetlands or waterways. Because these areas are currently developed, they are unlikely to contain jurisdictional wetlands or other surface waters and associated riparian vegetation zones. However, some housing opportunity sites may be in undeveloped areas or are near wetlands and streams within the City of Berkeley. Additionally, the proposed HEU would increase density in some areas, which could require upgraded utilities or

stormwater drainage. The construction of these upgraded facilities may require work, including dredge or fill, within jurisdictional wetlands and streams and could require ground disturbance in riparian habitat associated with these wetlands and streams. For development that would occur in these areas, Berkeley's creek protection ordinance (BMC Chapter 17.08) and permitting pursuant to Section 404/401 of the CWA Section, Section 1600 *et seq.* of the CFGC, and the Porter-Cologne Water Quality Control Act would be required. Actual jurisdictional areas are determined by the State and federal authorities at the time that permits are requested, and the agencies are responsible for describing avoidance, minimization, and mitigation measures, if required. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 4:	Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact BIO-4 IMPLEMENTATION OF THE PROPOSED HEU WOULD NOT SUBSTANTIALLY IMPEDE THE MOVEMENT OF NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES OR WITH ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS WITH COMPLIANCE WITH EXISTING AND PROPOSED REGULATIONS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The City of Berkeley is adjacent to a designated essential connectivity area but the City of Berkeley is not within, and does not function as, a significant regional or local wildlife movement corridor. Codornices Creek along the northern border of the City of Berkeley is one of the last remaining unchannelized perennial streams within or adjacent to the City of Berkeley. It provides a natural run for the threatened salmonid fish species. Specific development projects implemented under the proposed HEU would generally be focused in already developed urban areas within the City of Berkeley. However, if projects have the potential to result in direct impacts to Codornices Creek, the activities may impact the movement of native fish. The proposed HEU and associated future development projects would have to adhere to Berkeley General Plan Policy EM-28 Natural Habitat and the provisions of the Creek Protection Ordinance--BMC Chapter 17.08. In addition, projects under the HEU would be subject to permitting pursuant to CFGC Section 1600 et seq. Required compliance with these regulations would ensure that the watercourse is not diverted or obstructed such that it would impair the movement of native fish. With compliance with existing regulations, this impact would be less than significant.

Vegetation throughout much of the urban environment of the City of Berkeley consists of primarily non-native landscaped trees and shrubs. Native bird species will use the landscaped vegetation in lower numbers due to the simplicity of the vegetation and the non-native vegetation supports fewer of the resources required by native bird species that native and natural vegetation would provide. While the HEU will primarily focus development on the urban core of Berkeley, in some areas, native vegetation may be replaced with development and ornamental vegetation. Due to required consistency with General Plan policies EM-28, EM-29, and EM-30, however, this impact would be less than significant.

Development projects under the HEU may include taller buildings in areas along commercial corridors and in the Southside. Overall, redevelopment and infill housing in Berkeley would not substantially affect migratory bird routes, as the area is already built out with existing structures of

varying heights and mature trees around structures. Nonetheless, there is a risk for new construction with glass windows or facades that birds would not perceive transparent glass as an obstruction and may collide with the glass. This occurs mainly when sky or vegetation is reflected in the glass or they perceive an unobstructed flight path through the glass. As a result, morbidity and mortality due to collision with the buildings is a potential impact. The City is currently developing regulations for bird safety requirements for new construction which are planned to be adopted around the time the proposed HEU is adopted. These regulations will include requiring bird safe glass for new construction or renovations. The most common methods to prevent bird strikes are glass and façade treatments are such as fritted and frosted glass, angled glass, ultra-violet glass, or film. Future development in the HEU planning cycle would be subject to the City's bird safety requirements at the time of construction. Therefore, this impact is less than significant.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation measures are required.

Threshold 5:	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

IMPACT BIO-5 IMPLEMENTATION OF THE PROPOSED HEU WOULD NOT CONFLICT WITH LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES, SUCH AS A TREE PRESERVATION POLICY OR ORDINANCE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Future development in Berkeley under the proposed HEU may involve the removal of mature trees during construction. General Plan Policy EM-29 requires the City to maintain and enhance street and park trees to improve the environment and provide habitat. On-going implementation of the policy through site-specific design review and use permits would reduce any potential impact to locally significant trees to a less than significant level.

Under the City of Berkeley's Tree Ordinance (BMC No. 6,509-N.S.) the removal of coast live oak trees is prohibited for any reason, unless such removal is deemed necessary for public safety by the City Manager. Any Coast Live Oak with a single stem circumference of 18 inches or more or any multi-stemmed oak with an aggregate circumference of 26 inches or more at a distance of four feet from the ground is protected under this ordinance.

Specific development projects implemented under the proposed HEU would be required to adhere to General Plan policies and to the Tree Ordinance. The proposed HEU does not include specific policies or programs that would conflict with or hinder implementation of the City's Tree Ordinance or other policies or ordinances for protecting biological resources. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 6:	Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact BIO-5 IMPLEMENTATION OF THE PROPOSED HEU WOULD NOT CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN. NO IMPACT WOULD OCCUR.

There are no habitat conservation plans or natural community conservation plans adopted in Berkeley. Therefore, the proposed HEU and future specific development project would not conflict with any such plans. No impact would occur.

Mitigation Measures

No impact would occur and no mitigation measures are required.

c. Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines Section 15065[a][3]). The geographic scope for cumulative biological resources impacts includes the City of Berkeley. This geographic scope is appropriate for biological resources because it encompasses the mosaic of representative land cover and habitat types (and associated biological resources) affected by the project, including primarily urban, residential, commercial, and industrial development with areas of natural habitats. Development that is considered part of the cumulative analysis includes buildout under the University of California, Berkeley's LRDP.

Cumulative development in Berkeley may contribute to the loss of foraging and breeding habitat for special-status species; contribute to the decline of special-status species, fragmentation of habitat and isolation of populations, and decrease movement opportunities. Full implementation of the proposed HEU in combination with cumulative development described in Section 3, *Environmental Setting,* would increase density and intensity of existing land uses. However, the City of Berkeley is highly urbanized and developed which limits the habitat value and potential for presence of sensitive biological resources. Potential impacts to biological resources associated with the proposed project would be less than significant with mitigation. Therefore, the proposed project's incremental contribution to cumulative impacts associated with biological resources would not be cumulatively considerable, and cumulative impacts would be less than significant.

4.4 Cultural Resources

This section assesses potential impacts on cultural resources related to implementation of the proposed HEU.

4.4.1 Regulatory Setting

This regulatory framework section identifies the federal, state, and local laws, statutes, guidelines, and regulations that govern the identification and treatment of cultural resources as well as the analysis of potential impacts to cultural resources. The lead agency must consider the provisions and requirements of this regulatory framework when rendering decisions on projects that have the potential to affect cultural resources.

a. Federal Regulations

National Register of Historic Places

The National Register of Historic Places (NRHP) was established by the National Historic Preservation Act of 1966 as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (Code of Federal Regulations [CFR] 36, 60.2). The NRHP is the nation's official list of cultural resources worthy of preservation. The NRHP recognizes the quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects. Per 36 CFR Part 60.4, a property is eligible for listing in the NRHP if it meets one or more of the following criteria:

Criterion A: Are associated with events that have made a significant contribution to the broad patterns of our history

Criterion B: Are associated with the lives of persons significant in our past

Criterion C: Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined as follows:

Location: The place where the historic property was constructed or the place where the historic event occurred

Design: The combination of elements that create the form, plan, space, structure, and style of a property

Setting: The physical environment of a historic property

Materials: Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property

Workmanship: The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory

Feeling: A property's expression of the aesthetic or historic sense of a particular period of time

Association: The direct link between an important historic event or person and a historic property

Certain properties are generally considered ineligible for listing in the NRHP, including cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions, relocated structures, or commemorative properties. Additionally, a property must be at least 50 years of age to be eligible for listing in the NRHP. The National Park Service states that 50 years is the general estimate of the time needed to develop the necessary historical perspective to evaluated significance (National Park Service 1997:41). Properties which are less than 50 years must be determined to have "exceptional importance" to be considered eligible for NRHP listing.

b. State Regulations

California Register of Historical Resources

The CRHR was established in 1992 and codified by PRC §§5024.1 and 4852. The CRHR is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (Public Resources Code, 5024.1(a)). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (Public Resources Code, 5024.1(b)). Unlike the NRHP however, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation 2006). Further, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2006). Generally, the California Office of Historic Preservation recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995:2).

Properties are eligible for listing in the CRHR if they meet one of more of the following criteria:

Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage

Criterion 2: Is associated with the lives of persons important to our past

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history

California Environmental Quality Act

California Public Resources Code (PRC) Section 21804.1 requires lead agencies determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or cultural significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the National Register of Historic Places (NRHP) are automatically listed in the CRHR and are, therefore, historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

CEQA Guidelines Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a "unique archaeological resource" as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: 1) it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; 2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or 3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources will be less than significant and need not be considered further (*CEQA Guidelines* Section 15064.5[c][4]). *CEQA Guidelines* Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (*CEQA Guidelines* §15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (*CEQA Guidelines* §15064.5[b][2][A]).

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC §21083.2[a], [b]).

CEQA Guidelines Section 15126.4 stipulates an EIR shall describe feasible measures to minimize significant adverse impacts. In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impacts of the project. Generally, a project which is found to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and*

Reconstructing Historic Buildings (the Standards) is considered to be mitigated below a level of significance (*CEQA Guidelines* Section 15126.4 [b][1]). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (*CEQA Guidelines* Section 15126.4[b][3]).

Secretary of the Interior's Standards for the Treatment of Historic Properties

In accordance with the California Code of Regulations and *CEQA Guidelines*, a project that has been determined to conform with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (*Secretary's Standards*) is generally considered to be a project that will not cause a significant adverse impact to a historical resource (14 California Code of Regulations {CCR} Section 15126.4). If a project meets the *Secretary's Standards*, the project can qualify for a potential categorical exemption from CEQA (14 CCR Section 15331).

The goal of the *Secretary's Standards* is to outline treatment approaches that allow for the retention of and/or sensitive changes to the distinctive materials and features that lend a historical resource its significance. When changes are carried out according to the Secretary of the Interior's Standards, the historical resource retains its historic integrity and thereby continues to convey the reasons for its significance. The *Secretary's Standards* and associated Guidelines (36 CFR 67) are "neither technical nor prescriptive, but are intended to promote responsible preservation practices that help protect" cultural resources. The *Secretary of the Interior's Standards and Guidelines* offer general recommendations for preserving, maintaining, repairing, and replacing historical materials and features, as well as designing new additions or making alterations.

The *Secretary's Standards* also provide guidance on new construction adjacent to historic districts and properties, in order to ensure that there are no adverse impacts to integrity as a result of a change in setting. The ten *Secretary's Standards for Rehabilitation* are:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

In order to determine whether a project complies with the *Secretary's Standards*, the analysis must consider the "character-defining," or historically significant, features of the historical resource. Alterations and replacement of character-defining features over time can impair a historic property's integrity and result in a loss of historic status. Therefore, to ensure that a historic property remains eligible after implementation of projects, character-defining features should be identified and preserved.

According to Preservation Brief 17, Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character, there is a three-step process to identifying character-defining features. Step 1 involves assessing the physical aspects of the building exterior as a whole, including its location and setting, shape and massing, orientation, roof and roof features, projections, and openings. Step 2 looks at the building more closely—at materials, trim, secondary features, and craftsmanship. Step 3 encompasses the interior, including individual spaces, relations or sequences of spaces (floor plan), surface finishes and materials, exposed structure, and interior features and details.

California Public Resources Code

Section 5097.5 of the California PRC states:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

As used here, "public lands" means lands owned by or under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with PRC § 5097.5 for their activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others.

If a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and [c]).

Codes Governing Human Remains

The disposition of human remains is governed by Section 7050.5 of the California Health and Safety Code and PRC Sections 5097.94 and 5097.98 and falls within the jurisdiction of the Native American Heritage Commission (NAHC). If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

c. Local Regulations

City of Berkeley General Plan (2001)

The Urban Design and Preservation Element of the City's General Plan, approved in 2001, contains the following goals and policies related to cultural resources and relevant to the current project:

Policy UD-1 Techniques. Use a wide variety of regulatory, incentive, and outreach techniques to suitably protect Berkeley's existing built environment and cultural heritage.

Policy UD-2 Regulation of Significant Properties. Increase the extent of regulatory protection that applies to structures, sites, and areas that are historically or culturally significant.

Policy UD-3 Regulation of Neighborhood Character. Use regulations to protect the character of neighborhoods and districts, and respect the particular conditions of each area.

Policy UD-5 Architectural Features. Encourage, and where appropriate require, retention of ornaments and other architecturally interesting features in the course of seismic retrofit and other rehabilitation work.

Policy UD-6 Adaptive Reuse. Encourage adaptive reuse of historically or architecturally interesting buildings in cases where the new use would be compatible with the structure itself and the surrounding area.

Policy UD-8 Public Works Projects. In public works projects, seek to preserve desirable historic elements such as ornamental sidewalk features, lampposts, and benches.

Policy UD-12 Range of Incentives. Seek to maintain and substantially expand the range and scale of incentives that the City and/or other entities make available in Berkeley for the preservation of historic and cultural resources.

Policy UD-16 Context. The design and scale of new or remodeled buildings should respect the built environment in the area, particularly where the character of the built environment is largely defined by the aggregation of historically and architecturally significant buildings.

Policy UD-17 Design Elements. In relating a new design to the surrounding area, the factors to consider should include height, massing, materials, color, and detailing or ornament.

Policy UD-20 Alterations. Alterations to a worthwhile building should be compatible with the buildings original architectural character.

Policy UD-21 Directing Development. Use City incentives and zoning provisions to direct new development toward locations where significant historic structures or structures contributing to the character of an area will not need to be removed.

Policy UD-24 Area Character. Regulate new construction and alterations to ensure that they are truly compatible with and, where feasible, reinforce the desirable design characteristics of the particular area they are in.

Policy UD-36 Information on Heritage. Promote, and encourage others to promote, understanding of Berkeley's built and cultural heritage, the benefits of conserving it, and how to sensitively do that.

Policy UD-38 Tourism. As an economic development strategy, promote the city's cultural and architectural heritage.

City of Berkeley Municipal Code

The City of Berkeley's Municipal Code (BMC) Chapter 3.24 *Landmarks Preservation Commission* provides for the identification, designation, and preservation of historic structures and structures with cultural value. In accordance with Chapter 3.24, the Landmarks Preservation Commission is given regulatory powers over the City's designated historic properties (including Landmarks, Structures of Merit, and Historic Districts). Pursuant to Section 3.24.210,

> Upon receipt of any application for a permit to carry out any construction, alteration or demolition on a landmark site, in an historic district or on a structure of merit site, or on an initiated landmark site, in an initiated historic district or on an initiated structure of merit site, the Department of Planning and Community Development shall, unless the structure or feature concerned has been declared unsafe or dangerous pursuant to Section 3.24.280 of this chapter, promptly forward such permit application to the commission for review.

In accordance with Section 3.24.260, the Landmarks Preservation Commission may grant approval of permit applications for physical changes to Landmarks, Structures of Merit, and Historic Districts under the following circumstances. As described in Section 3.24.260(C), permit applications for construction, alteration, or repair of designated resources are subject to the following standards:

a. For applications relating to landmark sites, the proposed work shall not adversely affect the exterior architectural features of the landmark and, where specified in the designation for a publicly owned landmark, its major interior architectural features; nor shall the proposed work adversely affect the special character or special historical, architectural or aesthetic interest or value of the landmark and its site, as viewed both in themselves and in their setting.
b. For applications relating to property in historic districts, the proposed work shall not adversely affect the exterior architectural features of the subject property or the relationship and congruity between the subject structure or feature and its neighboring structures and surroundings, including facade, setback and height; nor shall the proposed work adversely affect the special character or special historical, architectural or aesthetic interest or value of the district. The proposed work shall also conform to such further standards as may be embodied in the designation of the historic district.
c. For applications relating to structure of merit sites, the proposed work shall not adversely affect the architectural features if architectural merit is the basis for designation; nor shall the proposed work adversely affect the special cultural, educational or historical interest or value if that is the basis for designation.

In addition, for permit applications for alteration or demolitions of designated landmarks, historic districts, and structures of merit, Section 3.24.260(C)(2) sets forth the provisions for Landmarks Preservation Commission review and consideration of extenuating circumstances, such as technical and economic feasibility.

Chapter 3.24 also defines the criteria for historic resource designation and procedures for the treatment of historic resources. Section 3.24.110, "Landmarks, historic districts, and structures of merit—Designation—Criteria for consideration," establishes the criteria when considering structures, sites, and areas for landmark or structure of merit designation The criteria for designating a City landmark are as follows:

1. Architectural merit:
    a. Property that is the first, last, only or most significant architectural property of its type in the region
    b. Properties that are prototypes of or outstanding examples of periods, styles, architectural movements or construction, or examples of the more notable works of the best surviving work in a region of an architect, designer or master builder
    c. Architectural examples worth preserving for the exceptional values they add as part of the neighborhood fabric
2. Cultural value: Structures, sites and areas associated with the movement or evolution of religious, cultural, governmental, social and economic developments of the City
3. Educational value: Structures worth preserving for their usefulness as an educational force
4. Historic value: Preservation and enhancement of structures, sites and areas that embody and express the history of Berkeley/Alameda County/California/United States
5. Historic property: Any property listed in the NRHP

The criteria for designating a structure of merit are as follows:

1. General criteria shall be architectural merit and/or cultural, educational, or historic interest or value. If upon assessment of a structure, the commission finds that the structure does not currently meet the criteria as set out for a landmark, but it is worthy of preservation as part of a neighborhood, a block or a street frontage, or as part of a group of buildings which includes landmarks, that structure may be designated a structure of merit.
2. Specific criteria include, but are not limited to one or more of the following:
    a. The age of the structure is contemporary with (1) a designated landmark within its neighborhood, block, street frontage, or group of buildings, or (2) an historic period or event of significance to the City, or to the structure's neighborhood, block, street frontage, or group of buildings.
    b. The structure is compatible in size, scale, style, materials or design with a designated landmark structure within its neighborhood, block, street frontage, or group of buildings.
    c. The structure is a good example of architectural design.
    d. The structure has historical significance to the City and/or to the structure's neighborhood, block, street frontage, or group of buildings. (Ord. 5686-NS § 1 (part), 1985: Ord. 4694-NS § 3.1, 1974)

Municipal Code General Provisions

Section 23.326.070.C of Berkeley's zoning code includes the following requirements for projects that would involve demolition of non-residential buildings (used for commercial, manufacturing, community institutional or other non-residential uses):

> Any application for a Use Permit or AUP to demolish a non-residential building or structure which is 40 or more years old shall be forwarded to the Landmarks Preservation Commission (LPC) for review prior to consideration of the Use Permit or AUP.
>
> The LPC may initiate a landmark or structure-of-merit designation or may choose solely to forward to the Board its comments on the application. The Board shall consider the recommendations of the LPC in considering its action on the application.

LPC input and comments on proposed demolitions subject to Section 23.326.070.C are advisory in nature to the Zoning Adjustments Board. Each LPC agenda lists the address and associated permit application number for all projects involving a request to demolish a building more than 40 years old for the LPC to review prior to any staff recommendation or action.

City of Berkeley Permit Application Requirements

While not part of the City's adopted Municipal Code, Berkeley's Zoning Project Application process includes a requirement for historic resources evaluation for certain projects involving properties over 40 years of age. Permit applications are required to include a set of State of California Department of Parks and Recreation (DPR) Series 523 forms, documenting a Historic Resource Evaluation, in the following project scenarios:

1. Demolition of a non-residential building, more than 40 years old, subject to referral to the Landmarks Preservation Commission in accordance with BMC Section 23.326.070.C;
2. Demolition/Substantial Change of any building more than 40 years old subject to environmental review pursuant to CEQA.

The Zoning Project Application Submittal Requirements include the following information on the evaluation:

> Evaluation(s) to include references to development history documentation (including but not limited to photographs, building permits, Sanborn maps, and directory listings); completed by a qualified historian, architectural historian or historic architect. Provide supplemental information in accordance with the Landmarks Preservation Ordinance criteria (BMC Section 3.24.110).
>
> The Environmental Review Officer may waive this requirement for residential addition and alteration proposals after determining that the project complies with preservation standards and environmental practices OR that qualified sources other than an HRE can provide the relevant information.

4.4.2 Cultural Resources Setting

Berkeley retains a wide variety of prehistoric and historic-era cultural resources that are of benefit to the community as a tangible record of the City's past and identity. This section provides an overview of the Berkeley's cultural resources setting from prehistoric/ethnographic times through the historic era and present day.

4.4.2.1 Prehistory

Data from the early work of N.C. Nelson in the San Francisco Bay, delta, and inland sites illuminated regional archaeological sequences and allowed the development of the Central California Taxonomic System (CCTS) (Nelson 1909; Moratto 1984). The CCTS outlines three main chronological periods (or 'horizons') for the Sacramento Delta and San Francisco Bay areas – Early, Middle, and Late,. summarized here following Hylkema's (2002) and Milliken *et al*.'s (2007) approaches.

Given the rise in sea levels in the Middle Holocene, the relatively recent formation of San Francisco Bay, and the presence of constant alluviation in low-lying parts of the Bay Area, most evidence of the earliest human habitation in the area is likely to be underwater or deeply buried. Therefore, most evidence for the Middle Holocene comes from inland sites, with the earliest dating from ca. 8000 BC at Los Vaqueros Reservoir in eastern Contra Costa County (Meyer and Rosenthal 1997), and the Metcalf Creek site (CA-SCl-178) in Morgan Hill (Hildebrandt 1983; Milliken *et al*. 2007:114; Jones et al. 2007:130).

The Early Period (4000-500 BC) in the San Francisco Bay Area shows the emergence of the "Windmiller pattern" of material culture, characterized by an advancement in technological skills and devices, an emphasis on hunting and trading, and burial and ceremonial practices as evidenced by large stemmed and concave-base obsidian projectile points, rectangular *Olivella* beads, charmstones, extended burials facing toward the west, and the replacement of milling slabs with mortars and pestles. Semi-sedentary land use, shell mound development, and evidence of regional trade are typical in some areas of the Bay while a lack of high-density shell deposits suggests only a preferential use of terrestrial resources. This cultural pattern appears earlier in the San Joaquin and Sacramento valleys, suggesting an influx of traditions or people from those areas into the Bay Area at some point during the period. In the East Bay, mortars and pestles first appear after 4000 BC and are ubiquitous by 1500 BC (Milliken *et al*. 2007:115; Moratto 1984: 277).

The Lower Middle Period (or Berkeley Pattern, 500 BC to 430 AD) is marked by major cultural disruptions. Changes included a move away from *Olivella* beads for new bead types much lower frequency of projectile points, the introduction of flexed burials instead of extended burials, and the introduction of decorative objects that may represent religious or cosmological beliefs. The period also saw the increased use of marine resources as seen through a developed network of large shellmounds (Lightfoot 1997; Moratto 1984:283; Lightfoot and Luby 2002; Leventhal 1993).

The Late Period (1050-1550 AD) is characterized by significant social transformations, an increase in social complexity and trade relations, greater sedentism, the appearance of cremation of high-status individuals, and the unification of ceremonial systems around the Bay Area. Changes in material culture include the introduction of the bow and arrow (including arrow-sized projectile points), harpoons, tubular tobacco pipe, clamshell disc beads, and new forms of ornamentation (Milliken *et al*. 2007:117).

Shellmounds are prevalent within the Alameda County (Nelson 1909). Approximately four miles southwest of the Southside, the Emeryville shellmound was excavated in 1902, 1924, (Moratto 1984:227-230). Another important site, the West Berkeley shellmound (Ala-307), was excavated in 1902 and in the mid-1950s before its destruction, providing an extensive faunal inventory and information on species change as well as important temporal and comparative data that has helped construct a regional archaeological sequence (Wallace and Lathrop 1975; Follett 1975; Greengo 1975; Moratto 1984:260-261).

Ethnography and Ethnohistory

The Huchiun people lived in present-day Berkeley when Spanish soldiers and missionaries arrived in the Bay Area. Huchiun territory extended "along the East Bay shore from Temescal Creek…north to the lower San Pablo and Wildcat Creek drainages in the present area of Richmond" (Milliken 1995:243). The names of two Huchiun villages – Genau and Junchaque – are known from Mission records, but their exact location is unknown (Milliken 1995:243). Huchiun presence near Temescal Creek, is attested in its Mexican-era name, "Arroyo del Temescal o Los Juchiyunes."

The Huchiun have been one of the groups of the Ohlone people who have lived along the east, west, and south shores of San Francisco Bay, and in the Santa Cruz Mountains, Salinas Valley, and Monterey Bay area. During this period, the Ohlone utilized a wide range of resources in a very favorable environment. Those populations living adjacent to the great bays of the region relied heavily on shellfish and aquatic animals for food. In the interior plant foods like acorns were gathered and stored in great quantity. Large game like deer, elk, and antelope were hunted. Game birds, waterfowl, fish, and shellfish were other major food sources that thrived in the nearby sloughs and marshes of San Francisco Bay (Milliken 1995:16-18; Levy 1978).

During this historical era, Ohlone society was organized in local tribes of 200-400 people living in semi-permanent villages made up of round, domed, or conical thatch homes with frames and a center hearth. Tribelets controlled fixed territories averaging 10 to 12 miles in diameter (Kroeber 1925:219; Milliken *et al.* 2007). Hereditary village leaders, who could be male or female, played an important role in conflict resolution, receiving guests, directing ceremonies, organizing food-gathering expeditions, and leading war parties but did not otherwise exercise direct authority (Levy 1978:487). Despite their autonomy, intermarriage between tribelets appears to have been frequent (Milliken 1995:22-24).

The Huchiun spoke the Chochenyo dialect of the Ohlone language, which was spoken along the eastern shore of San Francisco Bay prior to 1770. Ohlone/Costanoan is a branch of the Yok-Utian subfamily of the Penutian languages, which are spoken along the Pacific Coast from Central California to southeast Alaska. Penutian speakers seem to have entered central California from the northern Great Basin around 4000-4500 years ago and arrived in the San Francisco Bay Area about 1500 years ago, displacing speakers of Hokan languages (Golla 2007:74), which also relates to the spread of the Windmiller pattern (Moratto 1984:553; Levy 1978:486).

4.4.2.2 Post Contact History

History

Post-Contact history for the state of California is generally divided into three periods: the Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican American War, signals the beginning of the American Period when California became a territory of the United States.

Spanish Period (1769 – 1822)

Spanish explorers made sailing expeditions along the coast of California between the mid-1500s and mid-1700s. Juan Rodriguez Cabrillo in 1542 led the first European expedition to observe what was known by the Spanish as Alta (upper) California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). The Spanish crown laid claim to Alta California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1885; Gumprecht 1999).

During this period, Berkeley appears to have been sparsely inhabited by this time with the main Huchiun villages located near Richmond. By the 18th century, Spain developed a three-pronged approach to secure its hold on the territory and counter other foreign explorers. The Spanish established military forts known as presidios, as well as missions and pueblos (towns) throughout Alta California. The 1769 overland expedition by Captain Gaspár de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. Portolá established the Presidio of San Diego as the first Spanish settlement in Alta California in 1769. Franciscan Father Junípero Serra also founded Mission San Diego de Alcalá that same year, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

Mission San Francisco was founded in 1776. Few Huchiun people moved to the mission during the initial years, but by 1794 had migrated *en masse* to the mission. Construction of missions and associated presidios was a major emphasis during the Spanish Period in California to convert the Native American population to Christianity and to integrate them into communal enterprise. in 1794 187 Huchiuns were baptized at Mission San Francisco. In the following years, native people suffered from disease, dietary deficiency, and conflict that resulted in a nearly 80 percent population decline by 1832.

Spain began issuing land grants in 1784, typically to retiring soldiers, although the grantees were only permitted to inhabit and work the land. The land titles technically remained property of the Spanish king (Livingston 1914).

Mexican Period (1822 – 1848)

Several factors limited colonial settlement within Alta California to a minimum, including the threat of foreign invasion, political discord, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, the Viceroyalty of New Spain (Mexico and California territory) won independence from Spain in 1821. Shortly thereafter New Spain was dissolved and the Mexican Empire was established. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos, or large land areas used largely for raising cattle or livestock. Commonly, former soldiers and well-connected Mexican families were the recipients of these land grants, which now included the title to the land.

Berkeley was within Rancho San Antonio, which was granted to Luis Maria Peralta in 1820. Peralta had come to California in 1776 with the Anza expedition. The rancho stretched for more than 43,000 acres, including the area from present-day Albany in the north to San Leandro Creek in the south. In 1842, Luis Peralta divided the ranch among his sons, with José Domingo receiving what is today Berkeley and Albany and José Vicente receiving what is now Emeryville, North and West Oakland, and Piedmont.

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of non-native inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

In 1849 the area rapidly developed as a result of the Gold Rush. The Peralta family was plagued by squatters who overran rancho land, sometimes violently. Domingo Peralta sought to have his property confirmed in United States courts, and was burdened by legal proceedings to prove his ownership and sold portions of his land to raise money for legal fees.

American Period (1848 – Present)

The United States went to war with Mexico in 1846. The war ended in 1848 with the Treaty of Guadalupe Hidalgo, ushering California into its American Period.

In the San Francisco Bay Area, gold discovered in and along the American River in 1849 ushered in the Gold Rush. Immigrants flowed to the area and by the end of 1849, San Francisco's population grew from about 500 to 25,000 residents. California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as US territories (Waugh 2003). With the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom.

Local History

By the early 1860s, two noteworthy events catalyzed new settlement and expansion in the Berkeley area - the installation of telegraph lines along Telegraph and Claremont Avenues and the establishment of the College of California in 1866 (present-day UC Berkeley).

During this period, residences and industries grew around the wharf area that was known as "Ocean View". In April 1878, the people of "Ocean View", the area surrounding university campus, and local farmers were granted incorporation as the Town of Berkeley. Following incorporation, economic growth expanded rapidly with the establishment of mills, industrial plants, and retail operations. Commercial corridors began to grow in areas adjacent to the university, and along San Pablo Avenue. In 1872, the City's first post office opened. The area surrounding the City remained largely agricultural.

The establishment of the Southern Pacific Railroad in 1877 provided the means for easier transport of goods. By 1878, Southern Pacific had established a line from Oakland through to North Berkeley by way of Shattuck Avenue, and a downtown commercial district soon followed. As a result, the agricultural areas began to be developed for residential and commercial uses for the growing city.

By about 1888, an interurban electric trolley line as well as a ferry service to San Francisco helped connect the emerging town with nearby population and employment centers, further spurring population and construction expansion.

Into the twentieth century, Berkeley expanded steadily, through the meteoric growth of the UC Berkeley, the downtown commercial corridor, as well as industrial development along the city periphery. Residential expansion grew, as well, with neighborhoods into the Berkeley flats. The 1906 Earthquake hastened Berkeley's growth when thousands of displaced San Francisco residents became permanent Berkeley residents and a corresponding construction boom followed.

At the same time, enrollment at UC Berkeley more than tripled between 1900 and 1920, growing from 2,000 to over 7,000. In the 1910s, plans began for Berkeley's Civic Center. As expansion continued through the 1920s, the City adopted a comprehensive ordinance creating land-use zones throughout Berkeley, to manage the rapid construction that was transforming Berkeley. The economic collapse of the Great Depression signaled a shift in land use, as well, with one result being the adaptation of large-scale, single-family residences for multi-family use.

After the slowdown of the Great Depression, Berkeley experienced rapid expansion during and after World War II. The population grew from approximately 85,000 in 1940 to nearly 115,000 by 1950, with much of this increase due to defense-related industries, including shipyard operations, and military personnel stationed in and around Berkeley. The campus served as a training ground for Navy and Army officers as well as housing and barracks spaces.

Berkeley's growth was further reflected in surging enrollments at the University, which grew from 7,700 in 1944 to 21,000 in 1946. The University's growth contributed to Berkeley's emergence as important intellectual center. Much of Berkeley's postwar growth mirrors that of neighboring cities, with the postwar housing shortage (exacerbated by the population growth at UC Berkeley), the era of redevelopment, and suburban growth changing the dynamics and use patterns in the city's historic core.

In the postwar period, one of the eras that distinguished Berkeley, however, began in the 1960s and extended through the 1970s with the rise of the Civil Rights and Free Speech movements, the anti-war movement, and the flowering of a broad, influential counter-culture movement. With the leadership and participation of the younger generation, these movements came to define Berkeley's independent, progressive culture.

4.4.3 Known Historical Resources

To identify known historical resources within the housing inventory sites, the background research for this study included a review of the NRHP, CRHR, and the California Office of Historic Preservation Built Environment Resource Directory (BERD), and the City's listings of designated and previously evaluated resources. The review identified three housing inventory sites which are known as of the date of this report to contain properties which are listed in, or eligible for the NRHP, CRHR, or designated City of Berkeley Landmarks, and therefore are considered historical resources pursuant to *CEQA Guidelines* Section 15064.5(a).

One building, 2154 University Avenue (APN 57-2034-12), is a listed City of Berkeley Landmark. A review of the BERD included 11 properties that are listed in the housing inventory sites and have previously been surveyed for their potential historical significance. Of those properties surveyed, one property (2400 San Pablo Avenue) received a Status Code of 3S, or an individual property that appears eligible for the NRHP through survey evaluation and one property (2120 Shattuck Avenue) received a California Historical Resources Status Code of 2S2, or an individual property determined

to be eligible for listing in the NRHP by consensus through the Section 106 process and listed in the CRHR. In addition, background research for this study also identified four local historic districts; however, no housing inventory sites are located within a local historic district.

A review of parcel data for the properties comprising the housing inventory sites, including a total of 464 properties, found an additional 198 properties which have not been subject to previous historical resources evaluation, but which currently meet the 40-year age threshold generally triggering the need for evaluation in the City of Berkeley. An additional 10 properties will become 40 years of age during the 2022-2031 planning period of the Housing Element Update. Pending further analysis there is a potential for these previously unevaluated properties to qualify as historical resources pursuant to CEQA. For the purposes of this study, these properties are considered potential historical resources. See Appendix C for a full list of listed and age-eligible properties.

4.4.4 Impact Analysis

a. Methodology and Significance Thresholds

The methodologies and significance thresholds employed for the cultural resources impact analyses are described below and in the *Regulatory Setting*, above.

In accordance with Appendix G of the *CEQA Guidelines*, an impact to Cultural Resources is considered significant if it can be demonstrated that the project would:

1. Cause a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to *CEQA Guidelines* Section 15064.5; or
3. Disturb any human remains, including those interred outside of dedicated cemeteries.

The significance of an archaeological deposit and subsequently the significance of an impact are determined by the criteria established in the *CEQA Guidelines,* as provided in the *Regulatory Setting*.

If an archaeological resource does not meet either the historical resource or the more specific "unique archaeological resource" definition, impacts do not need to be mitigated [13 PRC 15064.5 (e)]. Where the significance of a site is unknown, it is presumed to be significant for the purpose of the EIR investigation.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact CUL-1 DEVELOPMENT ACCOMMODATED BY THE PROPOSED HOUSING ELEMENT UPDATE COULD ADVERSELY AFFECT KNOWN AND PREVIOUSLY UNIDENTIFIED HISTORIC-PERIOD RESOURCES. IMPACTS TO HISTORIC-PERIOD RESOURCES WOULD BE SIGNIFICANT AND UNAVOIDABLE WITH MITIGATION.

Reasonably foreseeable development facilitated by the Housing Element Update would result in a significant impact on historical resources if such activities would cause a substantial adverse change in the significance of a historical resource, which, as defined above, would include the demolition or substantial alteration of a resource such that it would no longer be able to convey its significance. Historical resources include properties eligible for listing in the NRHP or CRHR or as a local landmark

or structure of merit. Pursuant to PRC Section 15064.5, "[s]ubstantial adverse change in the significance of an historical resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion or eligibility for inclusion in the CRHR or account for its inclusion in a local register.

Reasonably foreseeable development facilitated by the project, including the proposed expansion of zoning capacity for additional units in the Southside Plan Area and the middle housing rezoning districts, could impact historical resources through demolition and construction activities associated with HEU implementation. The City of Berkeley has adopted regulations that would apply to future development facilitated by the project. As described in Section 4.4.1, Regulatory Setting, the City's Landmarks Preservation Commission ordinance provides procedures for the local designation of historical resources. The ordinance also includes a provision for a permit review which allows Landmarks Preservation Commission to review and approve any construction, alteration, or demolition of a designated landmark, buildings in designated historic districts, and structures of merit.

Additionally, the City has provisions in place for projects that would involve the demolition of non-residential buildings over 40 years old that require use permits or administrative use permits to be forwarded to Landmarks Preservation Commission for review. The City's zoning project application also has submittal requirements for zoning projects that include the proposed demolition or substantial change to any building more than 40 years old subject to environmental review requiring a historical resource evaluation. In most cases, mitigation of impacts to historical resources would be carried out though the existing procedures of the permit review process. These regulations are intended to reduce impacts to historical resources by ensuring that proposed changes to buildings do not negatively impact the resource through encouraging the preservation and maintenance of historical materials and ensuring work performed is consistent with the resource's historical character.

The City's regulations would mitigate impacts to historical resources to a substantial extent. However, mitigation is necessary to identify potential historical resources which have not yet been subject to evaluation or would not be subject to the City's permit review or zoning application requirements. For development projects involving properties 40 years of age or older, that have not been previously listed or recommended eligible for listing in the NRHP, CRHR, or a City of Berkeley Designated Landmark or Structure of Merit, Mitigation Measure CUL-1 would ensure that an evaluation is completed to determine if a property would qualify as a historical resource. If a historical resource evaluation finds a property eligible for listing in the NRHP, CRHR, or as a City of Berkeley Landmark, it would be subject to procedures regulating permit review. Although these procedures may mitigate impacts to the maximum extent feasible, they may allow, in some cases, for the demolition of a resource or other alterations that materially impair the features that convey its historical significance.

Mitigation Measures

The following mitigation measures are required.

CUL-1 Historic Context Statement, Cultural Resources Survey and Designations

During the period of this Housing Element, the City should conduct a citywide historic context statement and a cultural resource survey to identify historic resources, with priority given to sites in the EIR Site Inventory, to determine if there are designed built environment features which are over 40 years of age proposed to be altered or demolished. Designation of historic or cultural resources should be conducted by the Landmarks Preservation Commission pursuant to 3.24.260 of the Berkeley Municipal Code.

CUL-2 Historical Resources Discretionary Review

For projects that are subject to discretionary review that occur during the Housing Element period where a historical-age building or structure that has not been previously evaluated is present, a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level survey in accordance with the California Office of Historic Preservation guidelines to determine if the property qualifies for federal, state, or local historical resources designation. All age eligible properties shall be evaluated within their historic context and documented in a technical memorandum with Department of Parks and Recreation Series 523 Forms.

Should a property be found to be a qualifying historical resource, the project shall be subject to the City's regulations for permit review, including by the Preservation Landmarks Commission pursuant to Chapter 3.24.260, and/or by the Zoning Adjustments Board pursuant to Chapter 23.326 of the City of Berkeley Municipal Code. Efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources built environment assessment shall also identify and specify the treatment of character-defining features and construction activities.

Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR § 15126.4(b)(1)). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the report shall demonstrate how the project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits.

If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These may include documentation of the resource in a manner consistent with the standards of the Historic American Building Survey (HABS). Documentation should include full descriptive and historical narrative, measured drawings, and medium format photographs, all in archivally stable format.

Significance After Mitigation

Mitigation Measure CUL-1 would ensure that a historical resource evaluation is conducted for properties subject to discretionary review to determine if a property contains a historical resource eligible for listing in the NRHP, CRHR, or as a City of Berkeley Landmark or Structure of Merit. In combination with City of Berkeley regulations, Mitigation Measures CUL-1 and CUL-2 would reduce impacts to historical resources to the maximum extent feasible. However, even with implementation of this mitigation measure, existing and eligible historical resources could still be materially impaired by future development that would be carried out under the proposed Housing Element because specific actions intended for the reduction of impacts to historical resources could be deemed infeasible. Additionally, projects that are not subject to discretionary review and have not been previously evaluated could result in the demolition of potential historic resources. Therefore, impacts would be significant and unavoidable.

Threshold 2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact CUL-2 DEVELOPMENT ACCOMMODATED BY THE HOUSING ELEMENT UPDATE COULD ADVERSELY AFFECT IDENTIFIED AND PREVIOUSLY UNIDENTIFIED ARCHAEOLOGICAL RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH REQUIRED ADHERENCE TO THE CITY'S STANDARD CONDITIONS OF APPROVAL FOR ARCHAEOLOGICAL RESOURCES.

Although the City does not maintain an inventory of archaeological sites and the California Historical Resources Information System was not consulted for this analysis, it is understood that archaeological sites are present in Berkeley and the surrounding areas. According to the City's General Plan EIR, a high potential for Native American cultural resources exists within the City limits. Therefore, the potential to encounter unidentified resources in the City and on residential inventory sites noted in the Housing Element Update properties is considered high. Undeveloped properties in the Housing Element Update inventory have a higher probability of containing previously unidentified archaeological resources given the probable lack of previous ground-disturbing activities on those properties. However, ground-disturbance into native soils on any Housing Element Update property could contain previously unknown prehistoric or historic-period resources. Therefore, individual development projects under the proposed project that would involve ground disturbance activities would have the potential to damage or destroy archaeological resources, especially if they occur below the existing road base or in less disturbed sediments. Consequently, impacts would be potentially significant and mitigation would be required for projects involving ground disturbance activities that may include, but are not limited to, pavement removal, potholing, grubbing, tree removal, and grading. However, the City of Berkeley implements the following Standard Condition of Approval for projects in Berkeley:

> Archaeological Resources *(Ongoing throughout demolition, grading, and/or construction)*.
> Pursuant to *CEQA Guidelines* Section 15064.5(f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore:
>
> A. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist, historian or paleontologist to assess the significance of the find.

B. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Berkeley. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by the qualified professional according to current professional standards.
C. In considering any suggested measure proposed by the qualified professional, the project applicant shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, project design, costs, and other considerations.
D. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation measures for cultural resources is carried out.
E. If significant materials are recovered, the qualified professional shall prepare a report on the findings for submittal to the Northwest Information Center.

Adherence to this Standard Condition of Approval would ensure that development carried out under the Housing Element would have a less than significant impact from potential adverse changes in the significance of archeological resources.

Mitigation Measures

No mitigation measures are required with required adherence to existing regulations such a California Public Resources Code Section 5097.5 and City of Berkeley Standard Conditions of Approval.

Threshold 3:	Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact CUL-3 GROUND-DISTURBING ACTIVITIES ASSOCIATED WITH DEVELOPMENT UNDER THE HOUSING ELEMENT UPDATE COULD RESULT IN DAMAGE TO OR DESTRUCTION OF HUMAN BURIALS. IMPACTS WOULD BE LESS THAN SIGNIFICANT THROUGH ADHERENCE TO STATE HEALTH AND SAFETY CODE SECTION 7050.5 AND PUBLIC RESOURCES CODE SECTION 5097.98.

Human burials outside of formal cemeteries can occur in prehistoric archaeological contexts. While no known burial sites have been identified in the city, excavations during construction activities could have the potential to disturb these resources, which could include Native American burial sites. Although it is unlikely that human remains are present, all Housing Element Update properties have at least the possibility of containing previously unidentified human remains.

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in PRC Section 5097. The California Health and Safety Code (Section 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protect them from disturbance, vandalism, or destruction. They also include established procedures to be implemented if Native American skeletal remains are discovered. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and established the NAHC to resolve any related disputes. In addition, the City requires the following Standard Condition of Approval for projects in Berkeley:

Human Remains (*Ongoing throughout demolition, grading, and/or construction*). In the event that human skeletal remains are uncovered during ground-disturbing activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

Further, all development projects are subject to State of California Health and Safety Code Section 7050.5 which states that, if human remains are unearthed, no further disturbance can occur until the county coroner has made the necessary findings as to the origin and disposition of the remains pursuant to the PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site and make recommendations to the landowner within 48 hours of being granted access. With adherence to City's standard condition of approval and existing regulations, impacts to human remains would be less than significant.

Mitigation Measures

No mitigation measures are required with required adherence to existing State Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and City of Berkeley Standard Conditions of Approval.

c. Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]).

Development pursuant to the Housing Element Update and the LRDP would have the potential to impact historical resources. Historic-period resources could be vulnerable to development activities that could result in damage to or demolition of cultural resources. As noted above in Impact CUL-1, the proposed project would result in significant and unavoidable impacts to historical resources. Adherence to Mitigation Measures CUL-1 and CUL-2 would reduce or avoid some but not all potential impacts to historical resources in Berkeley. Therefore, cumulative historical resources impacts would be significant, and the project's contribution would be cumulatively considerable.

In addition, there is a potential for unknown and previously undisturbed archaeological resources and human remains to be encountered during cumulative development. Generally, impacts to cultural resources are site specific and would not result in overall cumulative impacts. Future development projects would be reviewed by the City pursuant to CEQA to identify potential impacts to cultural resources on a project-by-project basis. While there is the potential for significant cumulative impacts to cultural resources in the City of Berkeley, it is anticipated that potential

impacts associated with individual development projects would be addressed on a case-by-case basis and would be subject to the Standard Conditions of Approval outlined above, City policies, and local and state regulations regarding the protection of such resources. With compliance with the existing policies and regulations, future development would be required to avoid or mitigate the loss of these resources. Therefore, significant cumulative archaeological resources and human remains impacts would not occur.

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4.5 Energy

This section evaluates impacts to energy, including the potential wasteful, inefficient, or unnecessary consumption of energy, associated with the implementation of the proposed HEU.

4.5.1 Setting

Energy relates directly to environmental quality because energy use can adversely affect air quality and other natural resources. Fossil fuels are burned to create electricity to power homes and vehicles, which creates heat. Transportation energy use relates to the fuel efficiency of cars and trucks, and the availability and use of public transportation, the choice of different travel modes (auto, carpool, and public transit), and the miles traveled by these modes. Construction and routine operation and maintenance of infrastructure also consume energy, as do residential land uses, typically in the form of natural gas and electricity.

Energy Supply

Natural gas-fired generation has dominated electricity production in California for many years. However, in 2019, the two largest sources of energy produced in California were crude oil at approximately 920.1 trillion British thermal units (Btu), and renewable energy sources at approximately 1,139.6 trillion Btu, while natural gas production was 220.8 trillion Btu and nuclear electric power was 168.8 trillion Btu. (Energy Information Administration [EIA] 2021a). Berkeley contains no oil/gas fields. The nearest one is located in Orinda, approximately 2 miles east of Berkeley, but it has no active wells (California Department of Conservation, Division of Oil, Gas & Geothermal Resources 2021).

Energy Consumption and Sources

Total energy consumption in the United States in 2020 was approximately 104.53 quadrillion Btu (EIA 2021b). In 2020, petroleum provided approximately 35 percent of that energy, with other sources of energy coming from natural gas (approximately 34 percent), coal (approximately 10 percent), total renewable sources (approximately 12 percent), and nuclear power (approximately 9 percent). On a per capita basis in 2019, California was ranked the second lowest state in terms of total energy consumption (197.8 million Btu [MMBtu] per person), or about 35 percent less than the U.S. average per capita consumption of 305.4 MMBtu per person (EIA 2019a).

Alameda County as a whole consumed approximately 10,531,297 MWh of energy in 2021. Roughly 718,050 MWh of electricity was produced from renewable sources (Find Energy 2022).

Electricity

Most of the electricity generated in California is from natural gas-fired power plants, which provided approximately 48 percent of total electricity generated in 2020. In 2020, California used 272,575 gigawatt hours (GWh) of electricity and produced 70 percent (190,913 GWh) of the electricity it used and imported the rest from outside the state (California Energy Commission [CEC] 2020). Alameda County consumed approximately 10,247 GWh of electricity in 2020 from residential and non-residential uses (CEC 2022a).

Table 4.5-1 illustrates the County's 2020 electricity consumption in comparison to statewide consumption and displays the County's equivalent per capita energy consumption from its

electricity demand. With a population of 1,663,114 in 2020 (California Department of Finance [DOF] 2021), Alameda County's 2020 per capita electricity consumption was approximately 6,161 kWh, or approximately 21 million Btu.

Table 4.5-1 2020 Annual Electricity Consumption

Energy Type	Alameda County (GWh)	California (GWh)	Proportion of Statewide Consumption	County per Capita Consumption (kWh)	County per Capita Consumption (MMBtu)
Electricity	10,247	272,575	3.8%	6,161	21

Source: CEC 2022a, DOF 2021

East Bay Community Energy (EBCE) supplies electricity to Berkeley using transmission infrastructure operated and maintained by Pacific Gas and Electric (PG&E). EBCE is a community-governed, local power supplier that provides cleaner electricity to Alameda County residents and businesses. As of 2021, EBCE's base plan (Bright Choice) consisted of 40 percent eligible renewable energy resources (EBCE 2021). EBCE offers 100 percent renewable energy services to member cities, and both residential and commercial customers in Berkeley will be placed in the Renewable 100 Plan starting March 2022 and October 2022, respectively (EBCE 2021). However, customers have the option to opt out of the Renewable 100 program and enroll in the Bright Choice Program which would be supplied by 40 percent renewable energy or receive electricity from PG&E. PG&E is one of the nation's largest electric and gas utility companies, and it maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines (PG&E 2021). According to PG&E's 2018 Integrated Resource Plan, PG&E anticipates meeting a 2030 energy load demand of between 36,922 gigawatt-hours and 37,370 gigawatt-hours (PG&E 2018). In conjunction with the utility companies, the California Public Utilities Commission (CPUC) is involved in energy conservation programs.

CPUC and CEC are constantly assessing population growth, electricity demand, and reliability. The CEC is tasked with conducting assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand and prices (CEC 2022b). The CEC uses these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety (Public Resources Code Section 25301[a]).

Natural Gas

California relies on out-of-state natural gas imports for nearly 90 percent of its natural gas supply (CEC 2022c). Alameda County as a whole consumed approximately 366 million therms of natural gas in 2020 in both residential and non-residential uses (CEC 2022d). Table 4.5-2 illustrates the County's 2020 natural gas consumption in comparison to statewide consumption and displays the County's equivalent per capita energy consumption from its natural gas demand. With a population of 1,663,114 in 2020 (DOF 2021), Alameda County's 2020 per capita natural gas consumption was approximately 220 therms, or approximately 20 million Btu.

Table 4.5-2 2020 Annual Natural Gas Consumption

Energy Type	Alameda County (Millions of U.S. therms)	California (Millions of U.S. therms)	Proportion of Statewide Consumption	County per Capita Consumption (U.S. therms)	County per Capita Consumption (MMBtu)
Natural Gas	366	12,332	3.0%	220	20

Source: CEC 2022d, DOF 2021

The City is located within PG&E's natural gas service area, which spans central and northern California (PG&E 2022a). In 2020, PG&E customers consumed a total of 4.5 billion therms of natural gas. Residential users accounted for approximately 42 percent of PG&E's natural gas consumption. Industrial and commercials users accounted for another 35 percent and 19 percent, respectively. The remainder was used for mining, construction, agricultural, and water pump accounts (CEC 2022e). In 2020, Alameda County users accounted for approximately 8 percent of PG&E's total natural gas consumption across the entire service area. PG&E's service area is equipped with approximately 6,700 miles of gas transmission pipelines as 42,000 miles of gas distribution pipelines (PG&E 2022b).

The 2020 California Gas Report presents a comprehensive outlook for natural gas requirements and supplies for California through the year 2035. California natural gas demand, statewide and utility-driven, is expected to decrease at a rate of 1 percent per year from 2020 to 2035. The forecast decline is due to a combination of moderate growth in the natural gas vehicle market and across-the-board declines in all other market segments: residential, commercial, electric generation, and industrial markets (CGEU 2020). Residential gas demand is expected to decrease at an annual average rate of 1.7 percent. Demand in the commercial and industrial markets are expected to decrease at an annual rate of 1.5 percent and 0.2 percent, respectively. Stricter codes and standards coupled with more aggressive energy efficiency programs discussed in Section 4.5.2, are making a significant impact on the forecasted load for the residential, commercial, and industrial markets (CGEU 2020).

For the purposes of load-following as well as backstopping intermittent renewable resource generation, gas-fired generation will continue to be the primary technology to meet the ever-growing demand for electric power. However, overall gas demand for electric generation is expected to decline at 1.7 percent per year for the next 15 years due to more efficient power plants, statewide efforts to minimize greenhouse gas (GHG) emissions through aggressive programs pursuing demand-side reductions, and the acquisition of preferred power generation resources that produce little or no carbon emissions (CGEU 2020). Additional information on PG&E's gas supplies and capacity can be viewed in the 2020 California Gas Report (PG&E 2015).

Petroleum

Energy consumed by the transportation sector accounts for roughly 39.5 percent of California's energy demand, amounting to approximately 3,073.3 trillion Btu in 2019 (EIA 2019a). Petroleum-based fuels are used for approximately 98.4 percent of the state's transportation activity (EIA 2019a). Most gasoline and diesel fuel sold in California for motor vehicles is refined in California to meet state-specific formulations required by the California Air Resources Board (CARB). California's transportation sector, including on-road and rail transportation, consumed approximately 662 million barrels of petroleum fuels in 2019 (EIA 2021b).

As shown in Table 4.5-3, approximately 493 million gallons of fuel were consumed in Alameda County in 2020, of which approximately 442 million gallons were gasoline and approximately 51 million gallons were diesel fuel (CEC 2021c). Based on a 2020 population of 1,663,114 (DOF 2021), the County's annual per capita fuel consumption in 2020 consisted of 266 gallons of gasoline and 31 gallons of diesel fuel per person.

According to the CEC, 1 gallon of gasoline is equivalent to approximately 109,786 Btu, while 1 gallon of diesel is equivalent to approximately 127,460 Btu (Schremp 2017). Based on this formula, and as shown in Table 4.5-3, each person in Alameda County consumed approximately 29 MMBtu of gasoline and 4 MMBtu of diesel in 2020.

Table 4.5-3 2020 Annual Gasoline and Diesel Consumption

Fuel Type	Alameda County (million gallons)	California (million gallons)	Proportion of Statewide Consumption	County per Capita Consumption (gallons)	County per Capita Consumption (MMBtu)
Gasoline	442	12,572	3.5%	266	29
Diesel	51	1,744	2.9%	31	4
Total	**493**	**14,316**	–	**298**	**33**

Source: CEC 2020

Alternative Fuels

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard and Health and Safety Code Section 38566 [Senate Bill (SB) 32]). Conventional gasoline and diesel may be replaced, depending on the capability of the vehicle, with many alternative fuels including the following:

Hydrogen is being explored for use in combustion engines and fuel cell electric vehicles. The interest in hydrogen as an alternative transportation fuel stems from its clean-burning qualities, its potential for domestic production, and the fuel cell vehicle's potential for high efficiency (two to three times more efficient than gasoline vehicles). Currently, 49 open hydrogen refueling stations are in California, with 12 currently in construction. One station is located in the City of Berkeley at 1250 University Avenue, which opened in January 2021 (California Fuel Cell Partnership 2021).

Biodiesel is a renewable alternative fuel that can be manufactured from vegetable oils, animal fats, or recycled restaurant greases. Biodiesel is biodegradable and cleaner-burning than petroleum-based diesel fuel. Biodiesel can run in any diesel engine generally without alterations. There are 18 biodiesel-only refueling stations in California, one of which is located in Berkeley at 1441 Ashby Ave (U.S. Department of Energy 2022).

Electricity can be used to power electric and plug-in hybrid electric vehicles directly from the power grid. The electricity grid usually provides electricity used to power vehicles, which store it in the vehicle's batteries. Fuel cells are being explored to use electricity generated on board the vehicle to power electric motors. Electrical charging stations are available throughout Berkeley and Alameda County. Berkeley currently has approximately 80 electrical charging stations spread around the city and there are multiple publicly-available EV charging ports at many stations (PlugShare 2022).

Energy and Fuel Efficiency

Though the demand for gasoline and diesel fuel is rising because of population growth and limited mass transit, the increase in demand can be offset partially by efficiency improvements. Land use policies that encourage infill and growth near transit centers (e.g., following SB 375, the Sustainable Communities and Climate Protection Act of 2008), improvements to fuel efficiency, and gradual replacement of the vehicle fleet with new, more fuel-efficient and alternative-fuel as well as electric cars will all reduce fuel use.

4.5.2 Regulatory Setting

Programs and policies at the state and national levels have emerged to bolster the previous trend towards energy efficiency, as discussed below.

a. Federal Regulations

Energy Independence and Security Act of 2007

The Energy Independence and Security Act is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting global climate change. Specifically, it does the following:

1. Increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels
2. Reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020 – an increase in fuel economy standards of 40 percent over those in 2007

Safer Affordable Fuel-Efficient Vehicles Rule

The Safer Affordable Fuel-Efficient Vehicles Rule, issued March 31, 2020, sets fuel economy and carbon dioxide standards that increase 1.5 percent in stringency each year from model years 2021 through 2026. These standards apply to both passenger cars and light trucks and are a reduction in stringency from the 2012 standards which would have required increases of about 5.0 percent per year. This rule is anticipated to result in a 40.4 mile per gallon industry average for 2026.

Energy Policy and Conservation Act

Enacted in 1975, the Energy Policy and Conservation Act established fuel economy standards for new light-duty vehicles sold in the United States. The law placed responsibility on the National Highway Traffic and Safety Administration for establishing and regularly updating vehicle standards. The United States Environmental Protection Agency (U.S. EPA) is responsible for administering the Corporate Average Fuel Economy program, which determines vehicle manufacturers' compliance with existing fuel economy standards. In 2012, the U.S. EPA and National Highway Traffic and Safety Administration established final passenger car and light-duty truck Corporate Average Fuel Economy standards for model years 2017 to 2021, which require a combined average fleet-wide fuel economy of 40.3 to 41.0 miles per gallon in model year 2021 (United States Department of Transportation 2014).

Energy Star Program

Energy Star is a voluntary labeling program introduced by U.S. EPA to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specifications for maximum energy use established under the program are certified to display the Energy Star label. In 1996, the U.S. EPA joined with the Energy Department to expand the program, which now also includes certifying commercial and industrial buildings as well as homes (U.S. EPA 2021).

Construction Equipment Fuel Efficiency Standard

The U.S. EPA sets emission standards for construction equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Emissions requirements for new off-road Tier 4 vehicles were completely phased in by the end of 2015.

b. State Regulations

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The Act established a State policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000; codified as Public Resources Code Sections 25720-25721), the CEC and CARB prepared and adopted in 2003 a joint agency report, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030; significantly increase the efficiency of motor vehicles; and reduce per capita vehicle miles traveled (VMT). One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy reports, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

Integrated Energy Policy Report

SB 1389 (Chapter 568, Statutes of 2002) requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and price to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety.

California Renewables Portfolio Standard Program

In 2018, the California Renewables Portfolio Standard (SB 100) was signed into law, which increased the renewable portfolio standard (RPS) to 60 percent by 2030 (i.e., that 60 percent of electricity retail sales must be served by renewable sources by 2030) and requires all the state's electricity to come from carbon-free resources by 2045.

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. The Act also requires doubled energy efficiency savings in electricity and natural gas for retail customers through increased efficiency and conservation by December 31, 2030.

Assembly Bill 1493: Reduction of Greenhouse Gas Emissions

AB 1493 (Chapter 200, Statutes of 2002), known as the "Pavley bill," amended Health and Safety Code sections 42823 and 43018.5 and requires CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of greenhouse gas (GHG) emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.

Implementation of new regulations prescribed by AB 1493 required the State of California to apply for a waiver under the federal Clean Air Act. Although the U.S. Environmental Protection Agency (USEPA) initially denied the waiver in 2008, USEPA approved a waiver in June 2009, and in September 2009, CARB approved amendments to its initially adopted regulations to apply the Pavley standards that reduce GHG emissions to new passenger vehicles in model years 2009 through 2016. According to CARB, implementation of the Pavley regulations is expected to reduce fuel consumption while also reducing GHG emissions (CARB 2020).

Energy Action Plan

In the October 2005 *Energy Action Plan (EAP) II*, the CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other State, federal, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative, nonpetroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan, Executive Order S-06-06

Executive Order (EO) S-06-06, April 25, 2006, establishes targets for the use and production of biofuels and biopower, and directs State agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California

by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the State to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

1. Increase environmentally and economically sustainable energy production from organic waste
2. Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications
3. Create jobs and stimulate economic development, especially in rural regions of the State
4. Reduce fire danger, improve air and water quality, and reduce waste

Title 24, California Code of Regulations (CCR)

CCR, Title 24, Part 6, is California's Energy Efficiency Standards for Residential and Non-Residential Buildings. The CEC established Title 24 in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. The standards are updated on an approximately three-year cycle to allow consideration and possible incorporation of new efficient technologies and methods. In 2019, the CEC updated Title 24 standards with more stringent requirements effective January 1, 2020. All buildings for which an application for a building permit is submitted on or after January 1, 2020 must follow the 2019 standards. The next update is expected in 2022 and will become effective January 1, 2023. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The building efficiency standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided that these standards exceed those provided in Title 24.

Part 6 (Building Energy Efficiency Standards)

Part 6 of Title 24 contains the 2016 Building Energy Efficiency Standards for new residential and CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The most current standards are the 2019 Title 24 standards (CEC 2018a). The 2019 Standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a).

The City of Berkeley has adopted amendments to the 2019 California Energy Code in BMC Chapter 19.36, which require more stringent energy measures including:

- Extending the solar PV requirement to multifamily residential and nonresidential buildings
- Increasing EV charging readiness and installation in new buildings

- Providing two pathways to demonstrate compliance with the 2019 California Energy Code. New all-electric buildings must simply demonstrate compliance with the California Energy Code. However, new mixed-fuel buildings (i.e., electricity and natural gas used within the building) must exceed the energy efficiency requirements of the California Energy Code by 10 percent for non-residential buildings, high-rise residential buildings, and hotels/motels or by 10 Total Energy Design Rating points for single-family or low-rise residential buildings, or meet a set of prescriptive requirements with equivalent efficiency savings.
- Requiring electric-ready infrastructure for natural gas appliances in new mixed-fuel buildings to support future electrification

California Green Building Standards Code (2019), CCR Title 24, Part 11

California's green building code, referred to as CALGreen, was developed to provide a consistent approach to green building within the State. CALGreen lays out the minimum requirements for newly constructed residential and nonresidential buildings to reduce GHG emissions through improved efficiency and process improvements. The requirements pertain to energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. It also includes voluntary tiers to further encourage building practices that improve public health, safety, and general welfare by promoting a more sustainable design

c. Regional and Local Regulations

Plan Bay Area 2050

Plan Bay Area 2050 is a state-mandated, integrated long-range transportation, land-use, and housing plan, known as a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area (Metropolitan Transportation Commission/Association of Bay Area Governments [MTC/ABAG] 2021). Plan Bay Area 2050 builds on earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. Plan Bay Area 2050 focuses on advancing equity and improving resiliency in the Bay Area by creating strategies in the following four elements: Housing, Economy, Transportation, and Environment. The Plan discusses how the future is uncertain due to anticipated employment growth, lack of housing options, and outside forces, such as climate change and economic turbulence. These uncertainties will impact growth in the Bay Area and exacerbate issues for those who are historically and systemically marginalized and underserved and excluded. Thus, Plan Bay Area 2050 has created strategies and considered investments that will serve those systemically underserved communities and provide equitable opportunities. The Plan presents a total of 35 strategies to outline how the $1.4 trillion dollar investment would be utilized. The strategies include, but are not limited to, the following: providing affordable housing, allowing higher-density in proximity to transit-corridors, optimizing the existing roadway network, creating complete streets, providing subsides for public transit, reducing climate emissions, and expanding open space areas. Bringing these strategies to fruition will require participation by agencies, policymakers, and the public. An implementation plan is also included as part of the Plan to assess the requirements needed to carry out the strategies, identify the roles of pertinent entities, create an appropriate method to implement the strategies, and create a timeline for implementation.

City of Berkeley General Plan

The City's General Plan Transportation; Environmental Management; Housing; and Urban Design Elements contain the following policies related to energy efficiency and renewable energy (City of Berkeley 2003):

Policy T-19: Air Quality Impacts. Continue to encourage innovative technologies and programs such as clean-fuel, electric, and low-emission cars that reduce the air quality impacts of the automobile.

Policy EM-5: "Green" Buildings. Promote and encourage compliance with "green" building standards.

Policy EM-8: Building Reuse and Construction Waste. Encourage rehabilitation and reuse of buildings whenever appropriate and feasible in order to reduce waste, conserve resources and energy, and reduce construction costs.

Policy EM-35: Energy Efficient Design. Promote high-efficiency design and technologies that provide cost-effective methods to conserve energy and use renewable energy sources.

Policy EM-41: Fossil Fuel. Encourage and support efforts to reduce use of fossil fuel and other finite, nonrenewable resources.

Policy H-30: Energy Efficiency and Waste Reduction. Implement provisions of Berkeley's Climate Action Plan to improve building comfort and safety, reduce energy costs, provide quality housing, and reduce GHG emissions.

Policy UD-33: Sustainable Design. Promote environmentally sensitive and sustainable design in new buildings

City of Berkeley Climate Action Plan

The City of Berkeley adopted a Climate Action Plan (CAP) in 2009 with the goal of reducing communitywide GHG emissions by 80 percent below 2000 levels by 2050. The core recommendation strategies and actions of the CAP center around the following topics (City of Berkeley 2009):

1. Sustainable Transportation and Land Use
2. Building Energy Use
3. Waste Reduction and Recycling
4. Community Outreach and Empowerment
5. Preparing for Climate Change Impacts

The CAP contains several recommended goals specifically related to energy efficiency and renewable energy, such as encouraging the use of low-carbon vehicles and fuels, promoting green building, reducing the costs of energy upgrades for existing residential properties, and increasing residential and commercial renewable energy use (City of Berkeley 2009).

Since publication of the CAP, the City has adopted several climate commitments in addition to those contained in the CAP:

- 100 percent renewable electricity by 2035
- Net-Zero Carbon Emissions by 2045, in alignment with Gov. Brown's Executive Order B-55-18
- Declared a Climate Emergency and resolved to become a Fossil Fuel Free City

Berkeley Resilience Strategy

In 2016, the City released its Resilience Strategy to advance the City's resilience, or the ability of the individuals, institutions, businesses, and systems within the community to survive, adapt, and grow no matter what chronic stress or acute shock it experiences. Berkeley's interconnected resilience challenges include earthquakes, wildfires, climate change impacts such as drought and flooding, and racial inequity. The City's Resilience Strategy emphasizes building community resilience by facilitation stronger connections between neighbors; between public, private, nonprofit, and academic institutions; between departments within the City government; and between Bay Area local and regional governments. The six goals of the Resilience Strategy are (City of Berkeley 2016):

1. Build a Connected and Prepared Community
2. Accelerate Access to Reliable and Clean Energy
3. Adapt to the Changing Climate
4. Advance Racial Equity
5. Excel at Working Together within City Government to Better Serve the Community
6. Build Regional Resilience

Prohibition of Natural Gas Infrastructure in New Buildings

In 2019, the Berkeley City Council adopted Ordinance No. 7,672-N.S., which added Chapter 12.80 to the BMC prohibiting the installation of natural gas infrastructure in newly constructed buildings. In limited circumstances, the Ordinance allows the entitling body to grant an exception or a public interest exemption

Electric Mobility Roadmap

In July 2020, the City adopted its first Electric Mobility Roadmap, which outlines the City's plan to implement its vision of a fossil fuel-free transportation system that integrates with and supports the City's ongoing efforts to increase walking, biking, and public transportation use in Berkeley and ensures equitable and affordable access to the benefits of clean transportation. The Electric Mobility Roadmap includes strategies to increase electric vehicle charging stations in new and existing development, provide public electric vehicle charging on City properties, advance electric bus rapid transit routes, electrify shared transportation fleets and private fleets, and increase the share of electric vehicle charging powered by 100 percent renewable energy (City of Berkeley 2020).

4.5.3 Impact Analysis

a. Methodology and Significance Thresholds

Significance Thresholds

In accordance with Appendix G of the *CEQA Guidelines,* a significant energy impact would occur if new development facilitated by the proposed project would:

1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
2. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Methodology

Public Resources Code Section 21100(b)(3) states that an EIR shall include "mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy." The physical environmental impacts associated with the use of energy, including the generation of electricity and burning of fuels, are discussed in Section 4.2, *Air Quality*, and Section 4.7, *Greenhouse Gas Emissions*. Energy consumption is analyzed herein in terms of construction and operational energy.

Construction energy demand for future development under the proposed HEU is evaluated qualitatively because project-specific information regarding construction is unavailable for individual projects proposed under the HEU. Construction energy demand accounts for anticipated energy consumption during construction of development facilitated by the proposed HEU, such as fuel consumed by construction equipment and construction workers' vehicles traveling to and from the construction site. These construction activities would temporarily create a higher demand for energy supplies. The extent of energy use generated by construction equipment would depend on the quantity of equipment used and the hours of operation for each project.

The California Emissions Estimator Model (CalEEMod) version 2020.4.0 was used to approximate the operational natural gas and electricity consumption from development facilitated by the proposed HEU. This analysis then determined whether energy consumed during operation for full buildout of the project would be wasteful, inefficient, or unnecessary. Operational energy demand accounts for the anticipated energy consumption from development facilitated by the project, such as fuel consumed by cars, trucks, and public transit; natural gas consumed for on-site power generation and heating building spaces; and electricity consumed for building power needs, including, but not limited to, lighting, water conveyance, and air conditioning. The estimate of total daily VMT associated with the proposed HEU is based on VMT data provided in Section 4.16, *Transportation*.

b. Project Impacts and Mitigation Measures

Threshold:	Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact E-1 PROJECT CONSTRUCTION AND OPERATION WOULD REQUIRE TEMPORARY AND LONG-TERM CONSUMPTION OF ENERGY RESOURCES. HOWEVER, WITH ADHERENCE TO STATE AND LOCAL REGULATIONS, THE PROJECT WOULD NOT RESULT IN THE WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction and demolition activities associated with future development under the proposed HEU would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary power may also be provided for construction trailers and electric construction equipment. Construction resulting from development facilitated by the proposed HEU would also use building materials that would require energy use during the manufacturing and/or procurement of that material. However, as noted in the California Natural Resources Agency's Final Statement of Reasons, "a full 'lifecycle' analysis that would account for energy used in building materials and consumer products will generally not be required" (California Natural Resources Agency 2018). Therefore, this analysis does not provide a

full lifecycle assessment of energy impacts for project construction, but considers impacts only of construction itself. It is reasonable to assume that manufacturers of building materials such as concrete, steel, lumber, or other building materials would employ energy conservation practices in the interest of minimizing the cost of doing business. It also is reasonable to assume that traditional building materials, such as drywall and standard-shaped structural elements, would have been manufactured regardless of the proposed project and, if not used for implementation, would be used in a different project. Therefore, the consumption of energy required for the manufacturing of building and construction material is not considered wasteful, inefficient, or unnecessary in relation to the proposed project.

Energy use during demolition and construction would be temporary in nature, and construction equipment used would be typical of construction projects in the region. In addition, the contractors that would typically be employed for development facilitated by the proposed HEU would be expected to comply with applicable CARB regulations that restrict the idling of heavy-duty diesel motor vehicles and govern the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. Construction contractors would be required to comply with the provisions of 13 California Code of Regulations Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes, which would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency which would minimize inefficient fuel consumption. These construction equipment standards (i.e., Tier 4 efficiency requirements) are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Electrical power would be consumed during demolition and construction activities, and the demand, to the extent required, would be supplied from existing electrical infrastructure in the region.

Overall, demolition and construction activities would not have a substantial adverse impact on available electricity supplies or infrastructure. Demolition and construction activities would be expected to use fuel-efficient equipment consistent with State and federal regulations and comply with State measures to reduce the inefficient, wasteful, or unnecessary consumption of energy. In addition, pursuant to applicable regulatory requirements such as 2019 or later CALGreen and BMC Chapter 19.37, the project would comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris and to recycle and salvage 100 percent of excavated soil and land-clearing debris, concrete, and of asphalt during construction and demolition activities. These practices would result in efficient use of energy necessary to implement the proposed project.

With required adherence to regional and local regulations as well as the BMC, demolition and construction activities associated with future development under the proposed HEU would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

Operation

Energy consumption during project operation would consist of transportation fuels for vehicle trips by future residents, employees, and visitors and electricity and natural gas usage for exterior and interior lighting, appliances, and space and water heating. Minimal natural gas would be consumed under the proposed amendments because BMC Chapter 12.80 prohibits the use of natural gas infrastructure in all new construction with limited exemptions and exceptions. To provide a conservative estimate of project impacts, it was assumed that 10 percent of new development would include natural gas connections/appliances. To account for the increased electricity usage

that would occur in all-electric units, it was assumed that 90 percent of the natural gas demand estimated for the project in the GHG modeling would instead by supplied by electricity. Gasoline and diesel consumption would be associated with vehicle trips generated by residents. The project aims to provide housing sites along transit corridors, near BART, as well as Priority Development Areas, limiting the increase in travel required by new residents. This would limit the number and length of typical residential vehicle trips, and thus lower energy use.

As shown in Table 4.5-4, vehicle trips related to the project would require approximately 10.5 million gallons of gasoline (approximately 1.2 MMBtu) and 1.6 million gallons of diesel fuel (approximately 207,000 MMBtu) annually. This equates to an annual per capita transportation energy use of 29 MMBtu, or an average daily per capita transportation energy use of 0.08 MMBtu for the project.[1] This is lower than the County's 2020 annual per capita transportation energy use of 33 MMBtu, or average daily per capita transportation energy use of 0.09 MMBtu (see Table 4.5-3). Gasoline and diesel fuel demands would be met by existing gas stations in the vicinity of the housing inventory sites. Vehicles driven by future residents of development facilitated by the project would be subject to increasingly stringent State fuel efficiency standards, thereby minimizing the potential for the inefficient consumption of vehicle fuels. Furthermore, the project would facilitate development along transit corridors, near BART stations, and in Priority Development Areas, which would place residents in proximity to public transit and encourage walking and bicycling. Moreover, BMC Chapter 19.37 would require at least 20 percent of parking spaces at new multi-family residential developments to be capable of supporting electric vehicle chargers and raceway at the remaining 80 percent of parking spaces to facilitate future electric vehicle supply equipment, which would support the use of electric vehicles by future residents. Policy H-13 of the HEU would ensure implementation of Berkeley's CAP in order to reduce energy costs and GHG emissions, which would also aid the City in reaching its CAP goals of 100 percent renewable electricity by 2035, net-zero carbon emissions by 2045, and resolution to become a Fossil Fuel Free City. As a result, vehicle fuel consumption resulting from the project would not be wasteful, inefficient, or unnecessary.

Table 4.5-4 Project Operational Energy Usage

Source	Energy Consumption	Energy Consumption (in MMBtu)
Vehicle Trips		
Gasoline	10,541,101 gallons	1,157,267
Diesel	1,627,311 gallons	207,417
Built Environment		
Electricity	124,792,810 kWh	425,793
Natural Gas Usage	18,419,903 kBtu	18,420

Note: MMBtu = millions of British thermal units; kWh = kilowatt-hours; kBtu = thousands of British thermal units.
See Appendix E for CalEEMod default values for fleet mix and average distance of travel and Appendix D for energy calculation sheets.

As shown in Table 4.5-4, in addition to transportation energy use, development facilitated by the project would require permanent grid connections for electricity and natural gas. Development facilitated by the project would consume approximately 124.8 million kWh, or 430,000 MMBtu per year of electricity, and approximately 18.4 million kBtu, or 18,420 MMBtu per year of natural gas. Electricity would be provided by EBCE, and future residential customers would be placed in their Renewable 100 Plan which utilizes 100 percent renewable and carbon free energy. Customers that

[1] Calculation: Annual fuel consumption (1,364,684 MMBtu) divided by 365 days and divided by the total new residents (47,443 residents).

choose to opt out of the Renewable 100 Plan and be placed in the Bright Choice Plan which utilizes 40 percent renewable energy or a PG&E electricity product. Future development facilitated by the project would be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations, Title 24) and any locally adopted amendments, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. California's CALGreen standards (California Code of Regulations, Title 24, Part 11) and BMC Chapters 12.80 19.36, and 19.36 require implementation of energy-efficient light fixtures and building materials into the design of new construction projects, limit the use of natural gas infrastructure in new development, and provide for electric-ready infrastructure for natural gas appliances in new buildings. Furthermore, the 2019 Building Energy Efficiency Standards (California Code of Regulations, Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the CEC such as installing PV systems on all low-rise residential structures up to three stories equal to the expected electricity usage, and BMC Chapter 19.36 requires that new buildings exceed CEC energy standards. These standards for new buildings are designed for energy efficient performance, using clean electricity, so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. In addition, per CALGreen, all plumbing fixtures used in the proposed buildings would be high-efficiency fixtures, which would minimize the potential for inefficient or wasteful consumption of energy related to water and wastewater.

Therefore, development facilitated by the project would not result in a wasteful, inefficient, or unnecessary consumption of energy, and would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures would be required.

Threshold:	Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact E-2 THE PROPOSED HEU WOULD BE CONSISTENT WITH THE STATE PLANS AND GENERAL PLAN POLICIES RELATED TO ENERGY EFFICIENCY AND UTILIZING RENEWABLE ENERGY. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 4.5.2, several State plans as well as the City's adopted General Plan include energy conservation and energy efficiency strategies intended to enable the State and the City to achieve GHG reduction and energy conservation goals. A full discussion of the proposed project's consistency with GHG reduction plans is included in Section 4.7, *Greenhouse Gas Emissions*. As shown in Table 4.5-5, the project would be consistent with applicable State renewable energy and energy efficiency plans.

Table 4.5-5 Consistency with State Renewable Energy and Energy Efficiency Plans

Renewable Energy or Energy Efficiency Plan	Proposed Project Consistency
Assembly Bill 2076: Reducing Dependence on Petroleum. Pursuant to AB 2076, the CEC and CARB prepared and adopted a joint-agency report, *Reducing California's Petroleum Dependence,* in 2003. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand.	**Consistent.** The proposed project would encourage housing development near transit corridors, BART stations, and in Priority Development Areas such as the Southside Plan Area, University Avenue Plan Area, South Shattuck Plan Area, and Berkeley's Downtown Area, supporting Policy H-16 of the HEU for transit-oriented new construction and reducing usage of single-occupancy vehicles. All housing units constructed under the proposed project would be subject to the requirements of the most recent iteration of CALGreen and locally adopted amendments, which include provisions for electric vehicle charging infrastructure, reducing dependence on gasoline powered vehicles.
2019 Integrated Energy Policy Report. The 2019 report highlights the implementation of California's innovative policies and the role they have played in establishing a clean energy economy, as well as provides more detail on several key energy policies, including decarbonizing buildings, increasing energy efficiency savings, and integrating more renewable energy into the electricity system.	**Consistent.** Electricity provided for development facilitated by the proposed HEU would be supplied by EBCE, which sources power from renewable sources under the Renewable 100 program. Customers have the option to opt out of the Renewable 100 program and enroll in the Bright Choice Program which would be supplied by 40 percent renewable energy. In addition, new construction would be required to be all electric per the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. Additional, Policy H-13 of the proposed HEU aims to reduce energy use and costs.
California Renewable Portfolio Standard. California's RPS obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent total retail sales of electricity from renewable energy sources by 2020, 60 percent by 2030, and 100 percent by 2045.	**Consistent.** EBCE supplies electricity to Berkeley residents and businesses. As of 2021, EBCE's base plan (Bright Choice) consisted of 40 percent eligible renewable energy resources (EBCE 2021). EBCE offers 100 percent renewable energy services to member cities, and both residential and commercial customers in Berkeley would be placed in the Renewable 100 Plan starting March 2022 and October 2022, respectively (EBCE 2021).
Energy Action Plan. In the October 2005, the CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change. The nine major action areas in the EAP include energy efficiency, demand response, renewable energy, electricity adequacy/reliability/infrastructure, electricity market structure, natural gas supply/demand/infrastructure, transportation fuels supply/demand/infrastructure, research/development/demonstration, and climate change.	**Consistent.** Future development facilitated by the proposed project would be required to be constructed in accordance with the latest iteration of CALGreen, the California Energy Code, and any locally adopted amendments, which include requirements for the use of energy-efficient design and technologies as well as provisions for incorporating renewable energy resources into building design. Additionally, Policy H-13 of the HEU would ensure energy efficiency and waste reduction in all development facilitated under the project. Electricity would be provided by EBCE, which source all their power from renewable sources under the Renewable 100 program. Customers have the option to opt out of the Renewable 100 program and enroll in the Bright Choice Program which would be supplied by 40 percent renewable energy or a PG&E electricity product. Given these features, the project would facilitate implementation of the nine major action areas in the EAP.

Renewable Energy or Energy Efficiency Plan	Proposed Project Consistency
AB 1007: State Alternative Fuels Plans. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-State production of biofuels without causing a significant degradation of public health and environmental quality. **Bioenergy Action Plan, EO S-06-06.** The EO establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050.	**Consistent**. The project would not interfere with or obstruct the production of biofuels in California. Vehicles used by future residents would be fueled by gasoline and diesel fuels blended with ethanol and biodiesel fuels as required by CARB regulations. Additionally, pursuant to BMC Chapter 19.37, 20 percent of parking spaces for new multi-family residential developments would be required to be capable of supporting electric vehicle chargers and the remaining 80 percent of parking spaces would be required to have raceways to facilitate future electric vehicle supply equipment.
Title 24, CCR – Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen). The 2019 Building Energy Efficiency Standards move toward cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less. The CALGreen Standards establish green building criteria for residential and nonresidential projects. The 2019 Standards include the following: increasing the number of parking spaces that must be prewired for electric vehicle chargers in residential development; requiring all residential development to adhere to the Model Water Efficient Landscape Ordinance; and requiring more appropriate sizing of HVAC ducts.	**Consistent**. Development facilitated by the project would be required to comply with the City Code, Article IV, Division 1, which mandates the implementation of Title 24.

Furthermore, as described under Section 4.5.2c the City's General Plan and CAP contains goals and policies related to energy efficiency and renewable energy. As discussed under Impact GHG-2 (Table 4.7-4) in Section 4.7, *Greenhouse Gas Emissions*, the proposed project would be consistent with recommended goals, policies, and actions in the City's CAP related to energy efficiency and renewable energy. Table 4.5-6 summarizes the project's consistency with the applicable General Plan policies. As shown therein, the proposed project would be consistent with applicable General Plan policies and therefore would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.

Table 4.5-6 Project Consistency with Applicable General Plan Policies

Policies	Project Consistency
Transportation Element	
Policy T-19 Air Quality Impacts. Continue to encourage innovative technologies and programs such as clean-fuel, electric, and low-emission cars that reduce the air quality impacts of the automobile.	**Consistent:** All housing units constructed under the proposed project would be subject to the requirements of the most recent iteration of CALGreen and locally adopted amendments, which include provisions for electric vehicle charging infrastructure. For example, in 2022 BMC Section 19.37.040 requires 20 percent of parking spaces to be electric vehicle charging spaces capable of supporting future electric vehicle chargers and 80 percent of parking spaces to include raceways to facilitate future electric vehicle supply equipment at all new multi-family developments; and for new one- and two-family dwelling units to accommodate a dedicated 208/240-volt branch circuit for a future EV charger.

Policies	Project Consistency
Environmental Management Element	
Policy EM-5 "Green" Buildings. Promote and encourage compliance with "green" building standards.	**Consistent**: Future development facilitated by the proposed project would be required to be constructed in accordance with the latest iteration of CALGreen, the California Energy Code, and any locally adopted amendments, which include green building practices. In addition, new construction would be required to be all electric per the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. Policy H-13 of the HEU would also ensure energy efficiency in new buildings in order to reduce energy costs and GHGs.
Policy EM-35 Energy Efficient Design. Promote high-efficiency design and technologies that provide cost-effective methods to conserve energy and use renewable energy sources.	**Consistent**: Future development facilitated by the proposed project would be required to be constructed in accordance with the latest iteration of CALGreen, the California Energy Code, and any locally adopted amendments, which include requirements for the use of energy-efficient design and technologies as well as provisions for incorporating renewable energy resources into building design. Additionally, Policy H-13 of the HEU would ensure energy efficiency and waste reduction in all development facilitated under the project.
Policy EM-41 Fossil Fuel. Encourage and support efforts to reduce use of fossil fuel and other finite, nonrenewable resources.	**Consistent:** New construction facilitated under the project would be required to be all electric per the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. In addition, most housing inventory sites would be placed near transportation corridors in proximity to alternative transportation modes such as BART and buses, thereby supporting efforts to reduce the use of fossil fuels by motor vehicles. In addition, implementation of the City's Electric Mobility Roadmap (2020) and the electric vehicle charging infrastructure requirements of BMC Chapters 19.36 and 19.37 would facilitate future residents' use of electric vehicles powered by renewable energy resources, which would further reduce consumption of fossil fuels.
Urban Design Element	
Policy UD-33 Sustainable Design. Promote environmentally sensitive and sustainable design in new buildings.	**Consistent:** Future development projects facilitated by the proposed project would be required to be constructed in accordance with the latest iteration of CALGreen and the California Energy Code, which include environmentally sensitive and sustainable design practices. In addition, new construction would be required to be all electric per the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources.

Source: City of Berkeley 2003

Mitigation Measures

This impact would be less than significant. No mitigation measures would be required.

c. Cumulative Impacts

The geographic scope for cumulative land use and planning impacts includes the geographic area of the City of Berkeley. Development that is considered part of the cumulative analysis includes development proposed under the University of California, Berkeley's Long Range Development Plan (LRDP) and Housing Projects #1 and #2 as described in the Draft EIR dated March 8, 2021 (University of California, Berkeley 2021).

Cumulative development would increase demand for energy resources, but those resources would not be consumed in a wasteful, inefficient, or unnecessary manner. New iterations of the California Building Energy Efficiency Standards and CALGreen would require increasingly more efficient

appliances and building materials that reduce energy consumption in new development. In addition, vehicle fuel efficiency is anticipated to continue improving through implementation of the existing Pavley Bill regulations under AB 1493.

As described under Impact E-1, development facilitated by the project would be constructed in accordance with the California Building Energy Efficiency Standards and CALGreen. Additionally, development facilitated under the project in infill locations is presumed to lower VMT due to proximity to transit corridors, BART stations, and Priority Development Areas. Therefore, the project's contribution to a significant cumulative energy impact is not cumulatively considerable.

Development facilitated by the project would not result in a wasteful, inefficient, or unnecessary consumption of energy, and operation of the new residential structures would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact.

The geographic scopes for the cumulative impact analysis of consistency with renewable energy and energy efficiency plans are the State of California and the City of Berkeley. Projects throughout the State of California are required to adhere to applicable renewable energy and energy efficiency laws, programs, and policies such as California's RPS, AB 2076, and Title 24 standards. All other pending and future projects in the county would be required to adhere to General Plan policies and the BMC to mitigate energy impacts where feasible. In addition, all pending and future projects would be reviewed for consistency with the City General Plan and CAP. Therefore, the cumulative impact would be less than significant. As discussed under Impact E-2, development facilitated by the project would be consistent with the energy-related goals, policies, and actions of the Statewide plans and the City's General Plan; therefore, the project would not make a cumulatively considerable contribution to a significant cumulative impact with respect to consistency with renewable energy and energy efficiency plans.

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4.6 Geology and Soils

This section assesses potential impacts related to geologic and soil hazards associated with implementation of the proposed HEU.

4.6.1 Setting

a. Topography and Geology

Berkeley is located on the East Bay Plain (the Plain), a flat area that extends 50 miles from Richmond in the north to San Jose in the south. The Plain is about three miles wide in the Berkeley area. At its eastern edge, the plain transitions into hills, rising to approximately 1,683 feet at Barberry Peak, the highest point in Berkeley's Claremont Hills neighborhood. On its western edge, the Plain slopes down to San Francisco Bay, the largest estuary on the California coast (City of Berkeley 2001c; Elevation.maplogs.com 2018).

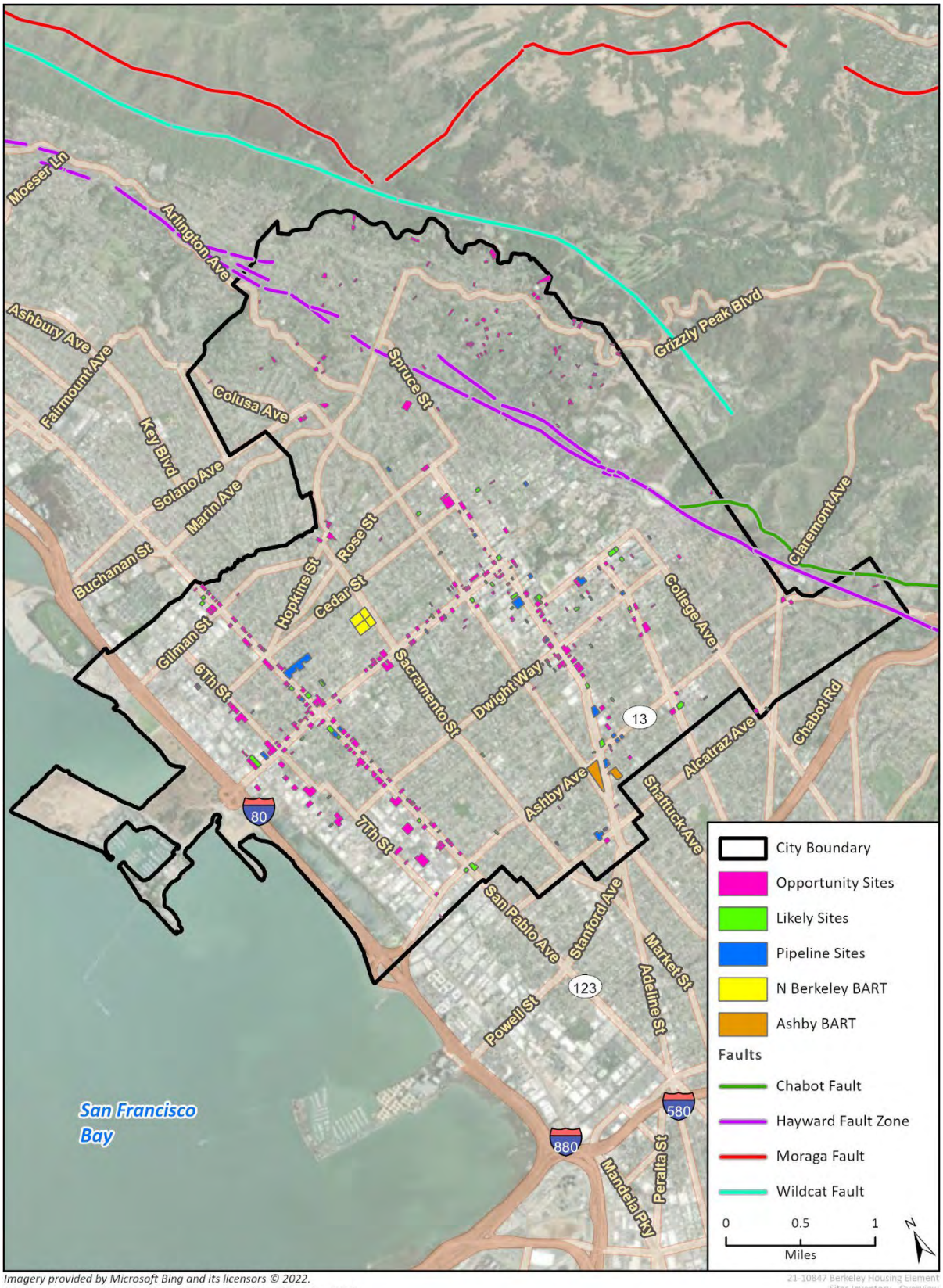
The Plain is part of the larger Coast Ranges geomorphic province, one of the eleven geomorphic provinces of California (California Geological Survey 2002). The Coast Ranges extend along the majority of California's coast from the California-Oregon border to Point Arguello in Santa Barbara County in the south and consist of northwest-trending mountain ranges and valleys. The Coast Ranges are composed of Mesozoic and Cenozoic sedimentary, igneous, and metamorphic strata. The eastern side is characterized by strike-ridges and valleys in the Upper Mesozoic strata. The Coast Ranges province runs parallel to and overlaps the San Andreas Fault in some areas, although not in Berkeley (California Geological Survey 2002).

Berkeley's rich alluvial soils and temperate climate support a wide variety of plants and animals. Wetlands in the western part of Berkeley provide habitat for the salt marsh harvest mouse and other special status species. Strawberry Creek and Codornices Creek remain two of the few waterways in the urbanized East Bay that retain their natural character along most of their respective courses (City of Berkeley 2001c).

Berkeley is located in the United States Geological Survey's (USGS) *Briones Valley*, *Richmond*, *Oakland East*, and *Oakland West* 7.5-minute topographic quadrangles. The area is typified by low topographic relief, with gentle slopes to the west in the direction of San Francisco Bay. By contrast, the Berkeley Hills that lie directly east of Berkeley have more pronounced topographic relief, with elevations that exceed 1,000 feet above mean sea level (City of Berkeley 2001b). Geologic maps indicate that the Plain is underlain primarily by Quaternary alluvial deposits, and the eastern parts of Berkeley, in the Berkeley Hills, are underlain by Mesozoic and Cenozoic igneous and sedimentary rocks (Graymer 2000).

Additionally, Berkeley is located near the San Andreas and Hayward fault zones, one of the most seismically active regions in the United States. The San Andreas Fault is located approximately 15 miles west of Berkeley. There is one Alquist-Priolo Earthquake Fault Zone within Berkeley for the Hayward Fault, as shown in Figure 4.6-1. The Hayward Fault trace passes through parts of the northeast Berkeley hills, the UC Berkeley campus and northeast to Tunnel Road (City of Berkeley 2001). Faults within Berkeley are discussed in greater detail below under part (c).

Figure 4.6-1 Fault Lines in the Vicinity of Berkeley



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Additional data provided by USGS, 2021 and the City of Berkeley, 2022.

21-10847 Berkeley Housing Element
Sites Inventory - Overview

b. Soils

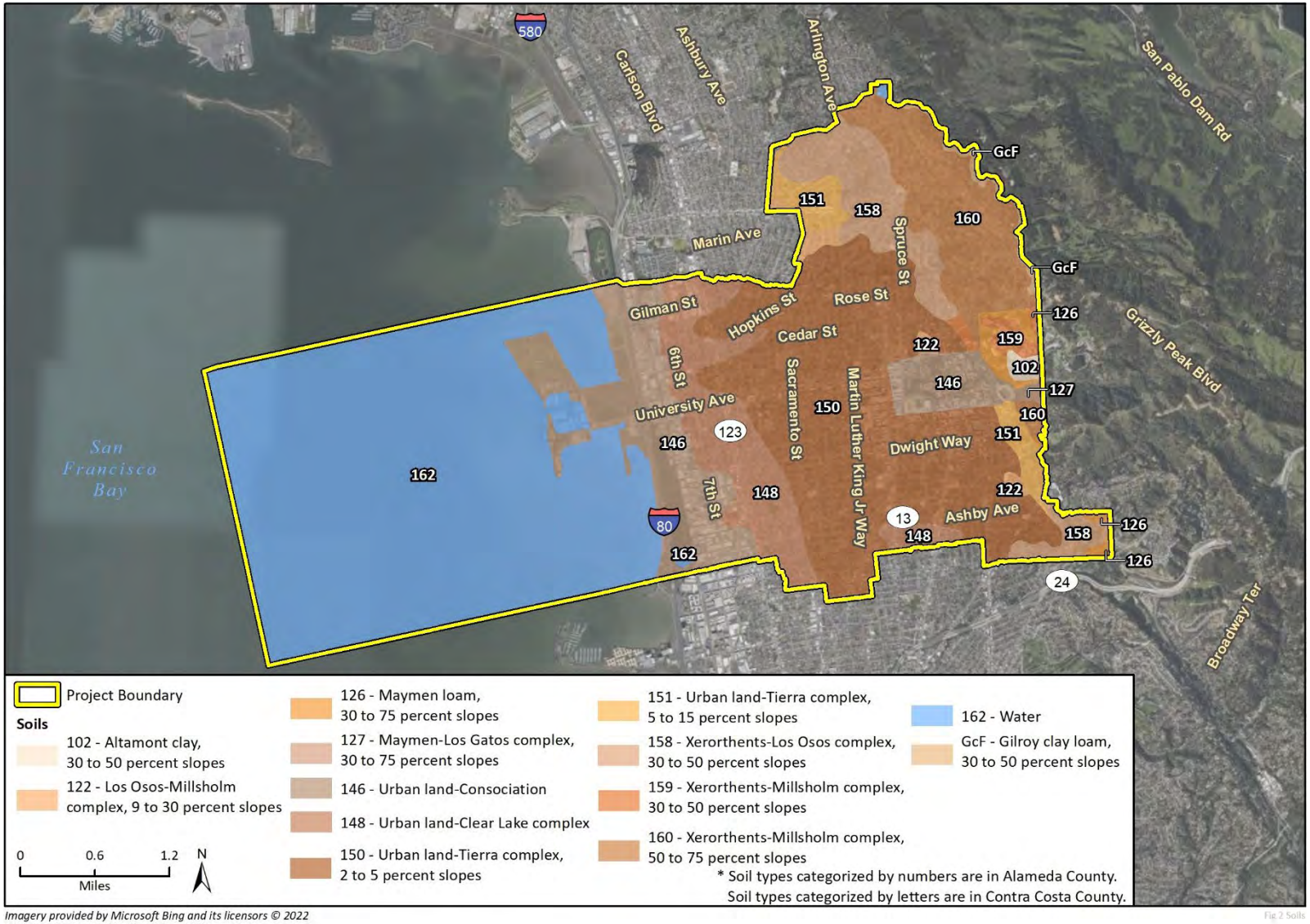
As mapped by the U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS), Berkeley features 12 soil types (USDA 2017). Figure 4.6-1 presents soil characteristics related to water holding capacity, permeability, shrink-swell potential, rate of surface runoff, and erosion hazard. Figure 4.6-2 shows soils In Berkeley.

Table 4.6-1 Berkeley Soil Parameters

Map Unit #	Name	Water Holding Capacity (in.)	Permeability (in/hr)	Shrink-Swell Potential	Rate of Surface Runoff	Erosion Hazard
102	Altamont Clay, 30 to 50 percent slopes	3.5-7	Slow	High	Medium to High	Moderate/ High
122	Los Osos-Millsholm Complex, 9 to 30 percent slopes	3.5-6.5	Slow	Moderate/ High	High	High
126	Maymen Loam, 30 to 75 percent slopes	1-3	Moderate	Low	High	High/Very high
127	Maymen-Los Gatos complex, 30 to 75 percent slopes	1-3	Moderate	Low/ Moderate	Very High	High/Very high
146	Urban land-Consociation	n/a	Slow	n/a	High	None
148	Urban Land-Clear Lake Complex	7.0-9.5	Moderately low to Moderately high	High	Medium	None
150	Urban land-Tierra Complex, 2 to 5 percent slopes	1.8	Very low/ Moderately low	High	High	Slight
151	Urban land Tierra Complex, 5 to 15 percent slopes	6-8	Slow	High	Medium	Moderate
158	Xerorthents-Los Osos Complex, 30 to 50 percent slopes	3.5-6.5	Slow	Moderate/ High	High	High
159	Xerorthents-Millsholm Complex, 30 to 50 percent slopes	1.5-3.5	Moderate	Low	High	High
160	Xerorthents-Millsholm Complex, 50 to 75 percent slopes	9.5-11	Moderate	Low	Slow	None
GcF	Gilroy Clay Loam, 30 to 50 percent slopes	3-6	Moderately slow	Moderate	Very high	High

Sources: USDA 2017, USDA 1977

Figure 4.6-2 Berkeley Soils Map



c. Geologic Hazards

Similar to much of California, Berkeley is located in a seismically active region. The seismic hazards relevant to Berkeley are described below.

Faulting and Seismically Induced Ground Shaking

The USGS defines active faults as those that have had surface displacement within the Holocene period (about the last 11,000 years). Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. Potentially active faults are those that have had surface displacement during the last 1.6 million years. Inactive faults have not had surface displacement within that period. Several faults are located near or within Berkeley (Figure 4.4-1). The major faults and fault zones are described in the paragraphs below.

San Andreas Fault

The San Andreas Fault, the most likely source of a major earthquake in California, is located approximately 15 miles west of Berkeley. The San Andreas Fault is the primary surface boundary between the Pacific and the North American plates. There have been numerous historic earthquakes along the San Andreas Fault, and it generally poses the greatest earthquake risk to California. In general, the San Andreas Fault is likely capable of producing a Maximum Credible Earthquake of 8.0.

Hayward Fault

The Hayward Fault, one of ten major faults that make up the San Andreas Fault Zone, runs directly beneath Berkeley and links with the Rodgers Creek Fault to the north. Although the last major earthquake generated by the Hayward Fault was in 1868, pressure is slowly building again and will begin to overcome the friction and other forces that cause the fault zone to stick. According to a study of earthquake probabilities by the USGS, the fault system that includes the Hayward and Rodgers Creek faults has a 31 percent probability of generating an earthquake with a magnitude greater than or equal to 6.7 on the Mercalli Richter Scale in the next 20 years (City of Berkeley 2014). The Hayward Fault would likely cause extensive damage in Berkeley due to its proximity to urban communities and infrastructure. The Hayward Fault and surrounding area is a designated Alquist-Priolo Zone (Figure 4.6-1).

Other active faults near Berkeley include the Calaveras Fault, the Rogers Creek fault, the Chabot Fault, the Moraga Fault, the Wildcat Fault, and unnamed secondary faults adjacent to these. There are few or no studies pertaining to these additional secondary faults, and it is unknown whether they may or may not experience secondary ground rupture during a large earthquake.

In addition to the primary hazard of surface rupture, earthquakes often result in secondary hazards that can cause widespread damage. The most likely secondary earthquake hazards within Berkeley are ground shaking, liquefaction, and settlement (City of Berkeley 2001).

Surface Rupture

Faults generally produce damage in two ways: ground shaking and surface rupture. Surface rupture is limited to very near the fault. As discussed above, the Hayward Fault runs directly beneath Berkeley. Since the fault zone is within Berkeley, there is potential for surface rupture (Figure 4.6-1).

Ground Shaking

Seismically induced ground shaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. The USGS and Associated Bay Area Governments (ABAG) have worked together to map the likely intensity of ground-shaking throughout the Bay Area under various earthquake scenarios. The most intense ground-shaking scenario mapped in Berkeley assumes a 6.9 magnitude earthquake on the Hayward Fault system. The predicted ground-shaking from such an earthquake would be “very violent” or “violent” throughout Berkeley (ABAG 2016).

Hazards associated with seismically induced ground shaking include liquefaction, seismically induced settlement, and earthquake-triggered landslides. Movement along any of the faults shown in Figure 4.6-1 could potentially generate substantial ground shaking in Berkeley leading to these secondary hazards, as discussed below.

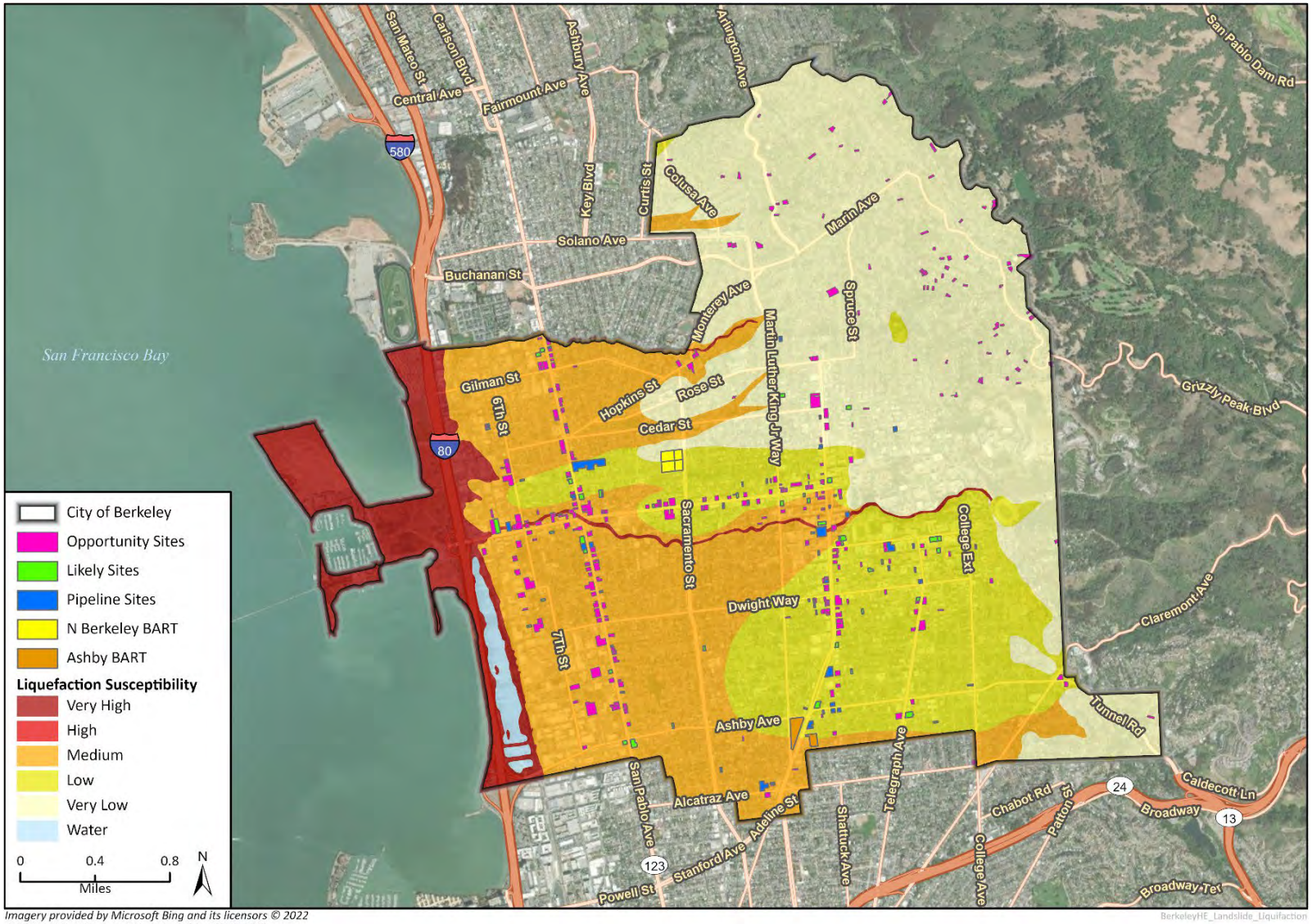
Liquefaction and Seismically-Induced Settlement

Liquefaction is defined as the sudden loss of soil strength due to a rapid increase in soil pore water pressure resulting from seismic ground shaking. Liquefaction potential is dependent on such factors as soil type, depth to ground water, degree of seismic shaking, and the relative density of the soil. When liquefaction of the soil occurs, buildings and other objects on the ground surface may tilt or sink, and lightweight buried structures (such as pipelines) may float toward the ground surface. Liquefied soil may be unable to support its own weight or that of structures, which could result in loss of foundation bearing or differential settlement. Liquefaction may also result in cracks in the ground surface followed by the emergence of a sand-water mixture.

Seismically induced settlement occurs in loose to medium dense unconsolidated soil above groundwater. These soils compress (settle) when subjected to seismic shaking. The settlement can be exacerbated by increased loading, such as from the construction of buildings. Settlement can also result solely from human activities including improperly placed artificial fill, and structures built on soils or bedrock materials with differential settlement rates.

Earthquake hazard maps produced by ABAG indicate that a large Hayward Fault quake would trigger violent shaking throughout Berkeley and a high risk of liquefaction across Berkeley (City of Berkeley 2001b). Berkeley is in an area identified by the California Geologic Survey, California Department of Conservation (2006), as having low to medium susceptibility and therefore is in a Zone of Required Investigation for liquefaction potential. The identified seismic hazard zone is due to the area having historical occurrence of liquefaction, or where local geological geotechnical and ground-water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c). However, seismic hazard zones identified by the California Geologic Survey may include developed land where delineated hazards have already been mitigated to city or county standards. As Figure 4.6-3 shows, Berkeley has areas identified as having very low, low, medium, and high, and very high susceptibility to liquefaction.

Figure 4.6-3 Berkeley Liquefaction Susceptibility



Landslides

Landslides result when the driving forces that act on a slope (i.e., the weight of the slope material, and the weight of objects placed on it) are greater than the slope's natural resisting forces (i.e., the shear strength of the slope material). Slope instability may result from natural processes, such as the erosion of the toe of a slope by a stream, or by ground shaking caused by an earthquake. Slopes can also be modified artificially by grading, or by the addition of water or structures to a slope. Development that occurs on a slope can substantially increase the frequency and extent of potential slope stability hazards.

Areas susceptible to landslides are typically characterized by steep, unstable slopes in weak soil/bedrock units that have a record of previous slope failure. There are numerous factors that affect the stability of the slope, including: slope height and steepness, type of materials, material strength, structural geologic relationships, ground water level, and level of seismic shaking.

According to the City's General Plan Disaster Preparedness and Safety Element (2001b), landslide risk is low throughout the majority of Berkeley. However, localized areas of instability exist throughout the Berkeley Hills at the northeastern end of Berkeley. Figure 4.6-4 shows identified landslide hazard zones in Berkeley. While most of the city is generally flat, its eastern portion is located in the hills and is located at the western edge of the Earthquake Induced Landslide Zone.

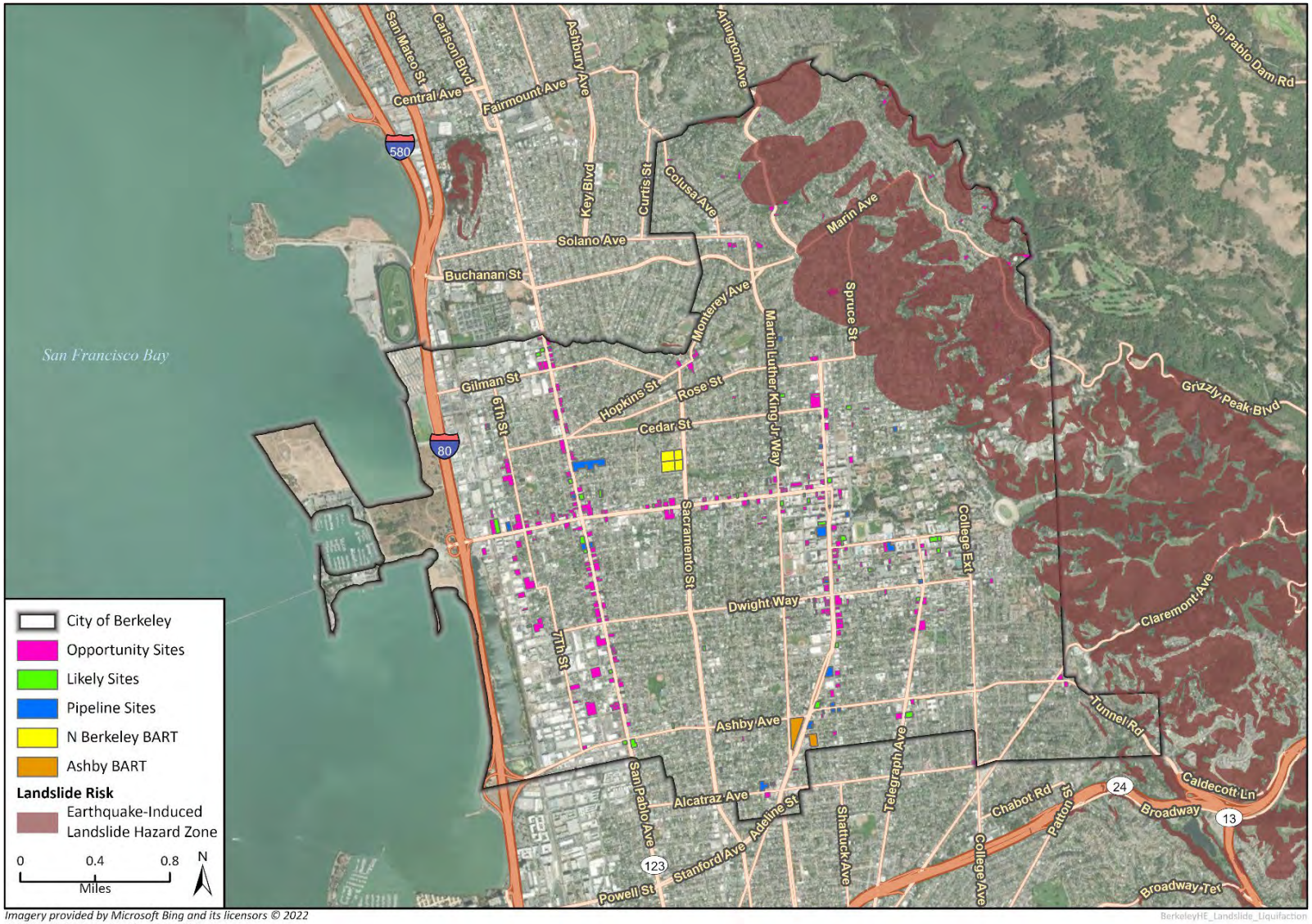
Expansive Soils

Expansive soils can change dramatically in volume depending on moisture content. When wet, these soils can expand; conversely, when dry, they can contract or shrink. Sources of moistures that can trigger this shrink-swell phenomenon include seasonal rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soil can develop wide cracks in the dry season, and changes in soil volume have the potential to damage concrete slabs, foundations, and pavement. Special building/structure design or soil treatment are often needed in areas with expansive soils. Expansive soils are typically very fine-grained with a high to very high percentage of clay. The clay minerals present typically include montmorillonite, smectite, and/or bentonite. Within the City, soils with high shrink-swell potential such as Altamont Clay, Urban Land-Clear Lake Complex, and Urban Land Tierra-Complex 2 to 5 percent slopes and 5 to 15 percent slopes as listed in Table 4.6-1 and illustrated on Figure 4.6-1 have a high potential for expansiveness.

Erosion

Erosion is the wearing away of the soil mantle by running water, wind or geologic forces. It is a naturally occurring phenomenon and ordinarily is not hazardous. However, excessive erosion can contribute to landslides, siltation of streams, undermining of foundations, and ultimately the loss of structures. Removal of vegetation tends to heighten erosion hazards.

Figure 4.6-4 Berkeley Landslide Susceptibility



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Additional data provided by CGS, 2016.

d. Paleontological Resources

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a development project.

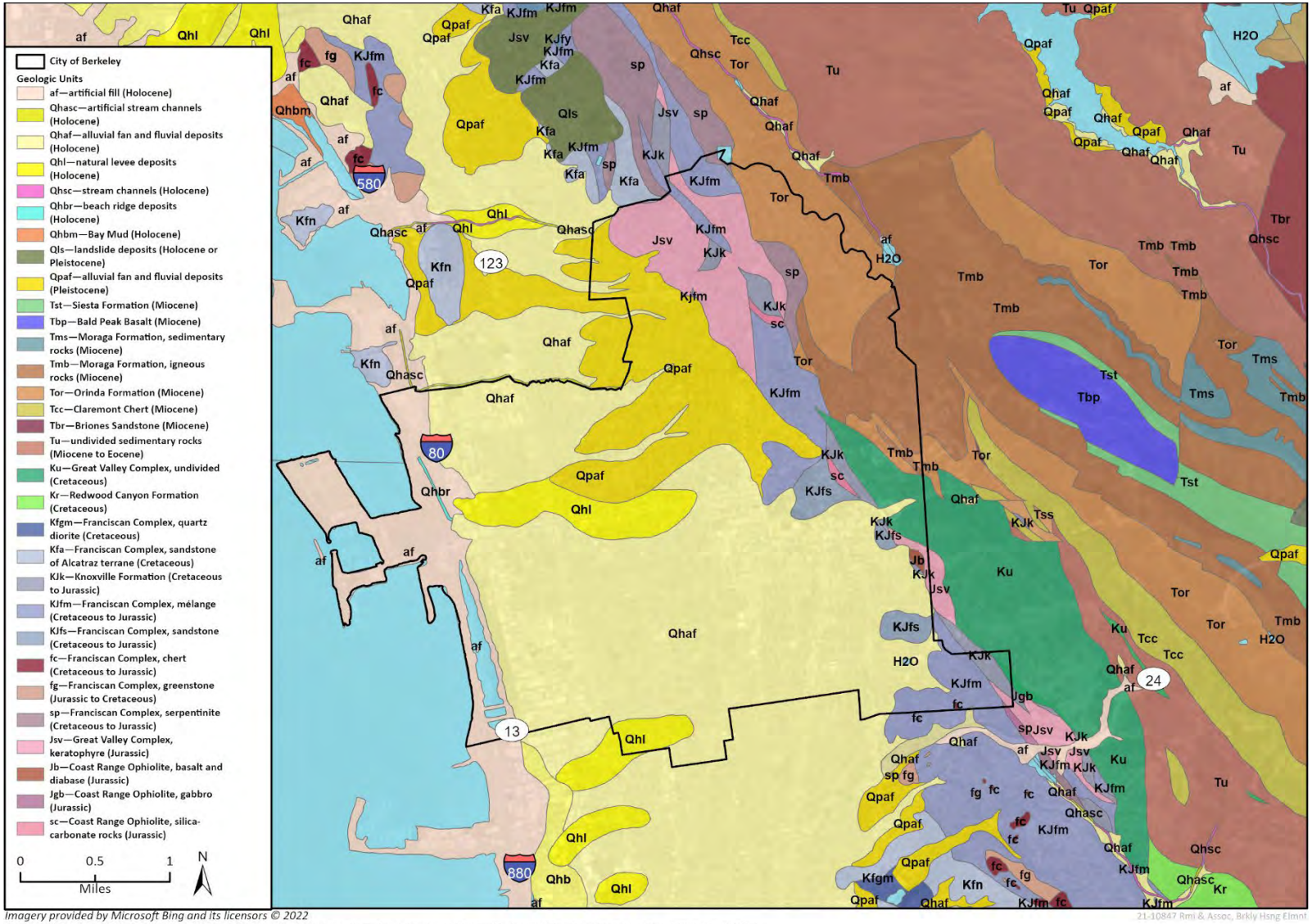
The geology of the region around Berkeley was mapped at a scale of 1:50,000 by Graymer (2000), who identified 18 distinct geologic units underlying Berkeley. The geologic units underlying Berkeley are shown in Figure 4.6-5.

Paleontological Sensitivity

Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Direct impacts to paleontological resources occur when earthwork activities, such as grading or trenching, cut into the geologic deposits within which fossils are buried and physically destroy the fossils. Since fossils are the remains of prehistoric animal and plant life, they are considered to be nonrenewable. Such impacts have the potential to be significant and, under the *CEQA Guidelines*, may require mitigation. Sensitivity is determined by rock type, history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey.

The discovery of a vertebrate fossil locality is generally of greater significance than that of an invertebrate fossil locality based on the rarity of vertebrate fossils compared to invertebrate fossils, especially microvertebrate assemblages. However, the recognition of new vertebrate or invertebrate fossil locations could provide important information on the geographical range of the taxa, their radiometric age, evolutionary characteristics, depositional environment, and other important scientific research questions. Vertebrate fossils are almost always significant because they occur more rarely than invertebrates or plants, but in some instances, inveterate fossils can be scientifically important and considered a sensitive environmental resource. Geological units having the potential to contain vertebrate fossils are generally considered to be of high sensitivity, whereas units with a record of only invertebrate assemblages typically have lower sensitivity but can have high paleontological sensitivity.

Figure 4.6-5 Regional Geologic Map



Imagery provided by Microsoft Bing and its licensors © 2022
Graymer "Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California," 2000.

The Society of Vertebrate Paleontology (SVP) outlines in its Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010) guidelines for categorizing paleontological sensitivity of geologic units within a project area. The paleontological sensitivity of Berkeley has been evaluated according to the following SVP (2010) categories:

- **High Potential (Sensitivity).** Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than recent, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways are also classified as significant. Full-time monitoring is typically recommended during any project-related ground disturbance in geologic units with high sensitivity.
- **Low Potential (Sensitivity).** Sedimentary rock units that are potentially fossiliferous but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic (processes affecting an organism following death, burial, and removal from the ground), phylogenetic species (evolutionary relationships among organisms), and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations.
- **Undetermined Potential (Sensitivity).** Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.
- **No Potential.** Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

Paleontological Sensitivity of Geologic Units in Berkeley

Rincon assessed the paleontological sensitivity of the geologic units underlying Berkeley by reviewing published geologic maps, online fossil databases, and primary literature. The distribution, characteristics, and paleontological sensitivity, of each geologic unit is discussed below.

Artificial fill (af)

Artificial fill is found in large areas of western Berkeley bordering San Francisco Bay (Figure 4.6-5). Artificial fill represents human-deposited materials used to shape the landscape (Graymer 2000). Therefore, these sediments are removed from their original context, thus making any fossils

contained within them scientifically useless. Therefore, artificial fill has **no paleontological sensitivity.**

Artificial stream channels (Qhasc)

Artificial stream channel deposits underlie portions of Cerita and Codornices Creeks in Berkeley (Figure 4.6-5). These deposits represent stream channels which have been straightened, realigned, or confined by artificial dikes or levees (Graymer 2000). These areas are undergoing active deposition, and thus, the sediments are too young to preserve scientifically significant paleontological resources (SVP 2010). Therefore, artificial stream channels have **low paleontological sensitivity.**

Holocene-aged basin deposits (Qhb), natural levee deposits (Qhl), alluvial fan and fluvial deposits (Qhaf), and beach ridge deposits (Qhbr)

Holocene-aged basin deposits are found in small parts of southwestern Berkeley near San Francisco Bay (Figure 4.6-5) and consist of silty clay or clay that were deposited in flat-floored basins at the edge of alluvial fans (Graymer 2000). Holocene-aged natural levee deposits are found throughout western and central Berkeley and consist of loose, moderately to well-sorted, sandy, or clayey silt that becomes more clayey moving upward. Natural levee deposits formed on the edges of stream channels, some of which are now abandoned (Graymer 2000). Holocene alluvial fan and fluvial deposits cover most of central and western Berkeley and consist of brown or tan, gravelly sand or sandy gravel that becomes finer grained moving upward. Holocene beach ridge deposits consist of well-sorted beach sand. All four sediment types are Holocene in age, and thus, are likely too young to preserve paleontological resources (SVP 2010). Therefore, Holocene-aged basin deposits, natural levee deposits, alluvial fan and fluvial deposits, and beach ridge deposits, have **low paleontological sensitivity.**

Pleistocene-aged alluvial fan and fluvial deposits (Qpaf)

Pleistocene-aged alluvial fan and fluvial deposits (Qpaf) are found in central Berkeley (Figure 4.6-5) and consist of brown, dense, sand or gravel that grades upward to sandy clay. Pleistocene alluvial sediments have produced scientifically significant fossils throughout California, including Alameda County, yielding taxa such as mammoths (*Mammuthus*), ground sloths (*Paramylodon*, *Megalonyx*), bison (*Bison*), cats (*Panthera*, *Smilodon*), and bears (*Arctodus*) (Jefferson 2010; Paleobiology Database [PBDB] 2022; Stirton 1939; University of California Museum of Paleontology [UCMP] 2022). Therefore, Pleistocene-aged alluvial fan and fluvial deposits have **high paleontological sensitivity.**

Moraga Formation, igneous rocks (Tmb)

Igneous rocks of the Moraga Formation underlie small parts of eastern Berkeley (Figure 4.6-5). These rocks consist of basaltic and andesitic flows dated to the late Miocene (Graymer 2000). Basaltic and andesitic rocks form from the cooling of lava at Earth's surface, so they cannot preserve paleontological resources. Therefore, the Moraga Formation has **no paleontological sensitivity.**

Orinda Formation (Tor)

The Orinda Formation underlies parts of eastern Berkeley (Figure 4.6-5). The Orinda Formation consists of bedded or massive, pebble to boulder conglomerate, sandstone, siltstone, and mudstone (Graymer 2000). The Orinda Formation has produced significant fossil localities throughout Contra

Costa County, yielding taxa such as cats (*Barburofelis*), horses (*Hipparion*, *Pliohippus*), elephants (*Gomphotherium*), hares (Leporidae), tortoises (Testudines), and invertebrates (PBDB 2022; Poust 2017; Stirton 1939; UCMP 2022). Given this fossil-producing history, the Orinda Formation has **high paleontological sensitivity**.

Undivided rocks of the Great Valley Complex (Ku)

Undivided rocks of the Great Valley Complex are found in eastern Berkeley (Figure 4.6-5) and consist of brown-weathering, massively or distinctly bedded, sandstone, siltstone, or mudstone, that are late Cretaceous in age (Graymer 2000). Late Cretaceous rocks of the Great Valley Complex (some of which are assigned to named units such as the Moreno and Panoche formations) have produced fossils throughout California, including dinosaurs (Hadrosauridae), mosasaurs, sharks, ray-finned fish, bivalves, gastropods, and cephalopods (PBDB 2022; UCMP 2022). However, these rocks cannot be confidently assigned to these or any other named geologic unit of the Great Valley Complex. Therefore, undivided rocks of the Great Valley Complex have **undetermined paleontological sensitivity.**

Knoxville Formation (KJk)

The Knoxville Formation is found in small parts of eastern Berkeley (Figure 4.6-5). The Knoxville Formation consists of dark greenish-gray silt of clay shale with thin sandstone interbeds and is early Cretaceous to late Jurassic in age (Graymer 2000). Many fossil localities are known from the Knoxville Formation, including Alameda County, yielding ammonites, bivalves, gastropods, and crinoids (PBDB 2022; UCMP 2022; Woodring and Bramlette 1950). Given this fossil-producing history, the Knoxville Formation has **high paleontological sensitivity.**

Franciscan Complex: sandstone of Alcatraz terrane (Kfa), undivided sandstone (KJfs), chert (fc), and mélange (KJfm)

The Franciscan Complex is a group of sedimentary, igneous, and metamorphic rocks that are Cretaceous to Jurassic in age and found throughout the Coast Ranges. Sedimentary rocks of the Franciscan Complex underlie parts of eastern and northern Berkeley (Figure 4.6-5). Sandstone of the Alcatraz terrane consists of dark greenish-gray, weathering to yellowish brown, massively bedded, coarse-grained sandstone with biotite grains and shale chips and is Cretaceous in age (Graymer 2000). Undivided sandstone of the Franciscan Complex consists of dark gray, medium- to coarse-grained sandstone that is slightly metamorphosed in parts. Chert of the Franciscan Complex is white, grayish-green, yellowish-orange, or brown, brittle radiolarian chert that may contain shale interbeds. Franciscan Complex mélange consists of sheared blocks of the igneous, sedimentary, and metamorphic rocks, that comprise the entire Franciscan Complex (Graymer 2000). These blocks can range from millimeter- to kilometer-scale. Invertebrate fossils (mollusks and echinoderms) are known from the sedimentary rocks of the Franciscan Complex (PBDB 2022; UCMP 2022). Marine reptiles (Ichthyosauria, Plesiosauria) have been found at two localities in the Franciscan Complex south Alameda County (Camp 1942), which given these rocks' extensive distribution, is quite rare. Due to the rarity of scientifically significant fossils in the sedimentary rocks of the Franciscan Complex, sandstone of the Alcatraz terrane, undivided sandstone, chert, and mélange of the Franciscan Complex have **low paleontological sensitivity.**

Great Valley Complex, keratophyre (Jsv)

Great Valley Complex keratophyre underlies much of eastern Berkeley (Figure 4.6-5). Great Valley Complex keratophyre consists of metamorphosed igneous rocks that are late Jurassic in age (Graymer 2000). Due to the intense heat and pressure required for their formation, metamorphic rocks cannot preserve paleontological resources. Therefore, keratophyre of the Great Valley Complex has **no paleontological sensitivity.**

Coast Range Ophiolite: serpentinite (sp), basalt and diabase (Jb), and *silica-carbonate rock (sc)*

Serpentinite, basalt and diabase, and silica-carbonate rock, of the Coast Range Ophiolite underlie parts of eastern Berkeley (Figure 4.6-5). These rocks are part of the Coast Range Ophiolite, a package of igneous and metamorphic rocks that accreted onto the North American continent in the Jurassic (Graymer 2000). Serpentinite consists of metamorphosed ultramafic igneous rocks, and silica-carbonate rock is a further-modified version of serpentinite. Due to the intense heat and pressure required for their formation, metamorphic rocks cannot preserve paleontological resources. Basalt and diabase are igneous rocks that form from the cooling of molten rock at or below Earth's surface, which also cannot preserve fossils. Therefore, serpentinite and basalt and diabase of the Coast Range Ophiolite have **no paleontological sensitivity.**

4.6.2 Regulatory Setting

a. Federal Regulations

Clean Water Act

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCB). Berkeley is in a watershed administered by the Bay Area RWQCB. Individual projects within Berkeley that disturb more than one acre would be required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a storm water pollution prevention plan describing best management practices (BMP) the discharger would use to prevent and retain stormwater runoff and to prevent soil erosion.

b. State Regulations

California Building Code

The California Building Code (CBC), Title 24, Part 2 provides building codes and standards for the design and construction of structures in California. It requires, among other things, seismically resistant construction and foundation and soil investigations prior to construction. The CBC also establishes grading requirements that apply to excavation and fill activities and requires the

implementation of erosion control measures. The City is responsible for enforcing the 2016 CBC, or most current CBC version, within Berkeley.

The referenced codes and standards include requirements for evaluations of geologic conditions at future project sites and design and construction standards to address geologic hazards. Geotechnical investigations are performed to identify the geologic conditions at a site and to evaluate whether a proposed project is feasible given the existing geological conditions. The Geotechnical report must be completed by a California licensed professional and must provide recommendations for foundation and structural design to address any geologic hazards. Such reports are required under the following conditions:

- New structures designed under the California Building Code in accordance with CBC 1803.5.11 and CBC 1803.5.12.
- New structures designed under the California Residential Code and located in a seismic hazard zone in accordance with CRC R401.4. This requirement does not apply to new accessory structures including utility sheds, garages and accessory dwelling units.
- New structures within a delineated earthquake fault zone:
- A single-family wood-frame or steel-frame dwelling exceeding two stories or when any dwelling is part of a development of four or more dwellings. Public Resources Code Chapter 7.5
- Multi-family and commercial of any kind.
- Alterations or additions to any structure within a seismic hazard zone which exceed either 50 percent of the value of the structure or 50 percent of the existing floor area of the structure. Public Resources Code Chapter 7.8
- In accordance with CBC 1803.5.2 and CRC R401.4.1 where design values exceed the presumptive values or the classification, strength or compressibility of the soil is in doubt.
- Where deep foundations will be used, a geotechnical investigation shall be conducted in accordance with CBC 1803.5.5.
- For new structures assigned to Seismic Design Category C, D, E or F, a geotechnical investigation shall be conducted in accordance with CBC 1803.5.11

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was passed into law following the destructive February 9, 1971 M6.6 San Fernando earthquake. The Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act addresses geo-seismic hazards, other than surface faulting, and applies to public buildings and most private buildings intended for human occupancy. The Seismic Hazards Mapping Act identifies and maps seismic hazard zones to assist cities and counties in preparing the safety elements of their general plans and encourages land use management policies and regulations that reduce seismic hazards. The Act mandated the preparation of maps delineating

"Liquefaction and Earthquake-Induced Landslide Zones of Required Investigation." Berkeley contains land designated as liquefaction risk areas according to the California Geologic Survey (2003).

California Environmental Quality Act – Paleontological Resources

Paleontological resources are protected under CEQA, which states in part a project will "normally" have a significant effect on the environment if it, among other things, will disrupt or adversely affect a paleontological site except as part of a scientific study. Specifically, in Section VII(f) of Appendix G of the *CEQA Guidelines*, the Environmental Checklist Form, the question is posed thus: "Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature." To determine the uniqueness of a given paleontological resource, it must first be identified or recovered (i.e., salvaged). Therefore, CEQA mandates mitigation of adverse impacts, to the extent practicable, to paleontological resources.

CEQA does not define "a unique paleontological resource or site." However, the Society of Vertebrate Paleontology (SVP) has defined a "significant paleontological resource" in the context of environmental review as follows:

> Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are typically to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) (SVP 2010).

The loss of paleontological resources meeting the criteria outlined above (i.e., a significant paleontological resource) would be a significant impact under CEQA, and the CEQA lead agency is responsible for ensuring that impacts to paleontological resources are mitigated, where practicable, in compliance with CEQA and other applicable statutes.

California Public Resources Code

Section 5097.5 of the Public Resources Code states:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Here "public lands" means those owned by, or under the jurisdiction of, the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, and for permit actions (e.g., encroachment permits) undertaken by others.

c. Local Regulations

City of Berkeley General Plan

The following goal, policies, and actions in the Safety Element of the City's General Plan relate to geology and soils:

Policy S-13: Hazards Identification. Identify, avoid and minimize natural and human-caused hazards in the development of property and the regulation of land use.

Action S-13A. Maintain and make publicly available up-to-date hazards maps identifying areas subject to heightened risk from potential seismic hazards (including fault rupture, ground failure, ground shaking, and liquefaction), and fire, flood, landslide, and other hazards, such as toxic contamination and radioactive release.

Action S-13B. Improve the understanding of identified hazards and mitigation needs via area-specific studies such as microzonation studies.

Policy S-14: Land Use Regulation. Require appropriate mitigation in new development, in redevelopment/reuse, or in other applications.

Action S-14B. Require soil investigation and/or geotechnical reports in conjunction with development/redevelopment on sites within designated hazard zones such as areas with high potential for soil erosion, landslide, fault rupture, liquefaction and other soil-related constraints.

Action S-14 C. Place structural design conditions on new development to ensure that recommendations of the geotechnical/soils investigations are implemented.

Action S-14 D. Encourage owners to evaluate their buildings' vulnerability to earthquake hazards, fire, landslides, and floods and to take appropriate action to minimize risk.

Action S-14E. Develop criteria for disaster-resistant land use regulations to ensure that new construction reduces rather than increases risk of all kinds.

Policy S-15: Construction Standards. Maintain construction standards that minimize risks to human lives and property from environmental and human-caused hazards for new and existing buildings.

Action S-15A. Periodically update and adopt the California Building Standards Code with local amendments to incorporate the latest knowledge and design standards to protect people and property against known fire, flood, landslide, and seismic risks in both structural and non-structural buildings and site components.

Action S-15B. Ensure proper design and construction of hazard-resistant structures through careful plan review/approval and thorough and consistent construction inspection.

Policy S-17: Residential Seismic Retrofitting Incentive Program. Maintain existing program such as the Residential Seismic Retrofitting Incentive Program to facilitate retrofit of potentially hazardous structures.

Action S-17A. Expand public awareness of the program and take other actions to publicize and improve the effectiveness of the program.

Policy S-19: Risk Analysis. Understand and track changes in seismic risk utilizing the best available information and tools.

Action S-19A. Make maximum use of new available information to update maps to depict seismic hazards.

Action S-19B. Encourage building owners (including public sector agencies and local jurisdictions) to install instruments to record earthquake shaking in conjunction with the State's Strong Motion Instrumentation Program.

City of Berkeley Municipal Code

Chapter 21, Section 40, Grading, erosion and sediment control requirements of the Berkeley Municipal Code (BMC) requires projects to comply with all grading, erosion and sediment control regulations on file in the Public Works Department.

4.6.3 Impact Analysis

a. Methodology and Significance Thresholds

In accordance with Appendix G of the *CEQA Guidelines*, the proposed HEU would result in a significant impact if it would:

1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
    I. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault
    II. Strong seismic ground shaking
    III. Seismic-related ground failure, including liquefaction
    IV. Landslides;
2. Result in substantial soil erosion or the loss of topsoil;
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?
Threshold 3:	Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Impact GEO-1 A PORTION OF BERKELEY IS LOCATED WITHIN THE HAYWARD FAULT ZONE. DEVELOPMENT FACILITATED BY THE PROPOSED HEU IS SUBJECT TO SEISMICALLY-INDUCED GROUND SHAKING AND OTHER SEISMIC HAZARDS, INCLUDING LIQUEFACTION AND LANDSLIDES, WHICH COULD DAMAGE STRUCTURES AND RESULT IN LOSS OF PROPERTY AND RISK TO HUMAN HEALTH AND SAFETY. HOWEVER, IMPLEMENTATION OF STATE-MANDATED BUILDING STANDARDS AND COMPLIANCE WITH THE ALQUIST-PRIOLO ACT EARTHQUAKE FAULT ACT, THE CBC, THE BERKELEY GENERAL PLAN'S POLICIES AND ACTIONS, AND THE BMC WOULD REDUCE IMPACTS TO A LESS THAN SIGNIFICANT LEVEL.

Ground Rupture and Seismic Ground Shaking

The proposed HEU involves zoning modifications in the R-1, R-2, and R-2A districts, which are in the area near the Hayward fault. The area is currently developed and populated. Full build-out under the proposed HEU would increase the population of Berkeley, structural development, and infrastructure that would be exposed to these hazards. However, several applicable laws, regulations, and policies would reduce hazards related to rupture. Under the Alquist-Priolo Earthquake Fault Zone Act, construction of development facilitated under the project would be restricted within 50 feet of an identified fault. Although the 50 feet restriction would not completely remove development from potential damage from a major seismic event, it would minimize potential for future development to receive the most direct damage potentially associated with the major seismic event (surface rupture).

Also as previously mentioned, this fault system has been assessed to have a 31 percent probability of generating an earthquake with a magnitude greater than or equal to 6.7 on the Mercalli Richter Scale in the next 20 years (City of Berkeley 2014). A seismic event with magnitude 6.7 or greater would have potential to damage structures and result in loss of property and risk to human health and safety. However, several applicable laws, regulations, and policies would reduce hazards related to ground shaking. New development that would occur within Berkeley would be required to conform to the CBC (as amended at the time of permit approval) as required by law. The City of Berkeley has adopted the CBC by reference pursuant to Title 19, Chapter 28 of the BMC. As described in the *Regulatory Setting* section above, the City of Berkeley Building Codes includes requirements for foundation and structural design to resist seismic hazards. In addition, the Building Codes outlines specific instances of when geotechnical investigations are required based on soil conditions and proposed construction methods, including for projects within Earthquake Fault Zones or Seismic Hazard Zones. New projects would be reviewed by the Building and Safety Division during the normal plan review process to confirm that the necessary geotechnical investigations are completed and that the structural design of the project is consistent with design measures recommended in the Geological report prior to issuance of required building permits. The City would therefore ensure that development would be designed and constructed consistent with

the current City of Berkeley Building Codes and with the findings and recommendations of the site-specific geotechnical reports to effectively minimize or avoid potential hazards associated with redevelopment and/or new building construction. Further, the proposed HEU would promote infill development, which may involve replacing older buildings subject to seismic damage with newer structures built to current seismic standards that could better withstand the adverse effects of strong ground shaking. Proper engineering, including compliance with the City of Berkeley Building Codes, would minimize the risk to life and property associated with potential seismic activity in the area. Impacts related to fault rupture and seismic shaking would be less than significant.

Liquefaction

As mentioned, liquefaction occurs when saturated or partially saturated and unconsolidated soils lose strength in response to a stress, typically on earthquake. This phenomenon can result in damage to infrastructure and foundations. Similarly, seismically-induced settlement, or the potential for the ground surface to lower/settle, is an existing geologic hazard that typically occurs where loose- to medium-density unconsolidated soils are located above groundwater; settlement can also be induced or exacerbated by the improper placement of artificial fill, or the placement of structures on soils or bedrock with differential settlement rates. The majority of the inventory sites, R-1, R-1A, R-2, R-2A, and MU-R districts, and Southside area, are in areas identified as having “Low” to “Moderate” liquefaction potential. The western-most portion of Berkeley does contain a small area with “High” liquefaction potential; however, no proposed inventory sites and the R-1, R-1A, R-2, and R-2A districts and Southside do not overlay the “High” liquefaction zones. A small portion of the MU-R district is within a “High” liquefaction zone. Full build-out of the proposed project would increase population, structural development, and infrastructure that would be exposed to these hazards. However, as described above, proper engineering and required compliance with CBC and other City requirements would minimize the risk to life or property associated with liquefaction hazards. This impact would be less than significant.

Landslides

Landslide risk throughout the majority of Berkely is low; however, localized areas of instability exist throughout the Berkely Hills in the eastern portion of Berkeley as shown on Figure 4.6-4. Therefore, the increase in development potential allowed by the proposed HEU in these areas could result in impacts related to landslides. As described above, the Public Resources Code (PRC) Section 2690-2699.6, *Seismic Hazards Mapping Act* and CBC requirements as adopted in the BMC would require site-specific geotechnical investigations for individual development projects within the landslide-susceptible portions of Berkeley to identify the degree of potential hazards, design parameters for the project based on the hazard, and describe appropriate design measures to address hazards. Future development in Berkeley would be required to adhere to recommended design measures to ensure hazards related are adequately mitigated. Moreover, the proposed HEU could facilitate projects that would replace older buildings subject to seismic damage with newer structures built to current seismic standards that could better withstand the adverse effects associated with unstable soils and liquefaction. Compliance with the City of Berkeley Building Codes, PRC Section 2690-2699.6, and the City’s Municipal Code would ensure that potential impacts associated with landslides would be less than significant.

Unstable Soils

Seismic hazards in Berkeley also include the potential for unstable soils to result in damage to existing or proposed infrastructure, and/or to introduce potential hazards to human health and

safety. Unstable soils may include any materials not capable of supporting a selected land use. The City requires site-specific geotechnical evaluations for individual development on steep slopes and unstable soils in accordance with the CBC. Compliance with CBC and other standards discussed in this section and under Impact GEO-2 would minimize potential adverse effects.

In addition, projects that require discretionary approval would be reviewed for their compliance with General Plan policies, including *Policy S-13A: Hazards Identification and Policy S-14B: Land Use Regulation* of the City's General Plan Disaster Preparedness and Safety Element. Future development in Berkeley in areas with identified hazards would be required to appropriately address and be designed to withstand associated hazards to the maximum extent feasible. In general, the proposed project could facilitate projects that would replace older buildings subject to seismic damage with newer structures built to current seismic standards that could better withstand the adverse effects associated with unstable soils.

Summary

Future development under the proposed HEU would be subject to the policies and actions of the Berkeley General Plan (listed in the Regulatory Setting) which would minimize the risks to lives and property due to seismic and geologic hazards. Compliance with the Alquist-Priolo Act Earthquake Fault Act, the CBC, PRC Section 2690-2699.6, General Plan policies, and the City's Municipal Code would ensure that potential impacts associated with strong seismic groundshaking, unstable soils, and potential liquefaction and landslides would be less than significant.

Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

Threshold 2:	Would the project result in substantial soil erosion or the loss of topsoil?

Impact GEO-2 WITH ADHERENCE TO APPLICABLE LAWS AND REGULATIONS, THE PROPOSED PROJECT WOULD NOT RESULT IN SUBSTANTIAL SOIL EROSION OR THE LOSS OF TOPSOIL. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Soil types in Berkeley are shown in Figure 4.6-2. Table 4.6-1 lists soil characteristics related to water holding capacity, permeability, shrink-swell potential, rate of surface runoff, and erosion hazard. Berkeley soils are characterized by having "moderate" or a "high" potential for erosion-related hazards. Development facilitated by the proposed HEU would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities that could result in erosion and loss of topsoil, particularly if soils are exposed to wind or stormwater during construction.

New development in Berkeley would be required to comply with the SWRCB's General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). Additionally, construction activities that disturb one or more acres of land surface are subject to the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. Compliance with the NPDES permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require the development of a stormwater pollution prevention plan, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-

stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction General Permit is reinforced through the City's Municipal Code in Chapter 21, Section 40, which requires applicants to comply with grading, erosion and sedimentation control plan regulations on file with the Public Works Department. Further, BMC Section 21.40.270 requires subdivision projects to comply with grading, erosion and sediment control regulations on file with the Public Works Department.

Required compliance with aforementioned policies, NPDES permit, and other regulations would ensure that impacts associated with substantial soil erosion or loss of topsoil would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 4:	Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact GEO-3 PORTIONS OF BERKELEY ARE LOCATED ON EXPANSIVE SOILS. HOWEVER, WITH REQUIRED IMPLEMENTATION OF STANDARD ENGINEERING PRACTICES, IMPACTS ASSOCIATED WITH UNSTABLE OR EXPANSIVE SOILS WOULD BE LESS THAN SIGNIFICANT.

Figure 4.6-2 shows the soil types in Berkeley which include 12 different soil types. As indicated in Table 4.6-1, many of the soil types within Berkeley have "moderate" to "high" potential for shrink-swell behavior, or expansiveness. The presence of expansive soils throughout Berkeley would make it necessary to conduct geologic investigations for all future development projects and ensure that soils for foundation support are sound. Building on unsuitable soils would have the potential to create future subsidence or collapse issues that could result in the settlement of proposed project infrastructure, and/or the disruption of utility lines and other services.

Compliance with existing State and local laws and regulations, such as the CBC and General Plan Action S-14B, would ensure that the impacts from development associated with implementation of the proposed project on expansive soil are minimized by requiring the submittal and review of detailed soils and/or geologic reports prior to construction. Such evaluations must contain recommendations for ground preparation and earthwork specific to the site, which then become an integral part of the construction design. The CBC includes requirements to address soil-related hazards. Typical measures to treat hazardous soil conditions involve removal of soil or fill materials, proper fill selection, and compaction. In cases where soil remediation is not feasible, the CBC requires structural reinforcement of foundations to resist the forces of expansive soils. Additionally, Berkeley Building Codes and other City requirements require site-specific investigations for projects where there are soil-related hazards and implementation of design recommendations in the investigations. Compliance with Berkeley Building Codes and other City requirements would ensure that potential impacts associated with expansive soils would be minimized or avoided.

With adherence to CBC requirements and General Plan Action S-14B, potential impacts associated with expansive soils that could occur with implementation of future development under the proposed project would be minimized or avoided because specified studies and design considerations would be employed as relevant and feasible at the individual project level. Impacts associated with expansive soils would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 5:	Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact GEO-4 THE PROPOSED PROJECT WOULD NOT INCLUDE SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS. NO IMPACT WOULD OCCUR.

Future development under the proposed HEU site would be served by the East Bay Municipal Utilities District, which is responsible for wastewater collection, treatment, and disposal of wastewater from all residential and commercial sources within its sewer service area. The proposed Project would not include septic tanks or alternative wastewater disposal systems; therefore, there is no potential for adverse effects due to soil incompatibility. No impact would occur.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 6:	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact GEO-5 DEVELOPMENT FACILITATED BY THE PROPOSED HEU HAS THE POTENTIAL TO IMPACT PALEONTOLOGICAL RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Rincon assessed the paleontological sensitivity of each of the 18 geologic units underlying Berkeley (Figure 4.6-5) and assigned a paleontological sensitivity to each unit (Table 4.6-2). The geologic units assigned a high sensitivity are shown on Figure 4.6-6; these include Pleistocene alluvial fan and fluvial deposits, Orinda Formation and Knoxville Formation. Ground disturbance in previously undisturbed portions of geologic units with high paleontological sensitivity may result in significant impacts to paleontological resources. However, potentially significant impacts to paleontological resources can only be determined once a specific project has been proposed because the effects are highly dependent on both the individual project site conditions and the characteristics of the proposed ground-disturbing activity. Ground disturbing activities associated with construction facilitated by this project, particularly in areas that have not previously been developed with urban uses, have the potential to damage or destroy paleontological resources that may be present on or below the ground surface in areas of high paleontological sensitivity. Consequently, damage to or destruction of fossils could occur due to development under the proposed HEU. This impact is potentially significant.

Table 4.6-2 Paleontological Sensitivity of Geologic Units in Berkeley

Geologic Unit	Age	Paleontological Sensitivity (SVP 2010)
Artificial fill (af)	Holocene	None
Artificial stream channels (Qhasc)	Holocene	Low
Holocene basin deposits (Qhb)	Holocene	Low
Holocene natural levee deposits (Qhl)	Holocene	Low
Holocene alluvial fan and fluvial deposits (Qhaf)	Holocene	Low
Holocene beach ridge deposits (Qhbr)	Holocene	Low
Pleistocene alluvial fan and fluvial deposits (Qpaf)	Pleistocene	High
Moraga Formation, igneous rocks (Tmb)	Miocene	None
Orinda Formation (Tor)	Miocene	High
Undivided rocks of Great Valley Complex (Ku)	Cretaceous	Undetermined
Knoxville Formation (Kjk)	Cretaceous to Jurassic	High
Franciscan Complex, sandstone of Alcatraz terrane (Kfa)	Cretaceous	Low
Franciscan Complex, undivided sandstone (Kfs)	Cretaceous to Jurassic	Low
Franciscan Complex, chert (fc)	Cretaceous to Jurassic	Low
Franciscan Complex, mélange (KJfm)	Cretaceous to Jurassic	Low
Coast Range Ophiolite, serpentinite (sp)	Jurassic	None
Coast Range Ophiolite, basalt and diabase (Jb)	Jurassic	None
Coast Range Ophiolite, silica-carbonate rock (sc)	Jurassic	None

Mitigation Measures

The following mitigation measure is required.

GEO-1 Protection of Paleontological Resources

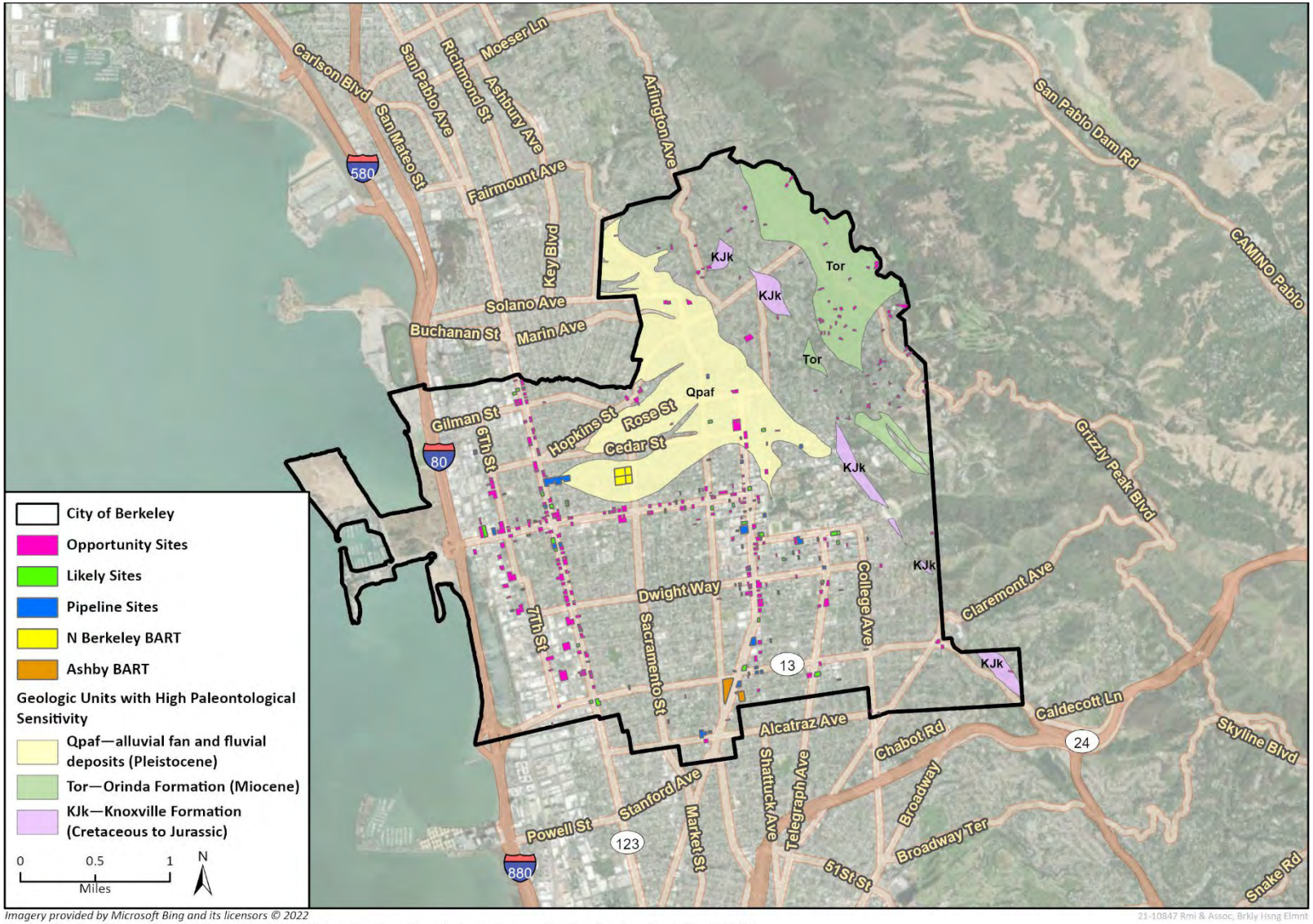
If ground disturbance below the level of prior disturbance and into native soils is proposed to occur in areas mapped as Pleistocene alluvial fan and fluvial deposits (Qpaf), Orinda Formation (Tor), or Knoxville Formation (Kjk), then the City shall require the following to be implemented:

Retention of Qualified Professional Paleontologist. Prior to initial ground disturbance, the project applicant shall retain a Qualified Professional Paleontologist, as defined by Society of Vertebrate Paleontology (SVP) (2010), to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards.

If underlying formations are found to have a high potential for paleontological resources, the Qualified Professional Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements:

Paleontological Worker Environmental Awareness Program (WEAP). Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff should fossils be discovered by construction staff.

Figure 4.6-6 Geologic Units with High Paleontological Sensitivity



Paleontological Monitoring. Full-time paleontological monitoring shall be conducted during ground disturbing construction activities (i.e., grading, trenching, foundation work) in sediments assigned a high paleontological sensitivity. Paleontological monitoring shall be conducted by a qualified Paleontological Resources Monitor, as defined by the SVP (2010). The duration and timing of the monitoring will be determined by the Qualified Professional Paleontologist based on the observation of the geologic setting from initial ground disturbance, and subject to the review and approval by the City. If the Qualified Professional Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Professional Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Professional Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Professional Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources.

Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would ensure procedures are in place to avoid destruction of paleontological resources. Therefore, impacts would be less than significant with mitigation.

c. Cumulative Impacts

All development in Berkeley is subject to geological hazards related to seismic activity, including strong ground shaking. Cumulative development in Berkeley as described in Section 3, *Environmental Setting,* would gradually increase population and therefore gradually increase the number of people exposed to potential geological hazards, including effects associated with seismic events such as ground rupture and strong shaking. However, conformance with the current CBC and City's General Plan policies and the other laws and regulations, would ensure that project-specific impacts associated with geology and soils would be less than significant; thereby reducing the potential cumulative impact associated with any single development project to less than significant. Development under the proposed HEU could also result in soil erosion or the loss of topsoil which could result in cumulative impacts when combined with other development in Berkeley and the region that might also cause erosion. However, compliance with existing regulations would reduce potential erosion impacts associated with new development. Potential impacts associated with geology and soils would not be cumulatively considerable, and cumulative impacts related to geologic hazards would be less than significant.

Cumulative development in Berkeley would disturb areas that may contain paleontological resources. It is anticipated that potential impacts associated with individual development projects would be addressed on a case-by-case basis and would be subject to local and state regulations regarding the protection of such resources. With compliance with existing policies and regulations, future development in Berkeley would be required to avoid or mitigate the loss of these resources. The proposed HEU's impacts can be reduced to below a level of significance implementation of Mitigation Measure GEO-1 described above. Therefore, significant cumulative paleontological resource impacts would not occur.

4.7 Greenhouse Gas Emissions

This section analyzes impacts to greenhouse gas (GHG) emissions, including the potential for development under the proposed HEU to generate greenhouse gas (GHG) emissions in excess of standards or for the proposed HEU to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

4.7.1 Setting

a. Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years.

The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic CO_2 was emitted (IPCC 2021). It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (U.S. EPA 2021a). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature.

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are usually by-products of fossil fuel combustion, and CH_4 results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (U.S. EPA 2021a).

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (IPCC 2021).[1]

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2022). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

b. Global Emissions Inventory

In 2015, worldwide anthropogenic total 47,000 million MT of CO_2e, which is a 43 percent increase from 1990 GHG levels (U.S. EPA 2021b). Specifically, 34,522 million metric tons (MMT) of CO_2e of CO_2, 8,241 MMT of CO_2e of CH_4, 2,997 MMT of CO_2e of N_2O, and 1,001 MMT of CO_2e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and use (includes fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed for three percent and two percent was due to international transportation sources. These sources account for approximately 98 percent because there was a net sink[2] of two percent from land-use change and forestry. (U.S. EPA 2021b).

United States Emissions Inventory

Total U.S. GHG emissions were 6,558 MMT of CO_2e in 2019. Emissions decreased by 1.7 percent from 2018 to 2019; since 1990, total U.S. emissions have increased by an average annual rate of 0.06 percent for a total increase of 1.8 percent between 1990 and 2019. The decrease from 2018 to 2019 reflects the combined influences of several long-term trends, including population changes, economic growth, energy market shifts, technological changes such as improvements in energy efficiency, and decrease carbon intensity of energy fuel choices. In 2019, the industrial and transportation end-use sectors accounted for 30 percent and 29 percent, respectively, of nationwide GHG emissions while the commercial and residential end-use sectors accounted for 16 percent and 15 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (U.S. EPA 2021c).

California Emissions Inventory

Based on the CARB California Greenhouse Gas Inventory for 2000-2019, California produced 418.2 MMT of CO_2e in 2019, which is 7.2 MMT of CO_2e lower than 2018 levels. The major source of GHG emissions in California is the transportation sector, which comprises 40 percent of the state's total GHG emissions. The industrial sector is the second largest source, comprising 21 percent of the

[1] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWPs from the Fourth Assessment Report.

[2] Net sink refers to the taking in of more carbon than can be emitted.

state's GHG emissions while electric power accounts for approximately 14 percent (CARB 2021). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of CO_2e (CARB 2021). The annual 2030 statewide target emissions level is 260 MMT of CO_2e (CARB 2017).

Local Emissions Inventory

Based on the Climate Action Plan Report presented by staff to the Berkeley City Council on February 8, 2022, Berkeley's GHG emissions totaled approximately 540,000 metric tons in 2019, approximately 26 percent below 2000 levels. The major source of GHGs in Berkeley is associated with transportation, contributing approximately 60 percent. Residential natural gas and commercial natural gas is the second largest source, contributing approximately 32 percent to the City's GHG emissions. The remaining 8 percent is made up by other sources such as commercial and residential electricity, landfill waste, municipal buildings, and water consumption and wastewater (City of Berkeley 2022).

c. Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Each of the past three decades has been warmer than all the previous decades in the instrumental record, 2013 through 2021 all rank among the ten-warmest years on record. It also marked the 45th consecutive year (since 1977) with global temperatures rising above the 20th century average (NOAA 2022). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations jointly indicate that LSAT and sea surface temperatures have increased.

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality and Wildfires

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C (36.32°F to 37.76°F) in the next 50 years and by 3.1 to 4.9°C (37.58°F to 40.82°F) in the next century (State of California 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have

increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them (California Natural Resources Agency 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California coasts (State of California 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels between 1993 to 2020, observed by satellites, is approximately 3.3 millimeters per year, double the twentieth century trend of 1.6 millimeters per year (World Meteorological Organization 2013; National Aeronautics and Space Administration 2020). Global mean sea levels in 2013 were about 0.23 meter higher than those of 1880 (National Aeronautics and Space Administration 2020). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise ranging between 0.25 to 0 1.01 meters by 2100 with the sea level ranges dependent on a low, intermediate, or high GHG emissions scenario (IPCC 2021). A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California’s water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). Furthermore, increased storm

intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has an over $50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2020). Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions as a result of higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

4.7.2 Regulatory Setting

a. Federal Regulations

Federal GHG Emissions Regulation

The U.S. Supreme Court determined in Massachusetts et al. v. Environmental Protection Agency et al. ([2007] 549 U.S. 05-1120) that the USEPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In Utility Air Regulatory Group v. Environmental Protection Agency (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

In the most recent West Virginia v. Environmental Protection Agency (20-1530 [2022]), the U.S. Supreme Court held that the USEPA may not regulate emissions from coal- and gas-fired power plants using generation shifting[3] that was implemented as part of the 2015 Clean Power Plan. The Court held that the USEPA is not permitted, under the Clean Air Act, to implement regulations for power plants that were allowed under the Clean Power Plan. However, the Court upheld EPA's authority to continue regulating greenhouse gas emissions from the power sector (Supreme Court 2021).

Safer Affordable Fuel-Efficient Vehicle Rule

In April 2020, EPA and NHTSA issued the Safer Affordable Fuel Efficient (SAFE) Vehicles Rule, which required automakers to improve fuel efficiency 1.5 percent annually from model years 2021 through 2026. The SAFE rule also upended State emission programs, and withdrew the waiver for California's Advanced Clean Cars Program, Zero Emission Vehicle Program (ZEV), and Low-Emission Vehicle Program (LEV). In response, California and other states sued in federal court to challenge the final action on preemption of state vehicle standards. In April 2021, the Biden administration, USEPA, and Department of Transportation began the process of dropping limitations on California's waiver. In December 2021, NHTSA issued a repealing of the SAFE Vehicle Rule Part One. In March 2022, USEPA did the same, thereby reinstating California's waiver and the ability of other states to adopt the California standards (Center for Climate and Energy Solutions [C2ES] 2022).

b. State Regulations

California's Advanced Clean Cars program (Assembly Bill 1493)

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the U.S. EPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles, beginning with the 2009 model year, which allows California to implement more stringent vehicle emission standards than those promulgated by the U.S. EPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as "LEV (Low Emission Vehicle) III GHG," regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

California Global Warming Solutions Act of 2006

California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006," which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_2e. The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste,

[3] Switching electricity generation from fossil fuels to clean sources.

among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

Senate Bill (SB) 32, signed into law on September 8, 2016, extends AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of 6 MT CO_2e by 2030 and 2 MT CO_2e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State (CARB 2017).

The Draft 2022 Scoping Plan Update has been prepared to assess the progress towards the 2030 target as well as to outline a plan to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities (CARB 2022).

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Renewables Portfolio Standard Program (Senate Bill 100)

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Senate Bill 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 directs each of the State's 18 major Metropolitan Planning Organizations to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan. On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. ABAG was

assigned targets of a 10 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035. In the ABAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

PRC Division 30 Part 3 Chapter 13.1 and Health and Safety Code Sections 39730.5-8 (Senate Bill 1383)

Adopted in September 2016, SB 1383 requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

1. Methane – 40 percent below 2013 levels
2. Hydrofluorocarbons – 40 percent below 2013 levels
3. Anthropogenic black carbon – 50 percent below 2013 levels

The bill also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Executive Order B-55-18

On September 10, 2018, Governor Brown issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

Executive Order N-79-20

On September 23, 2020, Governor Newsom issued Executive Order (EO) N-79-20, which established the following new statewide goals:

- All new passenger cars and trucks sold in-state to be zero-emission by 2035;
- All medium- and heavy-duty vehicles in the state to be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and
- All off-road vehicles and equipment to be zero-emission by 2035 where feasible.

EO N-79-20 directs CARB, the Governor's Office of Business and Economic Development, the CEC, the California Department of Transportation, and other state agencies to take steps toward drafting regulations and strategies and leveraging agency resources toward achieving these goals.

California Integrated Waste Management Act (Assembly Bill 341)

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; diversion of 50 percent of all solid waste on and after January 1, 2000; and diversion of 75 percent of all solid waste by 2020, and annually thereafter. CalRecycle is required to develop strategies to implement AB 341, including source reduction.

California Building Standards Code

The California Code of Regulations, Title 24, is referred to as the California Building Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on. The California Building Code's energy efficiency and green building standards are outlined below.

Part 6 – Building Energy Efficiency Standards

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The 2019 Title 24 standards are the applicable building energy efficiency standards for the project because they became effective on January 1, 2020 (CEC 2018).

2022 Building Energy Standards will become effective at the beginning of 2023 and improve upon the 2019 standards. It will include several amendments including revisions to residential energy efficiency standards for solar photovoltaic systems, establish requirements that mixed fuel buildings are electric ready, enhancements of requirements for duct sealing and ventilation, among others (CEC 2021).

Part 11 – California Green Building Standards

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Code). The 2016 CALGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements.

The mandatory standards require the following practices:

1. 20 percent reduction in indoor water use relative to specified baseline levels
2. 50 percent construction/demolition waste diverted from landfills
3. Inspections of energy systems to ensure optimal working efficiency
4. Use of low pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards
5. Implementation of dedicated circuitry to facilitate installation of electric vehicle (EV) charging stations in newly constructed attached garages for single-family and duplex dwellings
6. Installation of EV charging stations at least three percent of the parking spaces for all new multi-family developments with 17 or more units

The voluntary standards require the following:

1. Tier I—15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent

recycled content, 20 percent permeable paving, 20 percent cement reduction, cool/solar reflective roof

2. Tier II—30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, and 30 percent cement reduction, cool/solar reflective roof

Similar to the compliance reporting procedure for demonstrating Building Energy Efficiency Standards compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms for new low-rise residential and non-residential buildings. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

c. Regional and Local Regulations

Bay Area Air Quality Management District

In 2013, the BAAQMD adopted resolution no. 2013-11, "Resolution Adopting a Greenhouse Gas Reduction Goal and Commitment to Develop a Regional Climate Protection Strategy" that builds on state and regional climate protection efforts by (BAAQMD 2013):

1. Setting a goal for the Bay Area region to reduce GHG emissions by 2050 to 80 percent below 1990 levels
2. Developing a Regional Climate Protection Strategy to make progress towards the 2050 goal, using BAAQMD's Clean Air Plan to initiate the process
3. Developing a 10-point work program to guide the BAAQMD's climate protection activities in the near-term

The BAAQMD is currently developing the Regional Climate Protection Strategy and has outlined the 10-point work program, which includes policy approaches, assistance to local governments, and technical programs that will help the region make progress toward the 2050 GHG emissions goal.

The BAAQMD is responsible for enforcing standards and regulating stationary sources in its jurisdiction, including the San Francisco Bay Area Air Basins and the City of Piedmont. The BAAQMD regulates GHG emissions through specific rules and regulations, as well as project and plan level emissions thresholds for GHGs to ensure that new land use development in the San Francisco Bay Area Air Basin contributes to its fair share of emissions reductions (BAAQMD 2017).

Plan Bay Area 2050

Plan Bay Area 2050 is a state-mandated, integrated long-range transportation, land-use, and housing plan that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area (MTC/ABAG 2021). The SCS builds on earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. Plan Bay Area 2050 focuses on advancing equity and improving resiliency in the Bay Area by creating strategies in the following four elements: Housing, Economy, Transportation, and Environment. The Plan discusses how the future is uncertain due to anticipated employment growth, lack of housing options, and outside forces, such as climate change and economic turbulence. These uncertainties will impact growth in

the Bay Area and exacerbate issues for those who are historically and systemically marginalized and underserved and excluded. Thus, Plan Bay Area 2050 has created strategies and considered investments that will serve those systemically underserved communities and provide equitable opportunities. The Plan presents a total of 35 strategies to outline how the $1.4 trillion dollar investment would be utilized. The strategies include, but are not limited to, the following: providing affordable housing, allowing higher-density in proximity to transit-corridors, optimizing the existing roadway network, creating complete streets, providing subsidies for public transit, reducing climate emissions, and expanding open space area. Bringing these strategies to fruition will require participation by agencies, policymakers, and the public. An implementation plan is also included as part of the Plan to assess the requirements needed to carry out the strategies, identify the roles of pertinent entities, create an appropriate method to implement the strategies, and create a timeline for implementation (ABAG/MTC 2021).

City of Berkeley General Plan

The City of Berkeley's General Plan, adopted in April 2001, includes the following applicable policies and actions as part of the Environmental Management Element and Transportation Element that support the goal of reducing GHG emissions (City of Berkeley 2001):

Policy EM-5: "Green" Buildings Promote and encourage compliance with "green" building standards

Policy EM-7: Reduced Wastes Continue to reduce solid and hazardous wastes.

Policy EM-8: Building Reuse and Construction Waste Encourage rehabilitation and reuse of buildings whenever appropriate and feasible in order to reduce waste, conserve resources and energy, and reduce construction costs.

Policy EM-18: Regional Air Quality Action Continue working with the Bay Area Air Quality Management District and other regional agencies to:

1. Improve air quality through pollution prevention methods.
2. Ensure enforcement of air emission standards.
3. Reduce local and regional traffic (the single largest source of air pollution in the city) and promote public transit.
4. Promote regional air pollution prevention plans for business and industry.
5. Promote strategies to reduce particulate pollution from residential fireplaces and wood-burning stoves.
6. Locate parking appropriately and provide adequate signage to reduce unnecessary "circling" and searching for parking.

Policy EM-19: 15 percent Emission Reduction Global Warming Plan Make efforts to reduce local emissions by 15% by the year 2010.

Policy EM-35: Energy-Efficient Design Promote high-efficiency design and technologies that provide cost-effective methods to conserve energy and use renewable energy sources.

Policy EM-41: Fossil Fuel Encourage and support efforts to reduce use of fossil fuel and other finite, nonrenewable resources.

Policy UD-33 Sustainable Design. Promote environmentally sensitive and sustainable design in new buildings.

Policy T-10: Trip Reduction To reduce automobile traffic and congestion and increase transit use and alternative modes in Berkeley, support, and when appropriate require, programs to encourage Berkeley citizens and commuters to reduce automobile trips, such as:

1. Participation in a citywide Eco-Pass Program (also see Transportation Policy T-3).
2. Participation in the Commuter Check Program.
3. Carpooling and provision of carpool parking and other necessary facilities.
4. Telecommuting programs.
5. "Free bicycle" programs and electric bicycle programs.
6. "Car-sharing" programs.
7. Use of pedal-cab, bicycle delivery services, and other delivery services.
8. Programs to encourage neighborhood-level initiatives to reduce traffic by encouraging residents to combine trips, carpool, telecommute, reduce the number of cars owned, shop locally, and use alternative modes.
9. Programs to reward Berkeley citizens and neighborhoods that can document reduced car use.
10. Limitations on the supply of long-term commuter parking and elimination of subsidies for commuter parking.
11. No-fare shopper shuttles connecting all shopping districts throughout the city.

Policy T-43: Bicycle Network Develop a safe, convenient, and continuous network of bikeways that serves the needs of all types of bicyclists, and provide bicycle-parking facilities to promote cycling.

City of Berkeley Climate Action Plan

The City of Berkeley adopted a Climate Action Plan (CAP) in 2009 with the goal of reducing communitywide GHG emissions by 80 percent below 2000 levels by 2050. The core recommendation strategies and actions of the CAP center around the following topics (City of Berkeley 2009):

1. Sustainable Transportation and Land Use
2. Building Energy Use
3. Waste Reduction and Recycling
4. Community Outreach and Empowerment
5. Preparing for Climate Change Impacts

While the CAP is not considered a “qualified greenhouse gas reduction plan” for the purposes of streamlining GHG emissions analysis under CEQA, it is actively used by the City for guiding GHG emission reduction efforts. Since publication of the CAP, the City has outlined several additional climate commitments:

- 100 percent renewable electricity by 2035
- Net-Zero Carbon Emissions by 2045, in alignment with Governor Brown’s Executive Order B-55-18
- Declared a Climate Emergency and resolved to become a Fossil Fuel Free City

Berkeley Resilience Strategy

In 2016, the City released its Resilience Strategy to advance the City's resilience, or the ability of the individuals, institutions, businesses, and systems within the community to survive, adapt, and grow no matter what chronic stress or acute shock it experiences. Berkeley's interconnected resilience challenges include earthquakes, wildfires, climate change impacts such as drought and flooding, and racial inequity. The City's Resilience Strategy emphasizes building community resilience by facilitating stronger connections between neighbors; between public, private, nonprofit, and academic institutions; between departments within the City government; and between Bay Area local and regional governments. The six goals of the Resilience Strategy are (City of Berkeley 2016):

1. Build a Connected and Prepared Community
2. Accelerate Access to Reliable and Clean Energy
3. Adapt to the Changing Climate
4. Advance Racial Equity
5. Excel at Working Together within City Government to Better Serve the Community
6. Build Regional Resilience

Prohibition of Natural Gas Infrastructure in New Buildings

In 2019, the Berkeley City Council added Chapter 12.80 to the BMC via Ordinance No. 7,672-N.S., which prohibits the installation of natural gas infrastructure in newly constructed buildings. In limited circumstances, the Ordinance allows the entitling body to grant an exception or a public interest exemption.

Electric Mobility Roadmap

In July 2020, the City adopted its first Electric Mobility Roadmap, which outlines the City's plan to implement its vision of a fossil fuel-free transportation system that integrates with and supports the City's ongoing efforts to increase walking, biking, and public transportation use in Berkeley and ensures equitable and affordable access to the benefits of clean transportation. The Electric Mobility Roadmap includes strategies to increase electric vehicle charging stations in new and existing development, provide public electric vehicle charging on City properties, advance electric bus rapid transit routes, electrify shared transportation fleets and private fleets, and increase the share of electric vehicle charging powered by 100 percent renewable energy (City of Berkeley 2020).

4.7.3 Impact Analysis

a. Thresholds of Significance

To determine whether a project would result in a significant impact related to GHG emissions, Appendix G of the *CEQA Guidelines* requires consideration of whether a project would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Individual projects do not generate enough GHG emissions to create significant project-specific environment effects. However, the environmental effects of a project's GHG emissions can

contribute incrementally to cumulative environmental effects that are significant, contributing to climate change, even if an individual project's environmental effects are limited (*CEQA Guidelines* Section 15064[h][1]). The issue of a project's environmental effects and contribution towards climate change typically involves an analysis of whether a project's contribution towards climate change is cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines* Section 15064[h][1]).

CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions. *CEQA Guidelines* Section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, as long as any threshold chosen is supported by substantial evidence (see *CEQA Guidelines* Section 15064.7[c]).

In the BAAQMD 2017 *CEQA Air Quality Guidelines*, the BAAQMD outlines an approach to determine the significance of projects. The BAAQMD recommends that lead agencies determine appropriate GHG emissions thresholds of significance based on substantial evidence in the record. The BAAQMD has not established a quantitative significance threshold for evaluating construction-related emissions. Although the BAAQMD adopted new GHG thresholds on April 20, 2022, the Air District Board of Directors stated in the Board resolution that projects and plans with an issued Notice of Preparation (NOP) prior to the adoption of thresholds may continue to use the GHG thresholds included in the 2017 *CEQA Air Quality Guidelines,* with the caveat that the significance thresholds must be based on scientific and factual data and supported by substantial evidence. Since the NOP for this EIR was prepared and distributed prior to the adoption of the updated thresholds, the following significance thresholds established in the BAAQMD 2017 *CEQA Air Quality Guidelines* for operational GHG emissions from land use development projects within the San Francisco Bay Area Air Basin are used in determining the significance of project-level or plan-level impacts (BAAQMD 2017):

1. Project-level
    a. Compliance with a qualified GHG reduction strategy
    b. Annual emissions less than 1,100 MT of CO_2e per year
    c. Annual emissions less than 4.6 MT of CO_2e per service population (residents and employees) per year

2. Plan-level
    a. Compliance with a qualified GHG reduction strategy
    b. Annual emissions less than 6.6 MT of CO_2e per service population (residents and employees) per year

However, the BAAQMD's thresholds of significance were established based on achieving the 2020 GHG emission reduction targets set forth in the AB 32 Scoping Plan, and not the 2030 reduction targets of the SB 32 Scoping Plan or the 2045 carbon neutrality goal targets of EO B-55-18. Therefore, with a project buildout year of 2031, this analysis develops an efficiency threshold for

2031 in order to determine the significance of the project's GHG emissions. In the recently signed EO B-55-18, which identifies a new goal of carbon neutrality by 2045 and supersedes the goal established by EO S-3-05, CARB has been tasked with including a pathway toward the EO B-55-18 carbon neutrality goal in the next Scoping Plan update which is currently being drafted. While State and regional regulations of energy and transportation systems, along with the State's Cap and Trade program, are designed to achieve most of the reductions needed to meet long-term targets, local governments can do their fair share toward meeting the State's targets by siting and approving projects that accommodate planned population growth that are GHG-efficient. The Association of Environmental Professionals (AEP) Climate Change Committee recommends that CEQA GHG analyses evaluate project emissions in light of the trajectory climate change legislation and assess their "substantial progress" toward achieving long-term reduction targets identified in available plans, legislation, or EOs. Consistent with AEP Climate Change Committee recommendations, GHG impacts that would occur after codified targets are analyzed in terms of whether the project would impede "substantial progress" toward meeting the reduction goal identified in EO B-55-18 (AEP 2016). Avoiding interference with, and making substantial progress toward, these long-term State targets is important as these targets have been set at levels that achieve California's fair share of international emissions reduction targets that will stabilize global climate change effects and avoid the adverse environmental consequences.

To establish a more appropriate threshold of significance, BAAQMD's plan-level efficiency threshold of 6.6 MT CO_2e per service population per year was first reduced to the SB 32's codified 2030 target of 40 percent below 1990 emissions, which would result in a threshold of 4.0 MT CO_2e per service population per year. The 4.0 MT CO_2e per service population per year threshold was then reduced by 0.27 MT CO_2e per year to reach 2045's goal of 0 MT CO_2e population per year. Therefore, in the year 2031, this would equate to a 3.7 MT CO_2e per service population per year threshold, which is applied to the project.

b. Methodology

GHG emissions for development facilitated by the project (operation) were calculated using CalEEMod Version 2020.4.0. The model calculates emissions of the following GHGs: CO_2, N_2O, and CH_4, which are combined using each GHGs' GWP and reported as CO_2e. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E (CAPCOA 2021). GHG emissions include water and solid waste sources and area, energy, and mobile sources. The input data and subsequent operation GHG emission estimates for development facilitated by the project are discussed below and in Section 4.2, *Air Quality*. Land use types used in the modelling reflect land use types described in Table 4.12-3 (HEU Population Estimates) of Section 4.12, *Population and Housing*. CalEEMod output files are included in Appendix E.

Construction Emissions

The BAAQMD has not established a quantitative significance threshold for evaluating construction-related emissions. Since construction information is site specific and varies from project to project, construction emissions cannot be qualitatively analyzed over the 8-year timeline of the HEU and therefore are not modelled or included in this EIR.

Operational Emissions

Energy Sources

Emissions from energy use include electricity and natural gas use. The electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies. CalEEMod currently incorporates California's 2019 Title 24 building energy efficiency standards.

Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kWh. East Bay Community Energy (EBCE) would serve development facilitated by the project. Because EBCE would be residents default electricity provider, the company's specific energy intensity factors (i.e., the amount of CO_2, CH_4, and N_2O per kWh) were used in the calculations of GHG emissions. Per SB 100, the statewide Renewable Portfolio Standard (RPS) program requires electricity providers to increase procurement from eligible renewable energy sources to 60 percent by 2030, which EBCE is already in compliance with. EBCE has introduced a Renewable 100 option in 2022 which consists of 100 percent eligible renewable energy resources (EBCE 2022a). However, since customers have the option to opt out of the Renewable 100 program and enroll in the Bright Choice Program which would be supplied by 40 percent renewable energy, energy intensity factors were set to reflect 40 percent renewable energy for a conservative analysis. Although customers also have the option to select PG&E as their electricity provider, this analysis assumes EBCE as the main provider since the Berkeley City Council voted to set the default electricity option for residents to EBCE's Renewable 100 (EBCE 2022b). In accordance with Section 150.1(c)(14) of the 2019 Building Energy Efficiency Standards, development facilitated by the project would be required to install PV systems on all low-rise residential structures up to three stories equal to the expected electricity usage. As a conservative analysis, CalEEMod assumes that only single-family uses would include PV systems, even though solar PV systems will be required on most new residential structures.

Pursuant to Chapter 12.80 of the BMC, which prohibits the installation of natural gas infrastructure in newly constructed buildings unless granted an exception or public interest exception, it was assumed that 10 percent of new development would include natural gas connections/appliances for a conservative estimate of the project's impacts. To account for the increased electricity usage that would occur in all-electric units, it was assumed that 90 percent of the natural gas demand estimated for the project in the GHG modeling would instead by supplied by electricity.

Area Sources

Emissions associated with area sources, including space and water heating, consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and use standard emission rates from CARB, USEPA, and emission factor values provided by the local air district (CAPCOA Software 2021).

Waste Sources

GHG emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA Software 2021). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by CalRecycle.

Water and Wastewater Sources

GHG emissions from water and wastewater usage calculated in CalEEMod were based on the electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for northern and southern California. A 20 percent reduction in indoor potable water use was incorporated in the model in accordance with CALGreen standards.

Mobile Sources

Mobile source emissions are generated by the increase in vehicle trips to and from the housing inventory sites associated with operation of onsite development. Vehicle trips were calculated using default CalEEMod trip generation rates. Mobile emissions also assumed 2031 fleet mixes and emission factors, as this is the year in which the project's development is analyzed against GHG reduction goals.

c. Project Impacts and Mitigation Measures

Threshold 1:	Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact GHG-1 FUTURE DEVELOPMENT UNDER THE PROPOSED HEU WOULD NOT DIRECTLY OR INDIRECTLY GENERATE GHG EMISSIONS THAT WOULD HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT. GHG EMISSIONS FROM THE PROJECT WOULD NOT EXCEED BAAQMD 2031 INTERPOLATED THRESHOLDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Table 4.7-1 shows the operational GHG emissions associated with development facilitated by the proposed HEU. As shown therein, annual emissions from full buildout of the project's envisioned increase of 19,098 dwelling units over existing conditions would be 81,985 MT of CO_2e per year. With a project increase in population of 47,773 over existing conditions, this would result in an increase of 1.7 MT of CO_2e per service population per year. The relatively low annual emissions from the project are mostly due to Berkeley's natural gas ban and the electrification of buildings, coupled with EBCE's sourcing of renewable energy under the Bright Choice and Renewable 100 programs, which would decrease GHG emissions from energy sources. The project's 1.7 MT of CO_2e per service population per year would not exceed the BAAQMD's interpolated 2031 target of 3.7 MT CO_2e per service population at the plan-level. Therefore, impacts would be less than significant.

Table 4.7-1 Operational GHG Emissions

Emission Source	Annual Emissions (MT of CO_2e)
Operational	
Area	237
Energy	8,506
Mobile	67,670
Waste	4,463
Water	1,109
Operational Total	**81,985**
Project Population Increase	47,443
MT of CO_2e per Service Population	**1.7**

Emission Source	Annual Emissions (MT of CO_2e)
BAAQMD Interpolated Plan-level 2031 Target	3.7
Exceed BAAQMD Targets?	**No**

Source: Appendix E

Mitigation Measures

This impact would be less than significant. No mitigation measures would be required.

Threshold:	Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact GHG-2 THE PROPOSED HEU WOULD NOT CONFLICT WITH GHG REDUCTION GOALS AND POLICIES IN THE 2017 SCOPING PLAN, PLAN BAY AREA 2050, THE CITY'S GENERAL PLAN, OR THE CITY'S CAP. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The proposed HEU was evaluated for consistency with applicable State and local plans that were developed with the intent of reducing GHG emissions. Each applicable plan is discussed separately below.

2017 Scoping Plan

Development facilitated by the proposed HEU would be consistent with these goals through project design, which includes complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards. Development facilitated by the project would be required to install PV systems on all low-rise residential structures up to three stories equal to the expected electricity usage system per the 2019 Building Energy Efficiency Standards and energy efficient design and construction per CALGreen. Policy H-16 of the HEU aims to encourage residential development in proximity to transit, jobs and services. As discussed in Impact AQ-1 of Section 4.2, *Air Quality*, the net percentage VMT increase associated with the proposed project (approximately 23 percent) would be less than the net percentage population increase (approximately 41 percent). Therefore, on a per population basis, it would have the effect of reducing vehicle trips and therefore GHG emissions associated with fossil fuel use. Further, most of the housing inventory sites are located near transit corridors, BART stations, and in Priority Development Areas such as the Southside Plan Area, which would reduce reliance on personal vehicles. This supports 2017 Scoping Plan goals for the encouragement of alternative transportation use and VMT reduction. Therefore, the project would be consistent with the 2017 Scoping Plan.

Plan Bay Area 2050

The strategies from Plan Bay Area 2050 related to GHG emissions and applicable to the project are shown in Table 4.7-2. As shown in Table 4.7-2, the project would be consistent with the key goals and strategies of Plan Bay Area 2050.

Table 4.7-2 Project Consistency with Plan Bay Area 2050

Measure	Project Consistency
T8. Build a Complete Streets network. Enhance streets to promote walking, biking and other micro-mobility through sidewalk improvements, car-free slow streets, and 10,000 miles of bike lanes or multi-use paths.	**Consistent**. As shown in Figure 2-4 of the Project Description (Housing Element Update Sites Inventory Locations), most of the housing inventory sites are generally located along or near transportation corridors served by Class II and Class III bicycle lanes, which would encourage the usage of bicycles and reduce reliance of single-occupancy vehicles. Additionally, the City has over 2,660 short-term bicycle parking spaces as well as bike corrals, lockers, and a bike station adjacent to the Downtown Berkeley BART station which future residents could utilize (City of Berkeley 2017). Since the project would facilitate development mostly near transit corridors, BART stations, and Priority Development Areas such as the Southside Plan Area, University Avenue Plan Area, Adeline Corridor Plan Area, and Berkeley's Downtown Area, it would place residents within walking distance to services (commercial, retail, restaurants) and transit, which would promote walking as one of the main forms of mobility.
EN4. Maintain urban growth boundaries. Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions.	**Consistent.** The project would facilitate development of housing on vacant and/or underutilized sites within Berkeley's urban footprint and mostly near transit corridors, BART stations, and Priority Development Areas such as the Southside Plan Area, University Avenue Plan Area, South Shattuck Plan Area, and Berkeley's Downtown Area. By placing residents close to jobs and alternative methods of transportation, the project would reduce GHG emissions and other criteria pollutants associated with vehicle use to help communities stay healthy and safe.
EN8. Expand clean vehicle initiatives. Expand investments in clean vehicles, including more fuel-efficient vehicles and electric vehicle subsidies and chargers.	**Consistent.** Future development facilitated by the project would be required to comply with EV requirements pursuant to BMC Section 19.37.040, which currently requires 20 percent of parking spaces to be electric vehicle charging spaces capable of supporting future electric vehicle chargers and 80 percent of parking spaces to include raceways to facilitate future electric vehicle supply equipment at all new multi-family developments; and for new one- and two-family dwelling units to accommodate a dedicated 208/240-volt branch circuit for a future EV charger.

Source: ABAG 2021

City of Berkeley General Plan

The Environmental Management Element and Urban Design and Preservation Element of the Berkeley General Plan contains policies and actions aimed at reducing GHG emissions. As shown in Table 4.7-3, the proposed project would be consistent with these policies and actions.

Table 4.7-3 City of Berkeley General Plan Consistency for GHG Emissions

General Plan Policy or Action	Consistency
Environmental Management Element	
Policy EM-5 Green Buildings. Promote and encourage compliance with "green" building standards. *Actions:* A. Encourage, and where appropriate require, new construction and major remodel projects to be sited, designed, constructed, and operated to enhance the well-being of their occupants, and to minimize present and future impacts on the community and the natural environment B. Encourage landscaping for water and energy efficiency. C. Encourage buildings to incorporate renewable energy and energy- and water-efficient technologies. D. Encourage use of recycled-content construction materials. E. Encourage efforts to improve indoor air quality and to provide a comfortable and healthy environment. F. Encourage reduction of construction and demolition waste. G. Encourage construction of durable buildings. H. Establish a green design assistance and green building certification program.	**Consistent**: Future development facilitated by the proposed project would be required to be constructed in accordance with the latest iteration of CALGreen, the California Energy Code, and any locally adopted amendments, which include green building practices. In addition, new construction would be required to be all electric per the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. HEU Policy H-13 would also ensure energy efficiency in new buildings in order to reduce energy costs and GHGs.
Policy EM-8 Building Reuse and Construction Waste. Encourage rehabilitation and reuse of buildings whenever appropriate and feasible in order to reduce waste, conserve resources and energy, and reduce construction costs. *Actions:* A. Encourage the reuse of demolition materials and recycling of construction scraps.	**Consistent**: Future development facilitated by the proposed HEU would be required to divert at least 65 percent of construction and demolition debris pursuant to the requirements of CALGreen. In addition, projects would also be subject to BMC Chapter 19.37, which requires diversion of 65 percent diversion of construction/demolition waste, and recycling and salvage of 100 percent of excavated soil and land-clearing debris, 100 percent of concrete, and 100 percent of asphalt during construction and demolition activities.
Policy EM-35 Energy-Efficient Design. Promote high-efficiency design and technologies that provide cost-effective methods to conserve energy and use renewable energy sources.	**Consistent**: Future development facilitated by the proposed project would be required to be constructed in accordance with the latest iteration of CALGreen, the California Energy Code, and any locally adopted amendments, which include requirements for the use of energy-efficient design and technologies as well as provisions for incorporating renewable energy resources into building design. New construction would be required to be all electric pursuant to the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. Additionally, HEU Policy H-13 would ensure energy efficiency and waste reduction in all development facilitated under the project.

General Plan Policy or Action	Consistency
Policy EM-41 Fossil Fuel. Encourage and support efforts to reduce use of fossil fuel and other finite, nonrenewable resources.	**Consistent:** New construction facilitated under the project would be required to be all electric pursuant to the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. In addition, most housing inventory sites would be located near transportation corridors in proximity to alternative transportation modes such as BART and buses, thereby supporting efforts to reduce the use of fossil fuels by motor vehicles. In addition, implementation of the City's Electric Mobility Roadmap (2020) and the electric vehicle charging infrastructure requirements of BMC Chapters 19.36 and 19.37 would facilitate future residents' use of electric vehicles powered by renewable energy resources, which would further reduce consumption of fossil fuels.
Urban Design and Preservation Element	
Policy UD-33 Sustainable Design. Promote environmentally sensitive and sustainable design in new buildings. *Actions:* A. Promote compliance with green building standards for solar accessibility and orientation, energy efficiency, etc. B. Encourage use of recycled building materials. C. Establish guidelines that will help to integrate environmentally sensitive and sustainable designs into the built environment.	**Consistent:** Future development under the proposed HEU would be required to be constructed in accordance with the latest iteration of CALGreen and the California Energy Code, which include environmentally sensitive and sustainable design practices. In addition, new construction would be required to be all electric pursuant to the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources.

Source: City of Berkeley General Plan

City of Berkeley Climate Action Plan

The City's CAP contains 30 goals to reduce communitywide and municipal GHG emissions in order to achieve the City's target of reducing emissions by 80 percent below 2000 levels by 2050. The measures included in the CAP cover the main sectors of GHG emissions including transportation and land use, building energy usage, and waste reduction and recycling. The measures applicable to the project are summarized in Table 4.7-4. As shown therein, the project would be consistent with applicable GHG reduction measures in the City's CAP.

Table 4.7-4 Project Consistency with Applicable Climate Action Plan Measures

Recommended Goals	Project Consistency
Sustainable Transportation and Land Use	
Goal 1: Increase density along transit corridors.	**Consistent:** The project would facilitate increased housing density within housing inventory sites along the City's major transit corridors such as Shattuck Avenue, Cedar Street, and San Pablo Avenue. The project also envisions dense residential development at BART stations and in Priority Development Areas such as the Southside Plan Area, University Avenue Plan Area, South Shattuck Plan Area, and Berkeley's Downtown Area.

Recommended Goals	Project Consistency
Goal 2: Increase and enhance urban green and open space, including local food production, to improve the health and quality of life for residents, protect biodiversity, conserve natural resources, and foster walking and cycling.	**Consistent**: The project would facilitate development in the existing urban footprint of Berkeley, targeting vacant and/or underutilized sites and the Southside Plan Area. By facilitating housing near transit corridors and Priority Development Areas, the project would also encourage reduced reliance on single-occupancy vehicles and promote walking and bicycling to services and transit. Therefore, the project would not adversely impact existing urban green and open space and would foster walking and bicycling.
Goal 8: Encourage the use of low-carbon vehicles and fuels.	**Consistent:** Development facilitated under the proposed project would be subject to the requirements of the most recent iteration of CALGreen and the City's associated amendments, which includes provisions for electric vehicle charging infrastructure. For example, as of 2020, BMC Chapter 19.37 requires 20 percent of parking spaces for new multi-family residential developments to be capable of supporting electric vehicle chargers and the remaining 80 percent of parking spaces to have raceways to facilitate future electric vehicle supply equipment.
Building Energy Use	
Goal 1: Make green building business- as-usual in the new construction & remodel market.	**Consistent**: Future development facilitated by the proposed project would be required to be constructed in accordance with the latest iteration of CALGreen, the California Energy Code, and any locally adopted amendments, which include green building practices. In addition, new construction would be required to be all electric pursuant to the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. HEU Policy H-13 would also ensure energy efficiency in new buildings in order to reduce energy costs and GHGs.
Goal 4: Increase residential and commercial renewable energy use.	**Consistent**: Future development facilitated by the proposed project would be automatically enrolled in EBCE's Renewable 100 service, which provides 100 percent of electricity from eligible renewable energy sources. However, customers have the option to opt out of the Renewable 100 program and enroll in the Bright Choice Program, which would be supplied by 40 percent renewable energy.
Waste Reduction and Recycling	
Goal 1: Increase residential recycling, composting, and source reduction.	**Consistent**: In accordance with the Alameda County Waste Management Authority Mandatory Recycling Ordinance 2012-01, new multi-family housing projects with five or more units facilitated by the proposed project would be required to provide recycling service for tenants. Furthermore, residents in new multi-family housing developments would be required to separate plant debris from garbage in compliance with the Alameda County Waste Management Authority Plant Debris Landfill Ban Ordinance 2008-01. Future tenants and residents would also have the opportunity to dispose of food waste through the City's residential plant debris and food waste collection service, which would ensure compliance with SB 1383.
Goal 3: Increase recycling of construction & demolition (C&D) debris.	**Consistent**: Future development facilitated by the proposed HEU would be required to divert at least 65 percent of construction and demolition debris pursuant to the requirements of CALGreen. In addition, projects would also be subject to BMC Chapter 19.37, which requires diversion of 65 percent diversion of construction/demolition waste, and recycling and salvage of 100 percent of excavated soil and land-clearing debris, 100 percent of concrete, and 100 percent of asphalt during construction and demolition activities.

Source: City of Berkeley 2009

Summary

As described above, the proposed HEU would be consistent with 2017 Scoping Plan, Plan Bay Area 2050, City of Berkeley General Plan, and the City's CAP. Therefore, the proposed HEU would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Mitigation Measures

This impact would be less than significant. No mitigation measures would be required.

d. Cumulative Impacts

The impact of GHG emissions generated by development facilitated by the proposed HEU is inherently cumulative. GHG emissions from one project cannot, on their own, result in changes in climatic conditions; therefore, the emissions from any project must be considered in the context of their contribution to cumulative global emissions, which is the basis for determining a significant cumulative impact. This is determined through the project's consistency with applicable GHG emission thresholds and applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs. As discussed under Impact GHG-1, GHG emissions from development facilitated by the project would not exceed the BAAQMD interpolated 2031 plan-level threshold. In addition, development facilitated by the project would be consistent with the 2017 Scoping Plan, Plan Bay Area 2050, City General Plan, and the City CAP. Therefore, the project would not result in a significant cumulative impact related to GHG emissions.

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4.8 Hazards and Hazardous Materials

This section evaluates the potential impacts associated with exposure to hazards and hazardous materials from implementation of the proposed HEU. This analysis consists of a summary of the existing conditions in Berkeley, the hazard and hazardous materials regulatory framework, and a discussion of the potential hazardous impacts from development on inventory sites and throughout Berkeley. Potential hazards associated with wildland fires are discussed in Section 4.17, *Wildfire.*

4.8.1 Setting

a. Definition of Hazardous Materials and Hazardous Waste

The term "hazardous material" has different definitions for different regulatory programs. For the purpose of this EIR, the term "hazardous materials" refers to both hazardous materials and hazardous waste. The California Health and Safety Code Section 25501(n)(1) defines a hazardous material as any material that "because of its quantity, concentrations, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment." Hazardous materials include but are not limited to hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.

A material is hazardous if it exhibits one or more of the following characteristics: toxicity, ignitability, corrosivity, and reactivity. These types of hazardous materials are defined below:

- **Toxic Substances.** Toxic substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability, or even death. For example, such substances can cause disorientation, acute allergic reactions, asphyxiation, skin irritation, or other adverse health effects if human exposure exceeds certain levels (the level depends on the substances involved and is chemical-specific). Carcinogens, substances that can cause cancer, are a special class of toxic substances. Examples of toxic substances include benzene (a component of gasoline and suspected carcinogen) and methylene chloride (a common laboratory solvent and a suspected carcinogen).
- **Ignitable Substances.** Ignitable substances are hazardous because of their ability to burn. Gasoline, hexane, and natural gas are examples of ignitable substances.
- **Corrosive Materials.** Corrosive materials can cause severe burns. Corrosives include strong acids and bases such as sodium hydroxide (lye) or sulfuric acid (battery acid).
- **Reactive Materials.** Reactive materials may cause explosions or generate toxic gases. Explosives, pure sodium or potassium metals (which react violently with water), and cyanides are examples of reactive materials.

Soil and groundwater can become contaminated by hazardous material releases in a variety of ways, including permitted or illicit use and accidental or intentional disposal or spillage. Before the 1980s, most land disposal of chemicals was unregulated, resulting in numerous industrial properties and public landfills becoming dumping grounds for unwanted chemicals. The largest and most contaminated of these sites became Superfund sites, so named for their eligibility to receive cleanup money from a federal fund established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The National Priorities List (NPL) is the list of national

priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the United States Environmental Protection Agency (USEPA) in determining which sites warrant further investigation. Sites are added to the NPL following a hazard ranking system.

Numerous smaller properties have been designated as contaminated sites. Often these are gas station sites where leaking underground storage tanks (USTs) were upgraded under a federal requirement in the late 1980s. Another category of sites that may have some overlap with the types already mentioned is "brownfields" – previously used, often abandoned, sites that due to actual or suspected contamination are undeveloped or underused. Both the USEPA and California Department of Toxic Substances Control (DTSC) maintain lists of known brownfields sites. These sites are often difficult to inventory due to their owners' reluctance to publicly label their property as potentially contaminated.

b. Existing Hazardous Materials Sites

The locations where hazardous materials are used, stored, treated and/or disposed of comes to the attention of regulatory agencies through various means, including licensing and permitting, enforcement actions, and anonymous tips. To the extent possible, the locations of these businesses and operations are recorded in database lists maintained by various State, Federal, and local regulatory agencies. In addition, Federal, State, and local agencies enforce regulations applicable to hazardous waste generators and users. The Alameda County Department of Environmental Health Hazardous Materials Division. This Division created the Hazardous Materials Business Plan (HMBP) Program which is designed to prevent or minimize harm to public health and the environment from a release or threatened release of a hazardous material.

Permitted uses of hazardous materials include those facilities that use hazardous materials or handle hazardous wastes in accordance with current hazardous materials and hazardous waste regulations. The use and handling of hazardous materials from these sites is considered low risk, although there can be instances of unintentional chemical releases. In such cases, the site would be tracked in the environmental databases as an environmental case. Permitted sites without documented releases are, nevertheless, potential sources of hazardous materials in the soil and/or groundwater due to accidental spills, incidental leakage, or spillage that may have gone undetected. Some facilities are permitted for more than one hazardous material use and, therefore, could appear in more than one database.

The potential to encounter hazardous materials in soil and groundwater in Berkeley is generally based on a search of Federal, State, and local regulatory databases that identify permitted hazardous materials uses, environmental cases, and spill sites. The DTSC EnviroStor database contains information on properties in California where hazardous substances have been released or where the potential for a release exists. The California State Water Resources Control Board (SWRCB) GeoTracker database contains information on properties in California for sites that require cleanup, such as leaking underground storage tank (LUST) sites, which may impact, or have potential impacts, to water quality, with emphasis on groundwater.

According to databases of hazardous material sites maintained by the DTSC (EnviroStor) and the SWRCB (GeoTracker), Berkeley has the following types of hazardous sites that are still active or need further investigation: voluntary cleanup, corrective action, and tiered permit (DTSC 2022; SWRCB 2021). These sites are dispersed throughout Berkeley.

Existing sites that may potentially contain hazardous land uses in Berkeley include large and small-quantity generators of hazardous waste, such as dry cleaners, gas stations and other industrial uses. According to DTSC and SWRCB, there are 361 open sites containing or potentially containing hazardous materials contamination located within Berkeley, there are 60 open sites, including three sites in need of evaluation, forty-three cleanup program sites, and five active voluntary cleanup sites. Figure 4.8-1 shows the hazardous material sites within Berkeley.

Use, Transport, and Abatement of Hazardous Materials

The use of hazardous materials is typically associated with industrial land uses. Activities such as manufacturing, plating, cleaning, refining, and finishing, frequently involve chemicals that are considered hazardous when accidentally released into the environment.

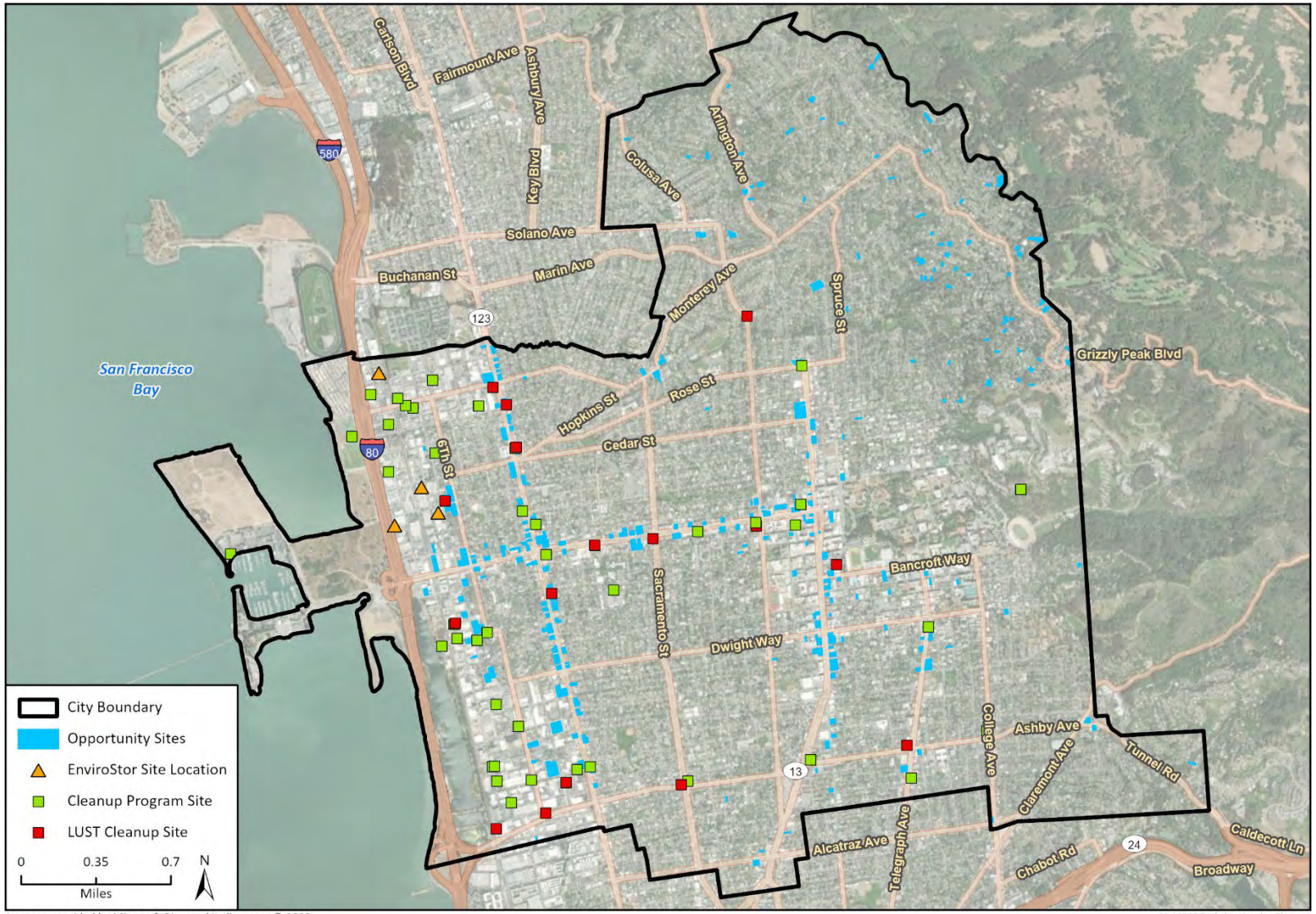
To a lesser extent, hazardous materials may also be used by various commercial enterprises, as well as residential uses. In particular, dry cleaners use cleaning agents considered to be hazardous materials. Hardware stores typically stock paints and solvents, as well as fertilizers, herbicides, and pesticides. Swimming pool supply stores stock acids, algaecides, and caustic agents. Most commercial businesses occasionally use commonly available cleaning supplies that, when used in accordance with manufacturers' recommendations, are considered safe by the State of California, but when not handled properly can be considered hazardous. Private residences also use and store commonly available cleaning materials, paints, solvents, swimming pool and spa chemicals, as well as fertilizers, herbicides, and pesticides.

If improperly handled, hazardous materials can result in public health hazards through human contact with contaminated soils or groundwater, or through airborne releases in vapors, fumes, or dust. There is also the potential for accidental or unauthorized releases of hazardous materials that would pose a public health concern. The use, transport, and disposal of hazardous materials and wastes are required to occur in accordance with Federal, State, and local regulations. In accordance with such regulations, the transport of hazardous materials and wastes can only occur with transporters who have received training and appropriate licensing. Additionally, hazardous waste transporters are required to complete and carry a hazardous waste manifest, which includes forms, reports, and procedures designed to seamlessly track hazardous waste.

c. Asbestos Containing Materials

Asbestos is a naturally occurring fibrous material that was widely used in structures built between 1945 and 1978 for its fireproofing and insulating properties. Asbestos-containing materials (ACM) were banned by USEPA between the early 1970s and 1991 under the authority of the federal Clean Air Act (CAA) and the Toxic Substances Control Act (TSCA) due to their harmful health effects. Exposure to asbestos increases risk of developing lung disease, such as lung cancer, mesothelioma, or asbestosis (USEPA 2021a). Common ACMs include vinyl flooring and associated mastic, wallboard and associate joint compound, plaster, stucco, acoustic ceiling spray, ceiling tiles, heating system components, and roofing materials. Pre-1973 commercial and industrial structures are affected by asbestos regulations if damage occurs, or if remodeling, renovation, or demolition activities disturb ACMs.

Figure 4.8-1 Known Hazardous Material Sites in Berkeley



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Additional data provided by the City of Berkeley, 2022; GeoTracker, 2022; EnviroStor, 2021

21-10847 Berkeley Housing Element
Fig X Hazardous Material Sites

d. Lead and Lead-Based Paint

Lead is a naturally occurring metallic element. Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Children are particularly susceptible to potential lead-related health problems because it is easily absorbed into developing systems and organs. Lead can affect almost every organ and system in the body. In children, lead can cause behavior and learning problems, lower IQ and hyperactivity, hearing problems, and anemia. In adults, lead can cause cardiovascular effects, decreased kidney function, and reproductive problems. In addition, lead can result in serious effects to the developing fetus and infant for pregnant women (USEPA 2021b). Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soils surrounding buildings and structures that are painted with lead-based paint (LBP). LBP was primarily used during the same time period as ACMs. Pre-1978 commercial and industrial structures are affected by LBP regulations if the paint is in a deteriorated condition or if remodeling, renovation, or demolition activities disturb LBP surfaces.

e. Schools

School locations require consideration because children are particularly sensitive to hazardous materials exposure. Additional protective regulations apply to projects that could use or disturb potentially hazardous products near or at schools. The California Public Resources Code requires projects that would be located within a quarter mile of a school and might reasonably be expected to emit or handle hazardous materials to consult with the school district regarding potential hazards. There are 21 schools located within Berkeley. As shown in Figure 4.8-2, 122 sites that were identified as Housing Opportunity Sites in the Housing Element are within a 0.25 mile radius of existing schools and childcare facilities.

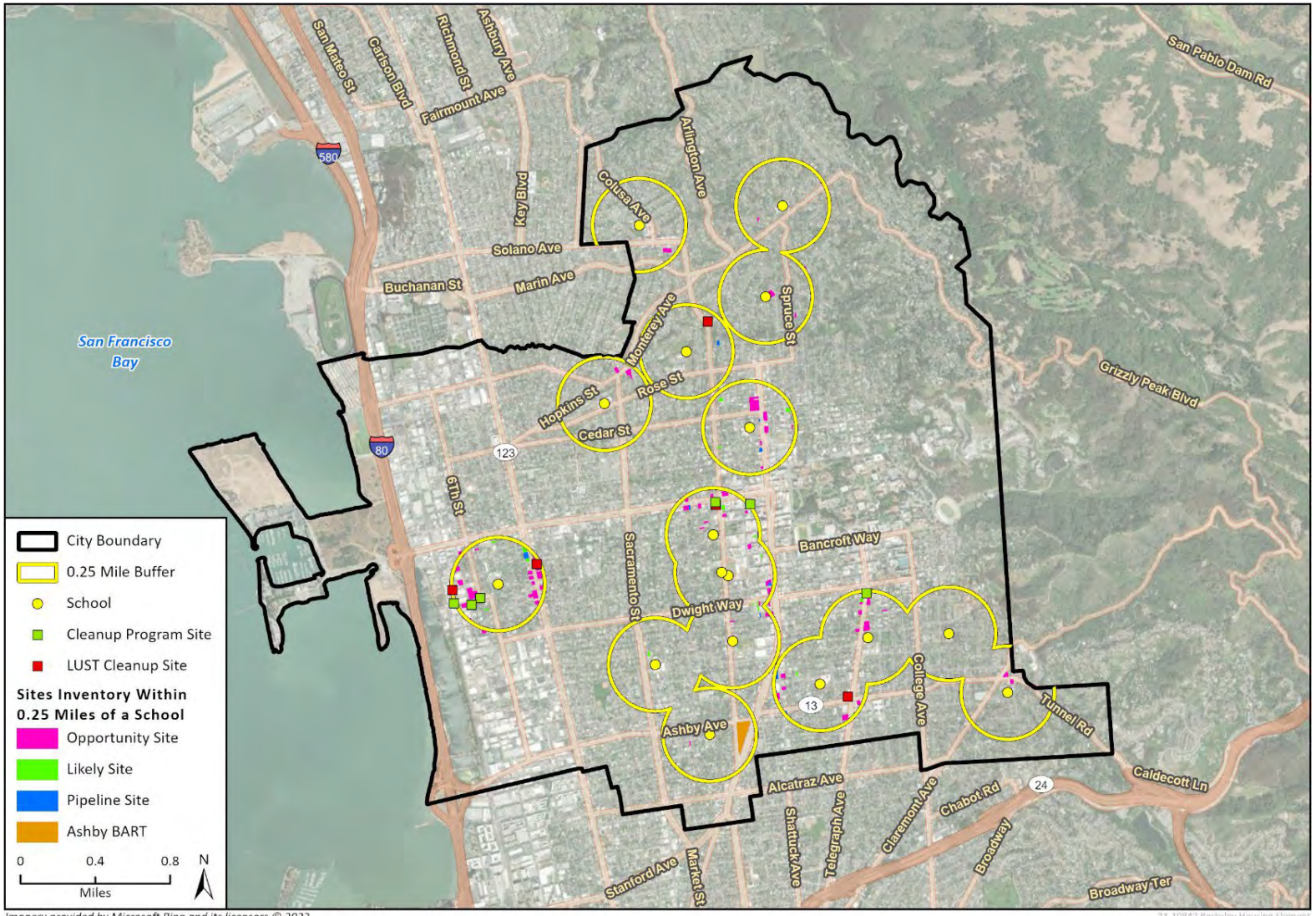
4.8.2 Regulatory Setting

Hazardous materials and waste can pose a potential hazard to human health and the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Federal, State, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste are in place to prevent unwanted consequences. These regulatory programs are designed to reduce the risk that hazardous substances may pose to people and businesses under normal daily circumstances and as a result emergencies and disasters.

a. Federal Regulations

Primary Federal agencies with responsibility for hazardous materials management include the USEPA, U.S. Department of Labor's Occupational Safety and Health Administration (OSHA), and the U.S. Department of Transportation (USDOT). The major laws enforced by these agencies are described below.

Figure 4.8-2 Hazardous Material Sites within 0.25 mile of a School



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Additional data provided by the City of Berkeley, 2022; GeoTracker, 2022; California School Campus Database (CSCD), 2021

21-10847 Berkeley Housing Element
Fig X Hazardous Material Sites within 0.25 Mile of a School

Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA)

These acts established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. Among other things, the use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Act.

Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations

Governed by the U.S. Housing and Urban Development, regulations for LBP are contained in the Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations (CFR) 33, which requires sellers and lessors to disclose known LBP and LBP hazards to perspective purchasers and lessees. Additionally, all LBP abatement activities must follow California and federal occupational safety and health administrations (California Occupational Safety and Health Administration [Cal/OSHA] and federal Occupational Safety and Health Administration [OSHA], respectively and with the State of California Department of Health Services requirements. Only LBP trained and certified abatement personnel can perform abatement activities. All lead LBP removed from structures must be hauled and disposed of by a transportation company licensed to transport this type of material at a landfill or receiving facility licensed to accept the waste.

U.S. Environmental Protection Agency

The USEPA is the agency primarily responsible for enforcement and implementation of Federal laws and regulations pertaining to hazardous materials. Applicable Federal regulations pertaining to hazardous materials are contained in the CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. The management of hazardous materials is governed by the following laws:

1. Resource Conservation and Recovery Act of 1976) (42 USC 6901 et seq.)
2. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also called the Superfund Act) (42 USC 9601 et seq.)
3. Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136 et. Seq.)
4. Superfund Amendments and Reauthorization Act of 1986 (Public Law 99 499)

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. USEPA provides oversight and supervision for Federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

U.S. Department of Transportation Regulations

USDOT prescribes strict regulations for the safe transportation of hazardous materials, including requirements for hazardous waste containers and licensed haulers that transport hazardous waste on public roads. The Secretary of the USDOT receives the authority to regulate the transportation of hazardous materials from the Hazardous Materials Transportation Act (HMTA), as amended and codified in in 49 U.S. Code (U.S.C.) Section 5101 et seq. The Secretary is authorized to issue regulations to implement the requirements of 49 U.S.C. The Pipeline and Hazardous Materials

Safety Administration (PHMSA), formerly the Research and Special Provisions Administration, was delegated the responsibility to write the hazardous materials regulations, which are contained in Title 49 of the CFR Parts 100-180. Title 49 of the CFR, which contains the regulations set forth by the HMTA, specifies requirements and regulations with respect to the transport of hazardous materials. It requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Under the HMTA, the Secretary "may authorize any officer, employee, or agent to enter upon, inspect, and examine, at reasonable times and in a reasonable manner, the records and properties of persons to the extent such records and properties relate to: (1) the manufacture, fabrication, marking, maintenance, reconditioning, repair, testing, or distribution of packages or containers for use by any 'person' in the transportation of hazardous materials in commerce; or (2) the transportation or shipment by any 'person' of hazardous materials in commerce.

Occupational Safety and Health Act of 1970

The U.S. Department of Labor's OSHA was created to assure safe and healthful working conditions by setting and enforcing standards and by providing training, outreach, education, and assistance. OSHA provides standards for general industry and construction industry on hazardous waste operations and emergency response. The Occupational Safety and Health Act, which is implemented by OSHA, contains provisions with respect to hazardous materials handling. Federal Occupational Safety and Health Act requirements, as set forth in Title 29 of the CFR Section 1910, et. seq., are designed to promote worker safety, worker training, and a worker's right-to-know. OSHA has delegated the authority to administer OSHA regulations to the State of California.

Title 49 of the CFR, which contains the regulations set forth by the Hazardous Materials Transportation Act of 1975, specifies additional requirements and regulations with respect to the transport of hazardous materials. Title 49 of the CFR requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Drivers are also required to be trained in function and commodity-specific requirements.

Other Hazardous Materials Regulations

In addition to the USDOT regulations for the safe transportation of hazardous materials, there are other applicable federal laws that also address hazardous materials:

- Community Environmental Response Facilitation Act of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Atomic Energy Act
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

b. State Regulations

Department of Toxic Substances Control

As a department of the California Environmental Protection Agency, the DTSC is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to

reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code.

The DTSC also administers the California Hazardous Waste Control Law (HWCL) to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both state and federal laws apply in California. The HWCL lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the State Water Resources Control Board, and CalRecycle to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Secretary for Environmental Protection consolidates the information submitted by these agencies and distributes it to each city and county where sites on the lists are located. Before the lead agency accepts an application for any development project as complete, the applicant must consult these lists to determine if the site at issue is included.

If any soil is excavated from a site containing hazardous materials, it would be considered a hazardous waste if it exceeded specific criteria in Title 22 of the California Code of Regulations. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

California Occupational Safety and Health Act – California Labor Code, Section 6300 et seq.

The California Occupational Safety and Health Act of 1973 addresses California employee working conditions, enables the enforcement of workplace standards, and provides for advancements in the field of occupational health and safety. The Act also created CalOSHA, the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. CalOSHA's standards are generally more stringent than federal regulations. Under the former, the employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure. The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. At sites known or suspected to be contaminated by hazardous materials, workers must have training in hazardous materials operations and a Site Health and Safety Plan must be prepared, which establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

California Code of Regulations, Title 22, Hazardous Waste Management

At the State level, under Title 22, Division 4.5 of the CCR, DTSC regulates hazardous waste in California primarily under the authority of the Federal RCRA and the California Health and Safety Code (HSC). The Hazardous Waste Control Law (HWCL), under CCR 22, Chapter 30, establishes regulations that are similar to RCRA but more stringent in their application and empowers the DTSC to administer the State's hazardous waste program and implement the federal program in

California. The DTSC is responsible for permitting, inspecting, ensuring compliance, and imposing corrective action programs to ensure that entities that generate, store, transport, treat, or dispose of potentially hazardous materials and waste comply with federal and State laws. The DTSC defines hazardous waste as waste with a chemical composition or other properties that make it capable of causing illness, death, or some other harm to humans and other life forms when mismanaged or released into the environment. The DTSC shares responsibility for enforcement and implementation of hazardous waste control laws with the SWRCB and, at the local level, the LARWQCB, and city and county governments.

California Code of Regulations Title 23, Chapter 15 Discharges of Hazardous Waste to Land Section 2511(b)

CCR 23, Chapter 15 Discharges of Hazardous Waste to Land Section 2511(b) pertains to water quality aspects of waste discharge to land. The regulation establishes waste and site classifications as well as waste management requirements for waste treatment, storage, or disposal in landfills, surface impoundments, waste piles, and land treatment facilities. Requirements are minimum standards for proper management of each waste category, which allows regional water boards to impose more stringent requirements to accommodate regional and site-specific conditions. In addition, the requirements of CCR 23, Chapter 15 applies to cleanup and abatement actions for unregulated hazardous waste discharges to land (e.g., spills).

California Accidental Release Prevention (Cal ARP) Program

The purpose of the Cal ARP program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. The Cal ARP requires any business that handles more than threshold quantities of an extremely hazardous substance per California regulations to develop a Risk Management Plan (RMP). The RMP is implemented by the business to prevent or mitigate releases of regulated substances that could have off-site consequences through hazard identification, planning, source reduction, maintenance, training, and engineering controls. The RMP contains the following elements:

- Safety Information
- A Hazard Review
- Operating Procedures
- Training Requirements
- Compliance Audits
- Incident Investigation Procedures

The RMP must also consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term health care facilities, and child day care facilities. The RMP must also consider external events such as seismic activity. The CUPAs determine the level of detail in the RMPs, review the RMPs, conduct facility inspections, and provide public access to most of the information. There are three program levels identified by Cal ARP and they are dependent on the type of business, potential impact, and accident history, among other factors.

If an accidental release occurs the owner/operator of a facility shall ensure that response actions have been coordinated with local emergency planning and response agencies.

California Fire and Building Code

The 2019 Fire and Building Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare for the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of this code apply to the construction, alteration, movement enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

c. Local Regulations

City of Berkeley General Plan

The Berkeley General Plan Disaster Preparedness and Safety Element and Environmental Management Element includes goals and policies to reduce the risk of death, injuries, and property damage in the city. Relevant goals and policies are listed below:

Policy S-1 Response Planning. Ensure that the City's emergency response plans are current and incorporate the latest information on hazards, vulnerability, and resources.

Policy S-10 Mitigation of Potentially Hazardous Buildings. Pursue all feasible methods, programs, and financing to mitigate potentially hazardous buildings.

Policy S-12 Utility and Transportation Systems. Improve the disaster-resistance of utility and transportation systems to increase public safety and to minimize damage and service disruption following a disaster.

Policy S-13 Hazards Identification. Identify, avoid, and minimize natural and human-caused hazards in the development of property and the regulation of land use.

Policy S-14 Land Use Regulation. Require appropriate mitigation in new development, in redevelopment/reuse, or in other applications.

Policy S-15 Construction Standards. Maintain construction standards that minimize risks to human lives and property from environmental and human-caused hazards for both new and existing buildings.

Policy S-21 Fire Preventative Design Standards. Develop and enforce construction and design standards that ensure new structures incorporate appropriate fire prevention features and meet current fire safety standards.

Policy S-22 Fire Fighting Infrastructure. Reduce fire hazard risks in existing developed areas.

Policy S-23 Property Maintenance. Reduce fire hazard risks in existing developed areas by ensuring that private property is maintained to minimize vulnerability to fire hazards.

Policy S-24 Mutual Aid. Continue to fulfill legal obligations and support mutual aid efforts to coordinate fire suppression in Alameda and Contra Costa Counties, Oakland, the East Bay Regional Park District, and the State of California to prevent and suppress major wildland and urban fire destruction.

Policy EM-8 Building Reuse and Construction Waste: Encourage rehabilitation and reuse of buildings whenever appropriate and feasible in order to reduce waste, conserve resources and energy, and reduce construction costs.

Policy EM-10 Materials Recovery and Remanufacturing: Support and encourage serial materials recovery and remanufacturing industries.

Policy EM-11 Biodegradable Materials and Green Chemistry: Support efforts to phase out the use of long-lived synthetic compounds, such as pesticides and vehicle anti-freeze, and certain naturally occurring substances which do not biodegrade. Encourage efforts to change manufacturing processes to use biodegradable materials, recycle manufactured products, reuse byproducts, and use "green" products.

Policy EM-12 Education: Work with other State and local agencies to educate business owners and residents regarding safe use, recycling, and disposal of toxic materials; reducing hazardous household wastes; and substitutes for these substances.

Policy EM-13 Hazardous Materials Disclosure: Continue to require the disclosure of hazardous materials usage and encourage businesses using such materials to prepare and implement a plan to reduce the use of hazardous materials and the generation of hazardous wastes.

Policy EM-14 Hazardous Material Regulation: Control and regulate the use, storage and transportation of toxic, explosive, and other hazardous and extremely hazardous material to prevent unauthorized and accidental discharges.

Policy EM-15 Environmental Investigation: When reviewing applications for new development in areas historically used for industrial uses, require environmental investigation as necessary to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses would not have the potential to affect the environment or the health and safety of future property owners, users, or construction workers.

Policy EM-16 Risk Reduction: Work with owners of vulnerable structures with significant quantities of hazardous material to mitigate potential risks.

Policy EM-17 Warning Systems: Establish a way to warn residents of a release of toxic material or other health hazard, such as sirens and/or radio broadcasts.

Berkeley Local Hazard Mitigation Plan

Berkeley is exposed to several natural and human-caused hazards that vary in their intensity and impacts on the city. The LHMP addresses earthquake, wildland-urban interface, fire, flood, landslide, tsunami, and also hazardous materials releases, climate change, extreme heat events, and terrorism. Hazardous materials release is described as a cascading impact of a natural hazard.

The City of Berkeley's 2019 LHMP serves three main functions:

- The 2019 LHMP documents the City's current understanding of the hazards present in Berkeley, along with their vulnerabilities to each hazard – the ways that the hazard could impact buildings, infrastructure, community, and environment.
- The LHMP presents Berkeley City government's Mitigation Strategy for the coming five years. The Mitigation Strategy reflects a wide variety of both funded and unfunded actions, each of which could reduce the Berkeley's hazard vulnerabilities.

- By fulfilling requirements of the Disaster Mitigation Act of 2000, the 2019 LHMP ensures that Berkeley will remain eligible to apply for mitigation grants before disasters, and to receive federal mitigation funding and additional State recovery funding after disasters.

City of Berkeley Municipal Code

Title 15 of the Berkeley Municipal Code (BMC) includes the Berkeley Hazardous Materials Code. The intent of this title to provide regulations and standards for certain operations, enterprises or activities which, if not regulated, may adversely affect the public health and safety.

Berkeley's Toxics Management Division (TMD) is a Certified Unified Program Agency and implements Chapter 6.11 of Div. 20 of Cal Health & State code and Title 15 of the BMC. The TMD has created Berkeley's Hazardous Materials Business Plan which is meant to satisfy federal and state Community laws. It provides detailed information for use by emergency responders. The Hazardous Materials Business Plan also assists residents in complying with the State requirements and provides emergency responders adequate information about the type, quantity of, storage location – and management practices regarding – hazardous materials that are stored at different facilities within Berkeley. A Hazardous Material Business Plan must be filed if the following occurs:

- At any time during the year hazardous materials or hazardous wastes are handled, stored or generated and are equal to or greater than
  - 55 gallons for liquids
  - 500 pounds for solids
  - 200 cubic feet (at normal temperature and pressure) for compressed gases
- A facility handles any amount of perchlorate material, pursuant to California Health & Safety Code (CHSC) Section 25504.1.
- A facility has any quantity of radioactive materials pursuant to Berkeley Municipal Code Title 15. Report the information on the Hazardous Materials Inventory.
- A facility has any quantity of etiologic agents, pursuant to Berkeley Municipal Code Title 15. You must report the agent name, quantity and storage location to the TMD
- A facility exceeds reportable thresholds for Extremely Hazardous Substances (EHSs), as defined in 40 CFR, Part 355, Appendix A
- A facility stores or handles manufactured nanoscale materials, pursuant to Berkeley Municipal Code Title 15. The City's TMD must be contacted to determine if documentation is required.

4.8.3 Impact Analysis

a. Methodology and Thresholds of Significance

The following thresholds are based on *CEQA Guidelines* Appendix G. For purposes of this EIR, impacts related to hazards and hazardous materials are considered significant if implementation of the proposed project would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area;
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

As described at the beginning of this section, an analysis of the risk of exposure to wildland fires resulting from implementation of the proposed HEU is contained in Section 4.17, *Wildfire*. Therefore, threshold 7 is addressed in Section 4.17, *Wildfire*.

b. Project Impacts or Mitigation Measures

Threshold 1:	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
Threshold 2:	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact HAZ-1 IMPLEMENTATION OF THE PROPOSED HEU WOULD FACILITATE NEW RESIDENTIAL DEVELOPMENT IN BERKELEY. PROPOSED NEW RESIDENTIAL USES WOULD NOT INVOLVE THE ROUTINE TRANSPORTATION, USE, OR DISPOSAL OF HAZARDOUS MATERIALS. HOWEVER, CONSTRUCTION OF NEW RESIDENCES COULD RESULT IN AN INCREASE IN THE OVERALL ROUTINE, TRANSPORT, USE AND DISPOSAL OF HAZARDOUS MATERIALS IN BERKELEY FOR CONSTRUCTION ACTIVITIES. NONETHELESS, REQUIRED COMPLIANCE WITH APPLICABLE REGULATIONS RELATED TO HAZARDOUS MATERIALS AND COMPLIANCE WITH GENERAL PLAN POLICIES WOULD MINIMIZE THE RISK OF RELEASES AND EXPOSURE TO THESE MATERIALS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Although no specific development projects are proposed as part of the HEU, development facilitated by the proposed HEU could accommodate construction of an estimated 19,098 new residential units in Berkeley.

Construction Activities

The following discussion addresses the use of hazardous materials during construction activities; the potential for release of existing contaminated materials during construction; and the potential for release of lead-based paint or asbestos-containing materials (ACM) during demolition or construction.

Use of Hazardous Materials During Construction

Construction associated with future development in Berkeley may include the temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, or

solvents. If spilled, these substances could pose a risk to the environment and to human health. However, the transport, storage, use, or disposal of hazardous materials is subject to various federal, state, and local regulations designed to reduce risks associated with hazardous materials, including potential risks associated with upset or accident conditions. Hazardous materials would be required to be transported under U.S. Department of Transportation (DOT) regulations (U.S. DOT Hazardous Materials Transport Act, 49 Code of Federal Regulations), which stipulate the types of containers, labeling, and other restrictions to be used in the movement of such material on interstate highways. DTSC regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California. It does this primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California H&SC Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, California Code of Regulations, Divisions 4 and 4.5). DTSC also oversees permitting, inspection, compliance, and corrective action programs to ensure that hazardous waste managers follow federal and State requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. Compliance with existing regulations would reduce the risk of potential release of hazardous materials during construction.

Release of Contaminated Materials During Construction

Portions of Berkeley are located in Environmental Management Areas (EMA) as identified by the City's TMD that identifies areas known or suspected to have groundwater contamination (City of Berkeley 2010). Potential health and environmental concerns related to contaminated groundwater and soil may occur during excavation and dewatering for new construction. In addition, grading or excavation on sites with existing contamination may also result in the transport and disposal of hazardous materials if they are unearthed and removed from the site. However, future development under the project would be subject to regulatory programs such as those overseen by the RWQCB and the DTSC. These agencies require applicants for development of potentially contaminated properties to perform investigation and cleanup if the properties are contaminated with hazardous substances. In addition, development in the EMA requires project review by the TMD prior to issuance of permits. Finally, all projects requiring discretionary review (including all new construction of dwelling units), would be subject to the following City of Berkeley Standard Condition of Approval:

> **Toxics.** The applicant shall contact the Toxics Management Division (TMD) to determine which of the following documents are required and timing for their submittal:
>
> **A. Environmental Site Assessments**
>
> 1. Phase I & Phase II Environmental Site Assessments (latest ASTM 1527-13). A recent Phase I ESA (less than 6 months old*) shall be submitted to TMD for developments for:
>   - All new commercial, industrial and mixed-use developments and all large improvement projects.
>   - All new residential buildings with 5 or more dwelling units located in the Environmental Management Area (or EMA).
>   - EMA is available online at:
>
>   http://www.cityofberkeley.info/uploadedFiles/IT/Level_3_-_General/ema.pdf

2. Phase II ESA is required to evaluate Recognized Environmental Conditions (REC) identified in the Phase I or other RECs identified by TMD staff. The TMD may require a third party toxicologist to review human or ecological health risks that may be identified. The applicant may apply to the appropriate state, regional or county cleanup agency to evaluate the risks.
3. If the Phase I is over 6 months old, it will require a new site reconnaissance and interviews. If the facility was subject to regulation under Title 15 of the Berkeley Municipal Code since the last Phase I was conducted, a new records review must be performed.

B. Soil and Groundwater Management Plan

1. A Soil and Groundwater Management Plan (SGMP) shall be submitted to TMD for all non-residential projects, and residential or mixed-use projects with five or more dwelling units, that: (1) are in the Environmental Management Area (EMA) and (2) propose any excavations deeper than 5 feet below grade. The SGMP shall be site specific and identify procedures for soil and groundwater management including identification of pollutants and disposal methods. The SGMP will identify permits required and comply with all applicable local, state and regional requirements.
2. The SGMP shall require notification to TMD of any hazardous materials found in soils and groundwater during development. The SGMP will provide guidance on managing odors during excavation. The SGMP will provide the name and phone number of the individual responsible for implementing the SGMP and post the name and phone number for the person responding to community questions and complaints.
3. TMD may impose additional conditions as deemed necessary. All requirements of the approved SGMP shall be deemed conditions of approval of this Use Permit.

C. Building Materials Survey

1. Prior to approving any permit for partial or complete demolition and renovation activities involving the removal of 20 square or lineal feet of interior or exterior walls, a building materials survey shall be conducted by a qualified professional. The survey shall include, but not be limited to, identification of any lead-based paint, asbestos, polychlorinated biphenyl (PBC) containing equipment, hydraulic fluids in elevators or lifts, refrigeration systems, treated wood and mercury containing devices (including fluorescent light bulbs and mercury switches). The Survey shall include plans on hazardous waste or hazardous materials removal, reuse or disposal procedures to be implemented that fully comply with state hazardous waste generator requirements (22 California Code of Regulations 66260 et seq). The Survey becomes a condition of any building or demolition permit for the project. Documentation evidencing disposal of hazardous waste in compliance with the survey shall be submitted to TMD within 30 days of the completion of the demolition. If asbestos is identified, Bay Area Air Quality Management District Regulation 11-2-401.3 a notification must be made and the J number must be made available to the City of Berkeley Permit Service Center.

D. Hazardous Materials Business Plan

1. A Hazardous Materials Business Plan (HMBP) in compliance with BMC Section 15.12.040 shall be submitted electronically at http://cers.calepa.ca.gov/ within 30 days if on-site hazardous materials exceed BMC 15.20.040. HMBP requirement can be found at http://ci.berkeley.ca.us/hmr/

The removal, transport, storage, use, or disposal of hazardous materials would be subject to federal, state, and local regulations pertaining to the transport, use, storage, and disposal of hazardous materials, including those outlined in the Standard condition of approval above. Compliance with these requirements would assure that risks associated with hazardous materials would be minimized. Impacts would be less than significant.

Asbestos and Lead

Berkeley contains numerous residential and commercial buildings that, due to their age, may contain asbestos and/or lead-based paint. Structures built before the 1970s typically contained asbestos containing materials (ACM). Demolition or redevelopment of these structures could result in health hazard impacts to workers if not remediated prior to construction activities. However, future projects in Berkeley would be subject to the City of Berkeley Standard Conditions of Approval above, which includes a Building Materials Survey prior to approval of permits for complete or partial demolition. The condition of approval requires that a building materials survey be conducted by a qualified professional. The survey must include plans on hazardous waste or hazardous materials removal, reuse or disposal procedures to be implemented that fully comply with state hazardous waste generator requirements. Future projects in the Berkeley would also be required to adhere to BAAQMD Regulation 11, Rule 2, which governs the proper handling and disposal of ACM for demolition, renovation, and manufacturing activities in the Bay Area, and California Occupational Safety and Health Administration (CalOSHA) regulations regarding lead-based materials. The California Code of Regulations, §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials, such that exposure levels do not exceed CalOSHA standards. With adherence to Standard Conditions of Approval, BAAQMD, and CalOSHA policies regarding ACM and lead-based paint, impacts at the program level would be less than significant.

Operation

Residential uses do not typically use hazardous materials other than small amounts for cleaning and landscaping. These materials would not be different from household chemicals and solvents already in wide use throughout the Berkeley. Residents and workers are anticipated to use limited quantities of products routinely for periodic cleaning, repair, and maintenance or for landscape maintenance/pest control that could contain hazardous materials. Those using such products would be required to comply with all applicable regulations regarding the disposal of household waste. Therefore, operation of new residential uses pose little risk of exposing the public to hazardous materials.

The proposed project is anticipated and intended to expand housing capacity; the proposed HUE would not facilitate the establishment of new industrial, warehouse, auto-service, or manufacturing uses. Therefore, the proposed project would not introduce new manufacturing, warehouse, or industrial uses that would sell, use, store, transport, or release substantial quantities of hazardous materials

Hazardous Materials Transportation

New housing units would be located in areas near major transportation corridors and existing residential and commercial development. Hazardous materials may be transported into and throughout Berkeley on US-13, I-580, University Avenue, Cedar Street, Shattuck Avenue, Telegraph Avenue, Sixth Street, San Pablo Avenue, and collector and local streets. Accidents on these roadways could result in the release of hazardous materials. Development facilitated by the

proposed HEU would increase residential density near major arterial streets. Industrial and commercial uses on these arterials may require the routine transport of hazardous materials for their business operations. Therefore, development facilitated by the proposed HEU would increase the number of residents near transportation corridors where hazardous materials may be routinely transported. The expected development of housing in Berkeley would increase the number of people in Berkeley that could be exposed to a potential accidental release of hazardous materials.

However, the U.S. Department of Transportation's Office of Hazardous Materials Safety regulates the transportation of hazardous materials, as described in Title 49 of the CFR, and implemented by Title 13 of the CCR. The U.S. Documentation of compliance with hazardous materials regulations codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, is required for all hazardous waste transport. In addition, individual contractors and property owners are required to comply with all applicable federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to, Title 49 of the CFR. Adherence to applicable regulations and laws would reduce the potential hazards associated with the transport of hazardous materials, including accidental release of hazardous materials during transport.

In addition to mandatory adherence to laws and regulations, Policy EM-14 Hazardous Material Regulation of the 2003 General Plan controls and regulates the use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous material to prevent unauthorized and accidental discharges. Following these laws and regulations reduces the risk of accidental release of hazardous materials in transport. Impacts to hazardous materials transport would be less than significant.

Hazardous Materials Use, Storage, and Disposal

The proposed HEU would facilitate residential development within areas of Berkeley where hazardous materials could be stored or used, such as near mixed-use or industrial areas. Facilitating housing in areas near existing commercial and industrial development would add additional residents where hazardous materials are used or transported or where there has been past use of hazardous materials. This would mean that the potential of residents being exposed to hazardous materials may increase due to the following:

- Potential soil/groundwater contamination due to past practices
- The proximity of new residential development to ongoing activity involving the use of hazardous materials.

The introduction of residential components in these areas could potentially increase exposure to hazardous materials. Although the overall quantity of hazardous materials used and requiring disposal in Berkeley could incrementally increase as a result of implementation of the proposed HEU, all new development that uses hazardous materials would be required to comply with the regulations, standards, and guidelines established by the USEPA, the State of California, and City of Berkeley related to storage, use, and disposal of hazardous materials.

As described above in the *Regulatory Setting* discussion, CAL ARP, the Hazardous Materials Business Plan created by Berkeley's TMD and the LHMP established by Alameda County and the City of Berkeley aim to minimize community exposure to hazardous and potentially hazardous materials by avoiding toxic cleaning and building materials and products in civic facilities and services; providing information, opportunities, and incentives to the community for proper disposal of toxic materials; encouraging non-toxic materials and products in homes and businesses as an alternative to

products containing potentially hazardous materials; and providing procedures to follow in the event of a spill. Compliance with these policies would further prepare the City, reduce the risk of spills, and protect the public in the event of an accidental spill or exposure.

In addition to mandatory adherence to laws and regulations, compliance with the Disaster Preparedness and Safety Element and the Environmental Management Element policies from the General Plan, including Policy S-15 (Construction Standards), Policy EM-12 (Education), Policy EM-13 (Hazardous Materials Disclosure), and Policy EM-15 (Environmental Investigation), would reduce the potential for accidental exposure and hazards associated with the use and disposal of hazardous materials. The HEU includes policies and programs to mitigate environmental constraints and comply with the Disaster Preparedness and Safety Element. These policies and programs include the following:

- HEU Policy -10 Lead-Poisoning Prevention
- HEU Policy-12 Home Modification for Accessibility and Safety
- HEU Policy-15 Seismic Safety and Preparedness Programs
- HEU Policy-18 Building Emissions Saving Ordinance (BESO)

The City has also included in their HEU annual property inspections, more restrictive local building code amendments, vegetation management and defensible space, improvement of access and evacuation routes, and infrastructure improvements.

Summary

Compliance with existing applicable regulations and programs would minimize risks from routine transport, use, and disposal of hazardous materials, including potential hazards from the accidental release of hazardous materials. Oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these materials. Therefore, impacts from a hazard to the public or the environmental through routine transport, use or disposal of hazardous materials, or from accidental release or exposure to these materials would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 3:	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Impact HAZ-2 IMPLEMENTATION OF THE PROPOSED HEU MAY RESULT IN HAZARDOUS EMISSIONS OR HANDLING OF HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN 0.25 MILE OF AN EXISTING OR PROPOSED SCHOOL. HOWEVER, COMPLIANCE WITH EXISTING REGULATORY REQUIREMENTS WOULD MINIMIZE RISKS TO SCHOOLS AND STUDENTS, RESULTING IN A LESS THAN SIGNIFICANT IMPACT.

The proposed project would facilitate residential and mixed-use development in Berkeley. There are 122 inventory sites within a 0.25-mile radius of Berkeley's existing schools and childcare facilities, as shown in Figure 4.8-2. Additional sites in the Southside and in the middle housing rezoning districts may be located within 0.25 mile of a school.

As described above under Impact HAZ-1, the proposed HEU would not involve new industrial or manufacturing uses. Hazardous materials and waste generated from reasonably foreseeable development accommodated under the proposed HEU would not pose a health risk to nearby schools or childcare facilities as a majority of these developments would be residential, which is a use that does not typically handle or emit hazardous materials or substances. They may involve use and storage of some materials considered hazardous, though primarily these would be limited to solvents, paints, chemicals used for cleaning and building maintenance, and landscaping supplies. These materials would not be different from household chemicals and solvents already in general and wide use throughout the Berkeley. Uses in the Berkeley that sell, use, store, generate, or release hazardous materials must adhere to applicable federal, State, and local safety standards, ordinances, and regulations.

Additionally, if future housing projects under the HEU include mixed-use commercial, businesses developed as part of these developments that handle or have on-site storage of hazardous materials would be required to comply with the provisions of the California Fire Code and the HHMD CUPA requirements set forth in the California Health and Safety Code, Division 20, Chapter 6.95, Articles 1 and 2. As described in the *Regulatory Setting* above, all businesses that handle more than a specified amount of hazardous materials are required to submit a hazardous materials business plan to a regulating agency, in this case, the HHMD. Therefore, reasonably foreseeable development accommodated under the proposed HEU would not result in use of new hazardous material use within a quarter mile radius of existing schools and childcare facilities in Berkeley, and impacts would be less than significant.

As mentioned above under Impact HAZ-1, construction associated with future development under the HEU may include the temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, or solvents. Specifically, demolition of existing buildings and grading and excavation activities associated with new construction within Berkeley may result in emissions and transport of hazardous materials within one-quarter mile of existing schools. However, adherence to applicable requirements, including DOT and DTSC regulations and the City's Standard Conditions of Approval regarding emission and transport of hazardous materials would ensure impacts at the program level would be less than significant.

Following the policies laid out by the Hazardous Materials Business Plan and the LHMP laid out by Berkeley and Alameda County would minimize risks associated with the accidental release of hazardous materials during operation of the residential and commercial spaces. Additionally, compliance with all other appropriate federal, State, and local agencies, such as CCR and CalOSHA, would minimize the risk of the public's potential exposure to these materials. Therefore, impacts to the public or environment through the accidental release or exposure to hazardous materials as a result of project implementation would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 4:	Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact HAZ-3 IMPLEMENTATION OF THE PROPOSED HEU WOULD ACCOMMODATE DEVELOPMENT ON OR NEAR HAZARDOUS MATERIALS SITES. HOWEVER, COMPLIANCE WITH APPLICABLE REGULATIONS AND THE CITY'S STANDARD CONDITIONS OF APPROVAL REQUIRING SITE CHARACTERIZATION AND CLEANUP WOULD MINIMIZE HAZARDS FROM DEVELOPMENT ON CONTAMINATED SITES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

As noted in the Setting above, there are 361 documented open sites containing or potentially containing hazardous materials contamination in underlying soil and/or groundwater in Berkeley. Further, contamination may be present on other sites not yet documented or listed on a regulatory database such as sites that are currently or have formerly used by gas stations, dry cleaners, and industrial uses. Development facilitated by the proposed HEU may involve ground disturbance on sites where soil, soil vapor, or groundwater contamination is present such that hazardous materials are released. This could expose construction workforce and or nearby occupants to hazardous materials. In particular, inventory sites in the western portion of the City may be exposed to hazardous materials from Cleanup Program sites off San Pablo Avenue and west of Sixth street as well as along University Avenue, among other locations.

Development near these locations would be preceded by investigation, remediation, and cleanup under the supervision of the City's TMD, Regional Water Quality Control Board or DTSC before construction activities could begin. Therefore, the sites would be remediated in accordance with State and regional standards for residential and mixed uses.

It is also possible that underground storage tanks (USTs) in use prior to permitting and record keeping requirements may be present in Berkeley. If an unidentified UST were uncovered or disturbed during construction activities, it would be removed under permit; if such removal would potentially undermine the structural stability of existing structures, foundations, or impact existing utilities, the tank might be closed in place without removal. Tank removal activities could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing the tank according to existing standards contained in Division 20, Chapters 6.7 and 6.75 (Underground Storage Tank Program) of the California Health and Safety Code as enforced and monitored by the HHMD. Therefore, potential impacts associated with USTs would be less than significant upon required compliance with applicable regulations.

The extent to which groundwater may be affected by an underground tank, if at all, depends on the type of contaminant, the amount released, the duration of the release, and depth to groundwater. If groundwater contamination is identified, characterization of the vertical and lateral extent of the contamination and remediation activities would be required by RWQCB prior to the commencement of any new construction activities that would disturb the subsurface. If groundwater contamination is identified, characterization of the vertical and lateral extent of the contamination and remediation activities would be required by the by the RWQCB prior to the commencement of any new construction activities that would disturb the subsurface. If contamination exceeds regulatory action levels, the developer would be required to undertake remediation procedures prior to grading and development under the supervision of the RWQCB, depending upon the nature of any identified contamination.

As discussed under Impact HAZ-1, future development would be subject to the City's Standard Conditions of Approval and the City's TMD would evaluate projects to determine if Phase I/Phase II Environmental Site Assessments are required to characterize potential contamination and develop a soil and groundwater management plan to address hazards during construction and operation. Compliance with existing State and local regulations as well as the City's Standard Conditions of Approval listed under Impact HAZ-1 would reduce impacts to a less than significant level.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 5:	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Impact HAZ-4 THERE ARE NO AIRPORTS WITHIN TWO MILES OF THE BERKELEY, AND BERKELEY IS NOT WITHIN THE INFLUENCE AREA OF AN AIRPORT. NO IMPACT WOULD OCCUR.

There are no public or private airports within Berkeley. The nearest airport is the Oakland International Airport which is located 14 miles south of the City limits. The proposed HEU would have no impact related to a safety hazard or excessive noise hazards within airport land use plan areas or in proximity to airports.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 6:	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact HAZ-5 THE PROPOSED HEU WOULD NOT RESULT IN PHYSICAL CHANGES THAT COULD INTERFERE WITH OR IMPAIR EMERGENCY RESPONSE OR EVACUATION. THEREFORE, THE PROJECT WOULD NOT RESULT IN INTERFERENCE WITH THESE TYPES OF ADOPTED PLANS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Figure 14 of the Berkeley General Plan identifies existing emergency access and evacuation routes in the City. Many of the proposed inventory sites are located along access and evacuation routes including Sacramento Street, Ashby Avenue, University Avenue, and San Pablo Avenue. General Plan Policy T-28 identifies actions for emergency access. These include not installing diverters or speed humps on streets identified as Emergency Access and Evacuation Routes. While traffic increases associated with the proposed rezoning may affect streets within the city, Sacramento Street, Adeline Street, Ashby Avenue, and Shattuck Avenue would still serve as evacuation routes in case of emergency.

As discussed in Section 4.13, *Public Services and Recreation*, future development in the City would be required to conform to the latest fire code requirements, including provisions for emergency access. With adherence to existing General Plan policies and other regulations, implementation of the proposed HEU would not impair or interfere with an emergency response or evacuation plan. This impact would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

c. Cumulative Impacts

As stated in Section 3, *Environmental Setting*, cumulative development would consist of development under the proposed HEU well as additional projects proposed within the City of Berkeley associated with the University of California's LRDP. Cumulative development could contribute to an increase in hazards related to the use of, and exposure to, hazardous materials. As discussed in the impact analysis, development carried out under the HEU may increase the potential for community risk from hazards and hazardous materials. However, all individual developments carried out under the HEU would be subject to General Plan policies and existing laws and regulations which would reduce impacts to a less than significant level. Since all projects carried out under the proposed HEU would be subject to these policies and regulations, cumulative impacts would be less than significant. Furthermore, the Plan would not combine with any other projects to substantially increase hazards and hazardous materials impacts, especially since other projects would also be subject to local, state, and federal regulations relating to hazards and hazardous materials. Overall, with implementation of the policies and actions included in the General Plan and compliance with existing laws and regulations, the Plan would not make a substantial contribution to cumulative hazards and hazardous materials impacts, and these cumulative impacts would be less than significant.

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4.9 Hydrology and Water Quality

This section evaluates the potential environmental effects related to hydrology and water quality associated with implementation of the proposed Housing Element Update.

4.9.1 Setting

a. Hydrology

Regional Watershed

The California Department of Water Resources divides surface watersheds in California into 10 hydrologic regions. Berkeley lies in San Francisco Bay Hydrologic Region (Bay Region), which contains 33 alluvial groundwater basins, covers approximately 4,500 square miles, and includes all of San Francisco County and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda counties. The Bay Region comprises numerous watersheds that drain directly into San Francisco Bay, downstream of the Sacramento-San Joaquin River Delta and coastal creek watersheds in Marin and San Mateo counties that drain directly to the Pacific Ocean. Within the San Francisco Bay Hydrologic Region, the Berkeley is in the Bay Bridges Hydrologic Unit, Berkeley Hydrologic Area, undefined Hydrologic Sub-Area, undefined CDFW Super Planning Watershed, and Point Richmond CDFW Planning Watershed.

Local Watershed

Berkeley is located on the eastern shoreline of the San Francisco Bay and extends east to the ridgelines of the East Bay Hills. There are 10 watersheds (not including the Marina) entirely or partially within City limits. The Potter Watershed is the largest watershed in the city, encompassing approximately one-third of the land area from the southern boundary of the Strawberry Creek Watershed in the north to roughly the Berkeley city limit in the south, and from Claremont Canyon in the east to the San Francisco Bay shore in the west. The watersheds in Berkeley eventually drain into the San Francisco Bay, with the exception of the Wildcat watershed which drains to the north on the eastern side of the ridgelines of the Berkeley Hills (City of Berkeley 2011).

Groundwater

Berkeley lies within the East Bay Plain Subbasin for which the East Bay Municipal Utility District (EBMUD) serves as the Groundwater Sustainability Agency (GSA). Water supply in Berkeley is also provided by EBMUD. The majority of the water delivered by EBMUD originates from the Mokelumne River watershed, and the remaining water originates as runoff from the protected watershed lands and reservoirs in the East Bay Hills. Supplemental groundwater projects would allow EBMUD to be flexible in response to changing external conditions, such as single-year or multiple-year droughts.

Surface Water

Berkeley contains five principal creeks: Derby, Potter, Strawberry, Schoolhouse, and Codornices, all of which flow west from the Berkeley Hills into San Francisco Bay. In addition, there are eight other creeks that are at least partially within the city limits (City of Berkeley 2001). Figure 4.9-1 contains a map showing surface water in Berkeley.

b. Water Quality

The San Francisco Bay region's immediate watershed is highly urbanized, resulting in contaminant loads from point and nonpoint sources. Stormwater runoff pollutants vary with land use, topography, and the amount of impervious surface, as well as the amount and frequency of rainfall and irrigation practices. Typically, runoff in developed areas contains oil, grease, litter, and metals accumulated in streets, driveways, parking lots, and rooftop. It also contains pollutants applied to landscaped areas. All stormwater runoff generated in Berkeley eventually discharges into San Francisco Bay. The runoff is conveyed by storm drains, open channel creeks, and culverted creeks to the Bay. The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) is the primary agency charged with protecting and enhancing surface and ground water quality in the region (City of Berkeley 2011).

The SFBRWQCB monitors surface water quality through implementation of the Basin Plan and designates beneficial uses for surface water bodies and groundwater. Since nearly all of the waterways within the Potter Watershed are underground, the San Francisco Bay RWQCB has not designated beneficial uses for any of the waterways in the watershed (SFBRWQCB 2017).

c. Flood Hazards

FEMA Flood Hazard Zones

The Federal Emergency Management Agency (FEMA) establishes base flood elevations (BFE) for 100-year and 500-year flood zones and establishes Special Flood Hazard Areas (SFHA). SFHAs are those areas within 100-year flood zones or areas that will be inundated by a flood event having a one percent chance of being equaled or exceeded in any given year. The 500-year flood zone is defined as the area that could be inundated by the flood which has a 0.2 percent probability of occurring in any given year, or once in 500 years, and is not considered an SFHA. Development in flood zones is regulated through the Berkeley Municipal Code Chapter 17.12 Flood Development. Portions of Berkely are located within the 100-year and 500-year flood hazard zones as mapped by FEMA and are defined by FEMA as flood prone. Figure 4.9-2 shows FEMA flood zones within Berkeley.

Most flooding in Berkeley is caused by (1) heavy rainfall and subsequent runoff volumes that cannot be adequately conveyed by the existing storm drainage system and surface water; or (2) flooding along the waterfront when flows out of the storm drainage system are limited by the backwater effects of the high tide. Areas subject to flooding are primarily found on the western side of Berkeley in the tidal basin areas south of Third Street between Codornices Creek and Gilman Street and between University Avenue and Ashby Avenue (Aquatic Park). Strawberry Creek poses a flood hazard for downtown Berkeley, immediately west of Oxford Street, and to portions of the central UC campus. The North Fork of Strawberry Creek in particular is subject to flash flood conditions in periods of intense rainfall (City of Berkeley 2001).

Figure 4.9-1 Surface Water in Berkeley

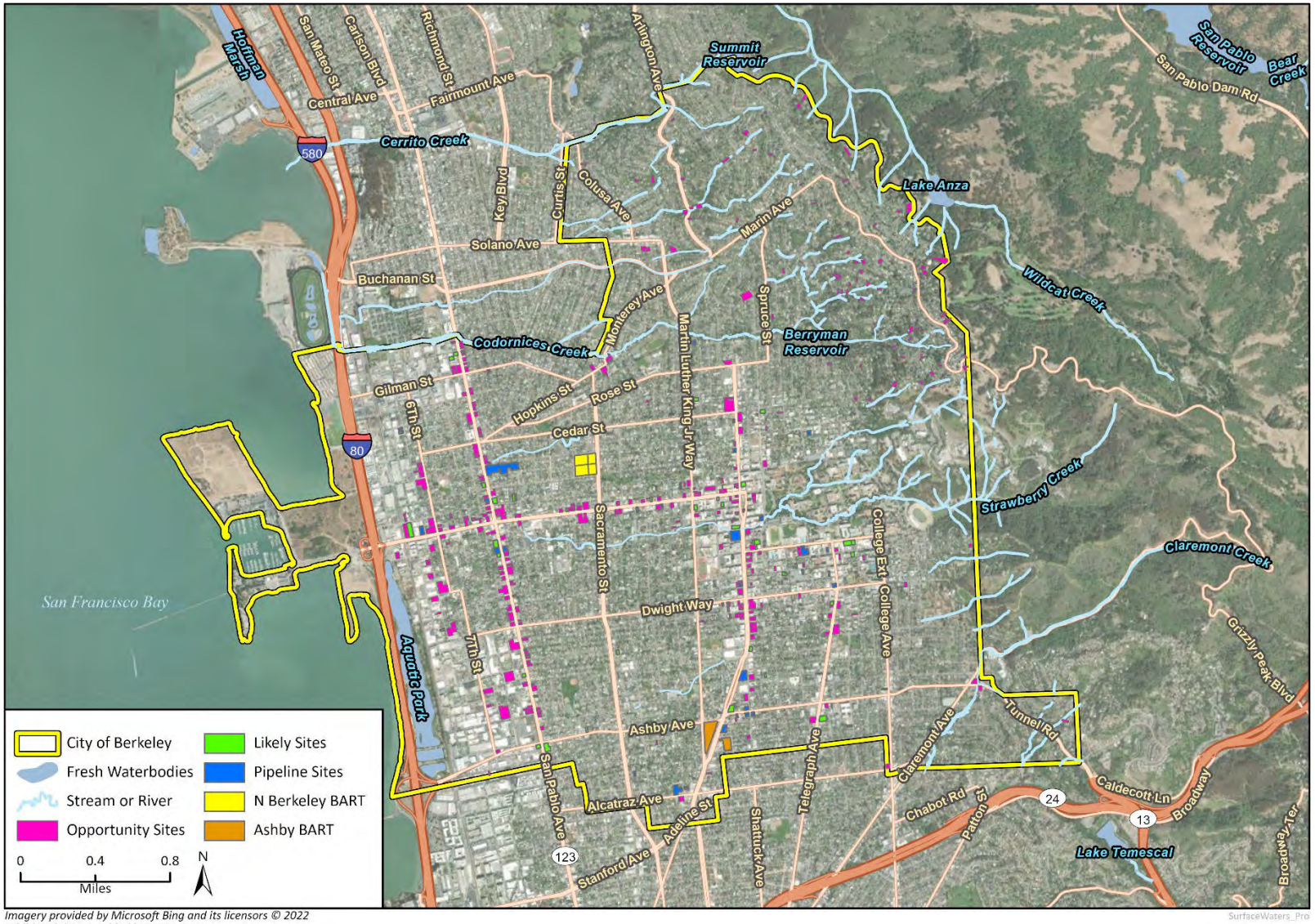
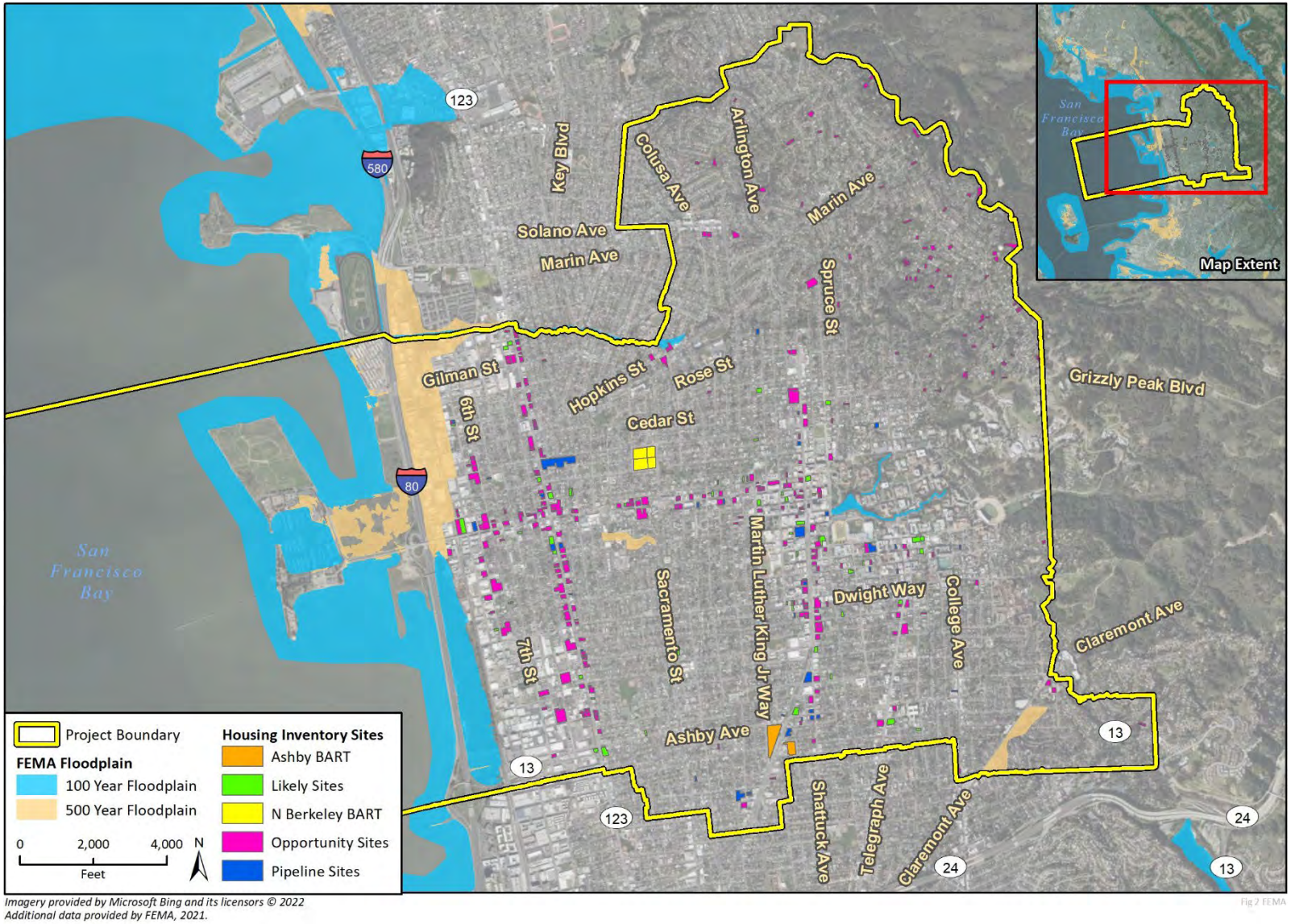


Figure 4.9-2 FEMA Flood Zones within Berkeley



Dams and Levees

Failure of the Summit Reservoir and the Berryman Reservoir, located east of Berkeley, could impact inundation downhill of the reservoirs. Summit reservoir is located in the City of El Cerrito and would impact areas between Grizzly Peak Boulevard and The Alameda. The Berryman Reservoir, adjacent to Codornices Park, could potentially inundate a large portion of Berkeley, including neighborhoods between Hopkins and Cedar Streets and in North and West Berkeley, especially at Aquatic Park, and areas east of the I-80 freeway (City of Berkeley 2001).

Tsunami and Seiches

A tsunami is a series of waves generated by an impulsive disturbance in the ocean or in a small, connected body of water. Tsunamis are produced when movement occurs on faults in the ocean floor, usually during very large earthquakes. Sudden vertical movement of the ocean floor by fault movement displaces the overlying water column, creating a wave that travels outward from the earthquake source. An earthquake anywhere in the Pacific Ocean can cause tsunamis around the entire Pacific basin.

Seiches are waves generated in an enclosed body of water, such as San Francisco Bay, from seismic activity. Seiches are related to tsunamis for enclosed bays, inlets, and lakes. These tsunami-like waves can be generated by earthquakes, subsidence or uplift of large blocks of land, submarine and onshore landslides, sediment failures and volcanic eruptions. The strong currents associated with these events may be more damaging than inundation by waves. The largest seiche wave ever measured in San Francisco Bay, following the 1906 earthquake, was four inches high. In a low-likelihood storm scenario (1 in a 100-year flood event) which has a 26 percent chance of occurring at least once in 30 years, approximately 1,900 properties in Berkeley would be estimated to be affected by severe flooding (Risk Factor 2022).

4.9.2 Regulatory Setting

a. Federal Regulations

Federal Clean Water Act

In 1972, Congress passed the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), with the goal of "restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. § 1251(a)). The CWA directs states to establish water quality standards for all "waters of the United States" and to review and update such standards on a triennial basis. Section 319 mandates specific actions for the control of pollution from non-point sources. The EPA has delegated responsibility for implementation of portions of the CWA, including water quality control planning and control programs, such as the National Pollutant Discharge Elimination System (NPDES) Program, to the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs).

Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States based on the water body's designated beneficial use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Applicable water quality standards are contained in the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan).

Section 303(d) of the CWA bridges the technology-based and water quality-based approaches for managing water quality. Section 303(d) requires that states make a list of waters that are not attaining standards after the technology-based limits are put into place. For waters on this list (and where the USEPA administrator deems they are appropriate), states are to develop total maximum daily loads (TMDL). TMDLs are established at the level necessary to implement the applicable water quality standards. A TMDL must account for all sources of the pollutants that caused the water to be listed.

Section 404 of the CWA prohibits the discharge of any pollutants into "waters of the United States," except as allowed by permit. 33 Code of Federal Resources § 328.3(a)(3). Section 404 of the CWA authorizes the U.S. Army Corps of Engineers to issue permits for and regulate the discharge of dredged or fill materials into wetlands or other waters of the United States. Under the CWA and its implementing regulations, "waters of the United States" are broadly defined to consist of rivers, creeks, streams, and lakes extending to their headwaters, including adjacent wetlands.

National Pollutant Discharge Elimination System (NPDES)

In California, the National Pollutant Discharge Elimination System (NPDES) program is administered by the SWRCB through the nine RWQCBs. Berkeley lies within the jurisdiction of SFBRWQCB (Region 2) and is subject to the waste discharge requirements of the Municipal Regional Stormwater Permit (MRP) (Order No. R2-2015-0049) and NPDES Permit No. CAS612008, which was issued on November 19, 2015 and went into effect on January 1, 2016. The MRP has expired and the SFBRWQCB is in the process of re-issuing the MRP. It is anticipated the new MRP will include new and more restrictive requirements which could expand the definition of regulated projects and add new requirements. Under Provision C.3 of the MRP, Berkeley is required to use its planning authority to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address stormwater runoff pollutant discharges and address increases in runoff flows from new development and redevelopment projects. These requirements are generally reached through the implementation of Low Impact Development (LID) techniques and other controls (City of Berkeley 2011).

The MRP requires appropriate LID and Stormwater Treatment technologies in new development and redevelopment projects, to mimic the natural hydrology of the lands prior to disturbance. The objective of LID and post-construction BMPs for stormwater is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. LID employs principles such as preserving and recreating natural landscape features and minimizing imperviousness to create functional and appealing site drainage that treats stormwater as a resource, rather than a waste product. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes.

b. State Regulations

State Water Resources Control Board General Construction Permit

The SWRCB is responsible for developing statewide water quality policy and exercise the powers delegated to the state by the federal government under the Clean Water Act. Construction activities that disturb one or more acres of land that could impact hydrologic resources must comply with the

requirements of the SWRCB Construction General Permit (Order 2012-0006-DWQ). Under the terms of the permit, applicants must file Permit Registration Documents (PRD) with the SWRCB prior to the start of construction. The PRDs include a Notice of Intent, risk assessment, site map, Stormwater Pollution Prevention Plan (SWPPP), annual fee, and a signed certification statement. The PRDs are submitted electronically to the SWRCB via the Storm Water Multiple Application and Report Tracking System website.

Applicants must also demonstrate conformance with applicable BMPs and prepare a Storm Water Pollution Prevention Plan (SWPPP) with a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection, and discharge points, general topography before and after construction, and drainage patterns across the city. The SWPPP must list BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for nonvisible pollutants if there is a failure of the BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Some sites also require implementation of a Rain Event Action Plan. The updated Construction General Permit (2012-0006-DWQ) went into effect on July 17, 2012 and requires applicants to comply with post-construction runoff reduction requirements (SWRCB 2017a).

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act establishes the SWRCB and each RWQCB as the principal agencies for coordinating and controlling water quality in California. Specifically, the Porter-Cologne Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and groundwater) and directs the RWQCBs to develop regional basin plans.

The SFBRWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters in its jurisdiction. Water quality objectives for receiving waters within Berkeley are specified in the Water Quality Control Plan for the Basin Plan, prepared by the SFBRWQCB in compliance with the federal CWA and the Porter Cologne Act. The principal elements of the Basin Plan are a statement of beneficial water uses protected under the plan; water quality objectives necessary to protect the designated beneficial water uses; and strategies and time schedules for achieving the water quality objectives. Together, narrative and numerical objectives define the level of water quality that shall be maintained in the region. The water quality objectives are achieved primarily through the establishment and enforcement of waste discharge requirements (WDR).

The RWQCBs have primary responsibility for issuing WDRs. The RWQCBs may issue individual WDRs to cover individual discharges or general WDRs to cover a category of discharges. WDRs may include effluent limitations or other requirements that are designed to implement applicable water quality control plans, including designated beneficial uses and the water quality objectives established to protect those uses and prevent the creation of nuisance conditions. Violations of WDRs may be addressed by issuing Cleanup and Abatement Orders or Cease and Desist Orders, assessing administrative civil liability, or seeking imposition of judicial civil liability or judicial injunctive relief.

State Updated Model Water Efficient Landscape Ordinance (Assembly Bill 1881)

The updated Model Water Efficient Landscape Ordinance required cities and counties to adopt landscape water conservation ordinances by January 31, 2010 or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Water Efficient Landscape Ordinance (WELO). The City of Berkeley adopted the Bay-Friendly Landscape Ordinance in accordance with this requirement. The ordinance incorporates landscape protocols developed by the Alameda County Waste Management Authority and all parameters in the WELO. The ordinance became effective as of February 1, 2010. In May of 2015, the governor issued Executive Order B-29-15 requiring the state to revise the model WELO to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater usage, onsite stormwater capture, and by limiting the portion of landscapes that can be covered in turf. The last update to the City's Water Efficient Landscape Ordinance occurred on December 1, 2015.

c. Local Regulations

San Francisco Bay Regional Water Quality Control Board

Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans for all areas in the region and establish water quality objectives in the plans. Berkeley is within the jurisdiction of SFBRWQCB (Region 2).

The SFBRWQCB addresses region-wide water quality issues through the Basin Plan, updated most recently in March 2017. This Basin Plan designates beneficial uses of the state waters in Region 2, describes the water quality that must be maintained to support such uses, and provides programs, projects, and other actions necessary to achieve the standards established in the Basin Plan (SFBRWQCB 2017). The Water Quality Control Policy for the Enclosed Bays and Estuaries of California, as adopted by the SWRCB in 1995, also provides water quality principles and guidelines to prevent water quality degradation and protect the beneficial uses of waters of enclosed bays and estuaries.

Alameda County Clean Water Program

The City of Berkeley, along with 13 other incorporated cities in Alameda County, has joined with the ACFCD, the Zone 7 Water Agency, and Alameda County in the Clean Water Program (CWP) initiative. Members of the program are regulated waste dischargers under the 2015 NPDES Permit issued by the SFBRWQCB and are responsible for municipal storm drain systems that they own or operate. As part of the permitting process, dischargers must submit a Stormwater Management Plan that describes a framework for management of stormwater discharges during the term of the permit (City of Berkeley 2011).

The City of Berkeley, as a co-permittee under the NPDES permit, is subject to the Provision C.3 requirements for new development and redevelopment projects, including post-construction stormwater management requirements. Provision C.3 requirements are separate from, and in addition to, requirements for erosion and sediment control and for pollution prevention measures during construction. All new development or redevelopment projects that create or replace 10,000 square feet of impervious surfaces or 5,000 square feet or more of impervious surface for special land use categories (i.e., uncovered parking lots, restaurants, auto service facilities, and gasoline

stations) are considered to be "regulated projects" and are required to implement site design measures, source control measures, and stormwater treatment measures to reduce stormwater pollution during operation of the project. The permit specifies methods to calculate the required size of treatment devices. All projects that create and/or replace 2,500 square feet or more but less than 10,000 square feet of impervious surface are required to meet site design requirements in Provision C.3.i of the MRP.

Regulated projects subject to stormwater treatment measures would require the implementation of LID features, such as harvesting and reuse, bioretention areas, pervious paving, green roofs, flow-through planters, tree well filters, and media filters. Systems must be designed to treat stormwater runoff volume equal to the 85th percentile 24-hour storm event, 80 percent of the annual runoff from the site, a flow design of runoff from a rain event equal to 0.2 inches/hour intensity, or an equivalent method (City of Berkeley 2011).

The City of Berkeley is shown as a solid gray area on CWP's Hydromodification Management Susceptibility Map (Alameda County 2022). According to the CWP, solid gray designates the land area between the hills and the tidal zone. The hydromodification standard and all associated requirements apply to projects in solid gray area unless a project proponent demonstrates that all project runoff will flow through fully hardened channels. Short segments of engineered earthen channels (length less than 10 times the maximum width of trapezoidal cross-section) can be considered resistant to erosion if located downstream of a concrete channel of similar or greater length and comparable cross-section dimensions. Plans to restore a hardened channel may affect the hydromodification standard applicability in this area. Only a small portion of the city, along Codornices Creek and in the Berkeley Hills, is subject to hydromodification measures, as determined by the CWP's Hydromodification Management Susceptibility Map. This would require projects in the hydromodification area that create and/or replace one acre or more of impervious surface to match post-development stormwater flow rates and volumes to pre-development conditions.

City of Berkeley General Plan: A Guide for Public Decision-Making (2001)

Applicable General Plan policies and actions related to hydrology and water quality are included in the Environmental Management Element and the Disaster Preparedness and Safety Element. Environmental Management Element Goal EM-4 promotes water conservation, improving water quality and restoring creeks. The Disaster Preparedness and Safety Element identifies areas of potential hazards in the city and includes goals and policies to improve safety with respect to natural disasters and environmental hazards such as flooding.

Environmental Management Element Policies and Actions

Policy EM-5: "Green" Buildings. Promote and encourage compliance with "green" building standards.

Policy EM-23: Water Quality in Creeks and San Francisco Bay. Take action to improve water quality in creeks and San Francisco Bay.

Action EM-23D. Restore a healthy freshwater supply to creeks and the Bay by eliminating conditions that pollute rainwater, and by reducing impervious surfaces and encouraging use of swales, cisterns, and other devices that increase infiltration of water and replenishment of underground water supplies that nourish creeks.

Policy EM-24: Sewers and Storm Sewers. Protect and improve water quality by improving the citywide sewer system.

Action EM-24E. Ensure that new development pays its fair share of improvements to the storm sewerage system necessary to accommodate increased flows from the development.

Policy EM-25: Groundwater. Protect local groundwater by promoting enforcement of state water quality laws that ensure non-degradation and beneficial use of groundwater.

Policy EM-26: Water Conservation. Promote water conservation through City programs and requirements.

Policy EM-27: Creeks and Watershed Management. Whenever feasible, daylight creeks by removing culverts, underground pipes, and obstructions to fish and animal migrations.

Action EM-27D. Restrict development on or adjacent to existing open creeks. When creeks are culverted, restrict construction over creeks and encourage design solutions that respect or emphasize the existence of the creek under the site.

Action EM-27G. Regulate new development within 30 feet of an exposed streambed as required by the Creeks Ordinance and minimize impacts on water quality and ensure proper handling of stormwater runoff by requiring a careful review of any public or private development or improvement project proposed in water sensitive areas.

Action EM-27 H. Consider amending the Creek Ordinance to restrict parking and driveways on top of culverts and within 30 feet of creeks.

Disaster Preparedness and Safety Element Policies and Actions

Policy S-26: Flood Hazards Mitigation. Reduce existing flood hazards in Berkeley.

Action S-26A. Conduct periodic evaluation of reservoir safety and undertake actions necessary to mitigate the potential for dam failure.

Action S-26B. Continue to rehabilitate the City storm drain system to reduce local flooding caused by inadequate storm drainage.

Action S-26C. Continue and significantly strengthen programs promoting storm drain maintenance by public and private sectors.

Action S-26D. Continue to work with the East Bay Municipal Utility District to complete the planned seismic improvements to the Berryman Reservoir.

Policy S-27: New Development. Use development review to ensure that new development does not contribute to an increase in flood potential.

Action S-27A. Regulate development in the Waterfront flood-prone areas consistent with the Berkeley Waterfront Specific Plan.

Action S-27B. Ensure that new development conforms to requirements and guidelines of the National Flood Insurance Program (NFIP).

Action S-27C. Require new development to provide for appropriate levels of on-site detention and/ or retention of storm water.

Action S-27D. Regulate development within 30 feet of an exposed streambed as required by the Preservation and Restoration of Natural Watercourses (Creeks) Ordinance.

Policy S-28: Flood Insurance. Reduce the cost of flood insurance to property owners in the City.

Action S-28A. Identify, prioritize, and implement activities necessary to qualify for a high Community Rating System (CRS) evaluation under the National Flood Insurance Program (NFIP).

Action S-28B. Update and revise flood maps for the city.

Action S-28C. Incorporate FEMA guidelines and suggested activities into City plans and procedures for managing flood hazards.

Berkeley Municipal Code

Four chapters of the City of Berkeley Municipal Code (BMC) contain directives pertaining to hydrology and water quality issues:

- **Preservation and Restoration of Natural Watercourses – Chapter 17.08.** The purpose of this chapter is to regulate: (1) building over or near culverted creeks; (2) building near open creeks; (3) the rehabilitation and restoration of natural waterways; and (4) the management of watersheds.
- **Stormwater Management and Discharge Control – Chapter 17.20.** This chapter provides the stormwater requirements for projects conducted within the City of Berkeley and is consistent with the requirements of the San Francisco RWQCB and the MRP permit. The purpose of this chapter is to ensure the health, safety, and general welfare of the City of Berkeley's citizens by eliminating non-stormwater discharges to the City's storm drain system and by reducing the contamination of stormwater by pollutants to the maximum extent practicable.
- **Standards of Construction in Special Flood Hazard Zones – Chapter 17.12.** The ordinance also ensures that property owners construct new and substantially improved buildings in the 100-year floodplain in accordance with the National Flood Insurance Program's goals to protect life and property. Section 500 of this chapter addresses standards of construction in special flood hazard areas. Section 530 addresses coastal high hazard areas vulnerable to future sea level rise.
- **Grading, erosion and sediment control requirements – Section 21.40.270.** This requires projects to comply with all grading, erosion and sediment control regulations on file in the Public Works Department.

4.9.3 Impact Analysis

a. Methodology and Significance Thresholds

Assessment of impacts is based on review of site information and conditions and City information regarding hydrology and water quality issues. In accordance with Appendix G of the *CEQA Guidelines*, a project would result in a significant impact if it would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would
   a. Result in substantial erosion or siltation on- or off-site
   b. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site
   c. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
   d. Impede or redirect flood flows;
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact HYD-1 **FUTURE DEVELOPMENT UNDER THE PROPOSED HEU WOULD INVOLVE GROUND-DISTURBING ACTIVITIES AND THE USE OF HEAVY MACHINERY THAT COULD RELEASE MATERIALS, INCLUDING SEDIMENTS AND FUELS, WHICH COULD ADVERSELY AFFECT WATER QUALITY. OPERATION OF POTENTIAL FUTURE DEVELOPMENT COULD ALSO RESULT IN DISCHARGES TO STORM DRAINS THAT COULD BE CONTAMINATED AND AFFECT DOWNSTREAM WATERS. HOWEVER, COMPLIANCE WITH REQUIRED PERMITS AND EXISTING REGULATIONS, AND IMPLEMENTATION OF BEST MANAGEMENT PRACTICES CONTAINED THEREIN, WOULD ENSURE THAT POTENTIAL WATER QUALITY IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Construction Impacts

Construction activities associated with development of inventory sites, in the middle housing rezoning districts and in the Southside under the proposed HEU would have the potential to cause soil erosion from exposed soil, and accidental release of hazardous materials used for equipment such as vehicle fuels and lubricant, or temporary siltation from storm water runoff. Soil disturbance would occur during excavation for proposed building foundations, demolition of existing buildings, and grading for improvements to public spaces and landscaped areas or development projects. However, future development facilitated by the proposed project would be required to comply with State and local water quality regulations designed to control erosion and protect water quality during construction. This includes compliance with the requirements of the SWRCB Construction General Permit, which requires preparation and implementation of a SWPPP for projects that disturb one acre or more of land. The SWPPP must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit, as well as those that control hydrocarbons, trash, debris, and other potential construction-related pollutants. Construction BMPs would include scheduling inlet protection, silt fencing, fiber rolls, stabilized construction entrances, stockpile management, solid waste management, and concrete waste management. Post-construction stormwater performance standards are also required to specifically address water quality and channel protection events. Implementation of these BMPs would prevent

or minimize environmental impacts and ensure that discharges during the construction phase of new development facilitated by the proposed Project would not cause or contribute to the degradation of water quality in receiving waters.

Should dewatering be necessary during construction, it may result in the discharge of potentially contaminated groundwater to surface water and may degrade the water quality of surrounding watercourses and waterbodies. However, future development projects would be subject to the San Francisco Bay Regional Water Quality Control Board Order No. R2-2012-0060, General Waste Discharge Requirements for Discharge or Reuse of Extracted Brackish Groundwater, Reverse Osmosis Concentrate Resulting from Treated Brackish Groundwater, and Extracted Groundwater from Structural Dewatering Requiring Treatment (Groundwater General Permit). The Groundwater General Permit requires dischargers to obtain an Authorization to Discharge, treat effluent to meet water quality-based effluent limitations, and comply with the Monitoring and Reporting Program. Pumped groundwater must be tested and if determined to be contaminated, the water must be collected and either treated or disposed of according to waste discharge requirements of Order No. R2-2012-0060. Future applicants are required to comply with all requirements of the Groundwater General Permit.

In addition, BMC Chapter 21.40 requires project applicants to comply with grading, erosion, and sediment control regulations on file in the Public Works Department and BMC Chapter 17.20 requires BMPs to be implemented to minimize non-stormwater discharges from the site during construction (City of Berkeley 2016). Compliance with local and State regulatory requirements and implementation of construction BMPs would minimize discharges during the construction phase of future development under the Housing Element Update and would not result in the degradation of water quality in receiving waters. Therefore, construction-related water quality impacts would be less than significant.

Operational Impacts

Berkeley is highly urbanized and the majority of the inventory sites and sites in the middle housing rezoning district and the Southside are almost entirely covered with impervious surfaces except for landscaped areas. Development under the Housing Element Update would involve infill and redevelopment of existing sites. Future development would be required to be implemented in compliance with existing programs and permits, including the BMC and the Municipal Regional Stormwater NPDES Permit (No. CAS612008). Development design would include BMPs to avoid adverse effects associated with stormwater runoff quality. Specifically, future development facilitated by the proposed project would be required to implement LID Measures and on-site infiltration, as required under the C.3 provisions of the Municipal Regional Stormwater Permit (MRP). Implementation of LID measures would reduce water pollution from stormwater runoff as compared to existing conditions. For example, on-site infiltration would improve the water quality of stormwater prior to infiltration or discharge from the site.

Water Quality

Implementation of development facilitated by the proposed project would result in a significant impact if activities would conflict with applicable water quality permits or waste discharge requirements. Future development facilitated by the project would be subject to multiple permits and approvals associated with the protection of water quality, as discussed below.

The City of Berkeley is responsible for enforcing the requirements of the Municipal Regional Stormwater Permit (MRP). Compliance with the MRP must include operational and maintenance

control measures, or BMPs and construction-related BMPs. Provisions specified in the MRP that affect construction projects generally include but are not limited to Provision C.3 (New Development and Redevelopment), Provision C.6 (Construction Site Control), and Provision C.15 (Exempted and Conditionally Exempted Discharges), as described below. Future projects would be required to comply with all provisions of the MRP, including:

- **Provision C.3** requires LID techniques be utilized to employ appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects; to address stormwater runoff pollutant discharges; and to prevent increases in runoff flows from new development and redevelopment projects by mimicking a site's predevelopment hydrology. This is to be accomplished by employing principles such as minimizing disturbed areas and imperviousness, and preserving and recreating natural landscape features, in order to "create functional and appealing site drainage that treats stormwater as a resource, rather than a waste product" (SFBRWQCB 2015). These LID practices, as well as other provisions and BMPs specified in the MRP, may require long-term operational inspections and maintenance activities to ensure the effective avoidance of significant adverse impacts associated with water quality degradation.
- **Provision C.6** requires implementation of a construction site inspection and control program at all construction sites and an Enforcement Response Plan to prevent construction-related discharges of pollutants into storm drains. Inspections shall confirm implementation of appropriate and effective erosion and other BMPs by construction site operators/developers, and reporting shall be used to confirm and demonstrate the effectiveness of its inspections and enforcement activities to prevent polluted construction site discharges into storm drains.
- **Provision C.10** recognizes trash as a significant pollutant in urban runoff and aims to reduce trash loads from municipal separate storm sewer systems. (Refer to Section 4.16, *Utilities and Service Systems* regarding solid waste generation impacts of the project.) The City currently implements a suite of zero-waste programs, including a requirement that all residential properties of five or more units provide recycling and organics collection for their tenants' food scraps, food soiled papers, and any plant debris generated at the property.
- **Provision C.15** exempts specified unpolluted non-stormwater discharges and to conditionally exempt non-stormwater discharges that are potential sources of pollutants. In order for non-stormwater discharges to be conditionally exempted, those permitted under the MRP must identify appropriate BMPs, monitor the non-stormwater discharges where necessary, and ensure implementation of effective control measures to eliminate adverse impacts to waters of the state consistent with the discharge prohibitions of the MRP.

Provision C.3 of the MRP addresses post-construction stormwater requirements for new development and redevelopment projects that add and/or replace 10,000 square feet or more of impervious area or special land use categories that create and/or replace 5,000 square feet of impervious surfaces, such as auto service facilities, retail gas stations, restaurants, and uncovered parking lots. These "regulated" projects are required to meet certain criteria: 1) incorporate site design, source control, and stormwater treatment measures into the project design; 2) minimize the discharge of pollutants in stormwater runoff and non-stormwater discharge; and 3) minimize increases in runoff flows as compared to pre-development conditions. Additionally, projects in Berkeley that drain to a natural water body must also construct and maintain hydromodification measures to ensure that estimated post-project runoff peaks and durations do not exceed estimated pre-project peaks and duration. LID methods are the primary mechanisms for implementing such controls.

Compliance with the MRP and BMC would increase infiltration of stormwater, decrease stormwater runoff, and would reduce the risk of water contamination from operation of new developments to the maximum extent practicable, and the project would reduce water pollution from stormwater runoff as compared to existing conditions. Therefore, the proposed project would not violate water quality standards or waste discharge requirements, would not significantly contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and would not substantially degrade water quality. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant without mitigation. No mitigation measures are required.

Threshold 2:	Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
Threshold 5:	Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact HYD-2 FUTURE DEVELOPMENT FACILITATED UNDER THE PROPOSED HEU WOULD NOT SUBSTANTIALLY DEPLETE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE SUCH THAT THERE WOULD BE A NET DEFICIT IN AQUIFER VOLUME OR A LOWERING OF THE LOCAL GROUNDWATER TABLE. FURTHER, IMPLEMENTATION OF LOW IMPACT DEVELOPMENT MEASURES AND ON-SITE INFILTRATION REQUIRED UNDER THE C.3 PROVISIONS OF THE MRP, AND COMPLIANCE WITH THE BERKELEY MUNICIPAL CODE WOULD INCREASE THE POTENTIAL FOR GROUNDWATER RECHARGE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Future development under the Housing Element Update would not use or deplete groundwater resources. Water supply for Berkeley is provided by EBMUD. The groundwater aquifer beneath Berkeley is not currently used for water storage or drinking water supply. Therefore, future development under the proposed project would not include installation of new groundwater wells or use of groundwater from existing wells.

If construction activities for future development under the proposed project encounter groundwater, dewatering may be required. However, dewatering would only occur to the extent that it was necessary for construction, and a resulting lowering of the groundwater table would be temporary and localized. Potential depressions created by underground structures would also be localized. Groundwater levels would recover upon cessation of dewatering activities.

Berkeley is urbanized and the majority of the inventory sites, sites in the middle housing rezoning districts and Southside are developed with impervious surfaces and existing buildings, so development associated with the proposed project would not result in an increase in the amount of impervious surfaces in the area, and therefore would not interfere with groundwater recharge. Additionally, development facilitated by the project would be required to comply with Provision C.3 of the MRP. which promotes infiltration. Implementation of LID measures would increase absorption of stormwater runoff and the potential for groundwater recharge.

Berkeley is under the jurisdiction of the SFBRWQCB, which is responsible for preparing the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality

objectives. The Basin Plan serves as the basis for the SFBRWQCB's regulatory programs and incorporates an implementation plan for achieving water quality objectives. With adherence to the State and local water quality standards discussed above, the project would not have an adverse effect on water quality and would not interfere with the objectives and goals in the Basin Plan.

Therefore, development under the Housing Element Update would not result in a net deficit in aquifer volume or a lowering of the groundwater table and would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant without mitigation. No mitigation measures are required.

Threshold 3a:	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?
Threshold 3b:	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
Threshold 3c:	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
Threshold 3d:	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flood flows?

Impact HYD-3 DEVELOPMENT UNDER THE PROPOSED HEU WOULD NOT SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF FUTURE DEVELOPMENT SITES, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER, IN A MANNER WHICH WOULD RESULT IN SUBSTANTIAL EROSION OR SILTATION ON- OR OFF-SITE OR SUBSTANTIALLY INCREASE THE RATE OR AMOUNT OF SURFACE RUNOFF IN A MANNER WHICH WOULD RESULT IN FLOODING OR EXCEED THE CAPACITY OF STORMWATER DRAINAGE SYSTEMS. IMPACTS RELATED TO DRAINAGE PATTERNS WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction activities would involve stockpiling, grading, excavation, paving, and other earth-disturbing activities, which may result in the alteration of existing drainage patterns. As described under Impact HYD-1 above, compliance with the NPDES Construction General Permit, NPDES MS4 General Permit, and the Berkeley Municipal Code would reduce the risk of short-term erosion and

increased runoff resulting from drainage alterations during construction. Therefore, impacts would be less than significant.

Operation

No surface water bodies would be directly affected by development under the Housing Element Update; the Housing Element Update would not involve the alteration of a course of a stream or river. Development could potentially alter the exiting drainage patterns at the future development sites (including inventory sites, sites in the middle housing rezoning districts, and Southside) through the introduction of new impervious surfaces and infrastructure. However, the future development sites and vicinities are urbanized. Of the 364 housing inventory sites, most are currently developed and approximately 105 sites are currently vacant. However, the vacant sites are relatively small (all are under 0.4 acres except for one site which is 0.98 acres) and therefore the introduction of impervious surfaces on these sites would not substantially affect the drainage patterns of the area or stormwater runoff volumes due to the relatively minor change in impervious surface area in the larger context.

New impervious surfaces could locally increase the rate and/or amount of surface runoff, redirect runoff to different discharge locations, or concentrate runoff from sheet flow to channelized flow. Surface water runoff rate and amount is determined by multiple factors, including the amount and intensity of precipitation and amount of precipitation that infiltrates to the groundwater. Infiltration is also determined by several factors, including soil type, antecedent soil moisture, rainfall intensity, the amount of impervious surfaces in a watershed, and topography. The rate of surface runoff is largely determined by topography. Runoff that does not infiltrate would be captured in the city's storm drain system and ultimately conveyed to the San Francisco Bay, as under current conditions.

Although site-specific drainage pattern alterations could occur with development facilitated by the proposed project, such alterations would not result in substantial adverse effects. The inventory sites are mostly covered with impervious surfaces, and development under the proposed project would not introduce new impervious areas to the extent that the rate or amount of surface runoff would substantially increase. Development that could be facilitated by the proposed project would not introduce substantial new surface water discharges and would not result in flooding on- or off-site. Overall drainage patterns, including direction of flow and conveyance to stormwater infrastructure, would not be modified by the project, and the runoff volume and rate from the project would be reduced compared to existing conditions.

Further, as discussed under Impact HYD-1 above, MRP-regulated projects must treat 80 percent or more of the volume of annual runoff for volume-based treatment measures or 0.2-inch per hour for flow-based treatment measures. Projects that create or replace 2,500 square feet or more, but less than 10,000 square feet, of impervious surface must implement site design measures to reduce stormwater runoff.

All regulated projects in Berkeley are also required to prepare a Stormwater Management Plan (SWMP) that includes the post-construction Best Management Practices (BMPs) that control pollutant levels pursuant to BMC Chapter 17.20 and the Alameda County Clean Water Program. All SWMPs would be reviewed by the City of Berkeley prior to the issuance of building permits and the most appropriate BMPs would be identified.

Compliance with the General Plan goals and policies and the BMC would increase infiltration of stormwater and reduce stormwater runoff from operation of new developments to the extent practicable. Therefore, development that could be facilitated by the proposed project would not

substantially alter the existing drainage pattern of the site or area or alter the course of any stream or river, would not result in erosion or siltation, and would not substantially increase the rate of surface runoff in a manner which would result in flooding on- or off-site or exceed capacity of a stormwater system. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant without mitigation. No mitigation measures are required.

Threshold 4:	In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

Impact HYD-4 DEVELOPMENT UNDER THE PROPOSED HEU WOULD PLACE HOUSING AND OTHER STRUCTURES WITHIN FEMA-DESIGNATED FLOOD HAZARD AREAS AND TSUNAMI ZONES. HOWEVER, COMPLIANCE WITH THE GENERAL PLAN, THE BMC, AND THE CALIFORNIA HEALTH AND SAFETY CODE WOULD REDUCE POTENTIAL EFFECTS ASSOCIATED WITH FLOOD EVENTS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Berkeley does not contain large surface water bodies that would result in seiches (including Aquatic Park). As shown on Figure 4.9-2, there are a few FEMA-designated 100-year Flood Hazard Areas throughout the project area, particularly in the western portion of the city. The western-most portion of the project area contains housing opportunity sites; only one housing opportunity site and three R-1 Single Family Residential sites are within a FEMA-designated 100-year Flood Hazard Area. As mentioned above, Chapter 17.12 of the BMC contains standards for construction in flood zones, including using appropriate building materials and techniques and ensures that flood-resistant design occurs per the most restrictive provisions available. In all areas of special flood hazard zones, BMC Section 17.12.090 requires standards for anchoring, construction materials and methods such as using flood-resistant materials, and elevation and floodproofing. BMC Section 17.12.100 contains standards for utilities in special flood hazard zones, which requires new water supply and sanitary sewage systems to be designed to minimize or eliminate infiltration of floodwaters into systems and discharge of systems to floodwater. On-site waste disposal systems should also be located to avoid impairment to them, or contamination from them during a flood event. In addition, the Berkely General Plan also includes goals and policies addressing flood-related hazards Including Policy S-26 (Flood Hazards Mitigation), Policy S-27 (New Development), and Policy S-28 (Flood Insurance).

Development under the Housing Element Update would be required to be consistent with the General Plan goals and policies listed above. New development that would occur under the proposed project would therefore be designed to withstand flooding hazards, including FEMA-designated Flood Hazard Areas. Therefore, although development under the proposed project would place housing and other structures within FEMA-designated Flood Hazard Areas, potential flood impacts would be less than significant.

The western-most portion of the project area contains housing opportunity sites in tsunami zones (California Department of Conservation 2021). However, as mentioned above, future development under the proposed Housing Element Update would be required to adhere to standards in BMC Chapter 17.12, which specifies requirements for construction and utilities in special flood hazard zones, floodways, and coastal high hazard areas, as well as goals and policies in the General Plan as outlined above under Section 4.9.2c, which are intended to minimize impacts attributed to flooding in established flood hazard zones. Additionally, the development facilitated by the proposed project would be required to adhere to existing federal, State, and local laws and regulations that address

the management and control of pollutants, including regulations addressing the proper disposal, transportation, storage, and handling of potentially hazardous materials, including the California Health and Safety Code, Division 7 of the California Water Code, and Chapter 15.12 of the BMC. Adherence to goals and policies in the General Plan, the BMC, and the California Health and Safety Code would reduce the risk of the release of pollutants. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant without mitigation. No mitigation measures are required.

c. Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065(a)(3)). The geographic scope for cumulative hydrology and water quality impacts is the extent of the watersheds located in Berkeley, as described above under "Local Watersheds." This geographic scope is appropriate for hydrology and water quality because water quality impacts are localized in the watershed where the impact occurs.

Development under the Housing Element Update in combination with cumulative development discussed in Section 3, *Environmental Setting,* including development under the University's LRDP in Berkeley, could increase stormwater runoff such that water quality impacts could occur. However, overall, implementation of the proposed project and projects planned under the University's LRDP would not substantially increase the total area of impervious surface in the project area; would not result in substantial groundwater use or affect groundwater recharge, and would not modify the course of an existing stream or river. Required conformance with State and local policies and regulations would reduce hydrology and water quality impacts associated with future cumulative development. New development and redevelopment within the City would be subject to City, State, and federal policies and ordinances, design, guidelines, the Zoning Code, and other applicable regulatory requirements that reduce impacts related to water quality on a project-by-project basis.

The water quality regulations implemented by the SFBRWQCB take a basin-wide approach and consider water quality impairment in a regional context. For example, the NPDES Construction Permit ties receiving water limitations and basin plan objectives to terms and conditions of the permit, and the MRP encompasses all of the surrounding municipalities to manage stormwater systems and be collectively protective of water quality.

As discussed under Impact HYD-4, portions of Berkeley are located within a 100-year flood hazard area. Cumulative development also subject to inundation may have localized impacts. However, projects would be analyzed and mitigated on a case-by-case basis and would be designed to avoid or mitigate potential impacts related to flooding in compliance with the jurisdiction's Municipal Code. Cumulative impacts related to flooding, seiche, and tsunami would therefore be less than significant. The proposed Housing Element Update would not impede or redirect flood flows or risk release of pollutants due to inundation. Impacts from implementation of the Housing Element Update related to flood flows and inundation would be less than significant. Because flooding is localized and site-specific, the Housing Element Update would not have a cumulatively considerable contribution to a significant cumulative impact related to flood hazard or inundation risks.

Policies and regulatory requirements described above would avoid significant impacts to water quality and reduce stormwater runoff with future development. Therefore, cumulative

development in combination with development under the proposed Housing Element Update would not result in a significant cumulative impact with respect to hydrology and water quality. Cumulative impacts would be less than significant and the project's contribution to cumulative impacts would not be cumulatively considerable.

4.10 Land Use and Planning

This section analyzes the consistency of the proposed HEU with applicable land use plans, policies, and regulations, and identifies environmental effects that would arise from such inconsistencies.

4.10.1 Setting

a. Land Uses

The general distribution of land uses within Berkeley is shown in Table 4.10-1. Residential uses and streets occupy almost three-quarters of the overall land area of Berkeley. Institutional uses, such as the University of California, schools, churches, public facilities, and hospitals occupy approximately nine percent of the total land area. Commercial uses make up approximately seven percent of the City's land area, open space six percent, and manufacturing four percent. Approximately two percent of the City's land is vacant, and most of the vacant land is located in an area purchased by the East Bay Regional Park District for the Eastshore State Park (City of Berkeley 2001).

Table 4.10-1 Approximate Land Use Summary

Land Use	Percentage of Total Land Use (%)
Residential	48
Streets	24
Institutional	9
Commercial	7
Open Space	6
Manufacturing	4
Vacant	2
Total	**100**

Source: City of Berkeley 2001

City of Berkeley General Plan Land Use Classifications

General Plan land use classifications describe a range of land uses and intensities that reflect different General Plan policies related to the type, location, and intensity of development. Since the General Plan land use classifications describe land uses and development intensities in a relatively large area, they are not intended to be used as standards to determine the maximum allowable density on a specific parcel. Allowable densities and uses in each zoning district are established in the City's Zoning Ordinance. The intent of General Plan land use classifications is to reflect the range of existing zoning districts. Zoning Ordinance regulations for a specific area might allow for a smaller range of uses than allowed by the land use classifications. The Zoning Ordinance is further discussed below under *Local Regulations*.

- **Low Density Residential (1-10 du/ac):** These areas are generally characterized by single-family homes. The Low Density Residential land use classification applies to use of land for residential, community services, schools, home occupations, recreational uses, and open space and institutional facilities. Population density will generally not exceed 22 persons per acre.

- **Low Medium Density Residential (10-20 du/ac):** These areas are generally characterized by single-family homes and small multi-family structures with two or three units. The Low Medium Density Residential land use classification applies to the same land uses allowed under Low Density Residential. Population density will generally range from 22 to 44 persons per acre.
- **Medium Density Residential (20-40 du/ac):** These areas are generally characterized by a mix of single-family homes and small to medium sized multi-family structures. The Medium Density Residential land use classification applies to the same land uses allowed under Low Density Residential. Population density will generally range from 44 to 88 persons per acre.
- **High Density Residential (40-100 du/ac):** These areas are generally characterized by large, multi-family structures conveniently located near transit, the Downtown, the University campus, or BART. The High Density Residential land use classification applies to use of land for residential, community service, schools, institutional, recreational uses, open space, and in some cases where allowed by zoning, ground-floor commercial and office uses. Population density will generally range from 88 to 220 persons per acre.
- **Neighborhood Commercial (FAR <1 to 3):** These areas are generally characterized by pedestrian-oriented, neighborhood-serving commercial development, and multi-family residential structures, and are usually located on two-lane streets with on-street parking and transit. The Neighborhood Commercial land use classification applies to use of land for local-serving commercial, residential, office, community service, and institutional uses. Population density will generally range from 44 to 88 persons per acre.
- **Avenue Commercial (FAR <1 to 4):** These areas are generally characterized by pedestrian-oriented commercial development and multi-family residential structures, and are usually located on ide, multi-lane avenues served by transit or BART. The Avenue Commercial land use classification applies to use of land for local-serving and regional-serving commercial, residential, office, community service, and institutional uses. Population density will generally range from 44 to 88 persons per acre.
- **Downtown (FAR <1 to 6):** This area is identified as the Downtown in the Downtown Plan and is characterized by high density commercial, office, arts, culture, and entertainment and residential development. The Downtown classification is intended to encourage, promote, and enhance development that will increase the residential population in the Downtown, provide new high density, transit-oriented housing opportunities, and support a vital city center. The Downtown land use classification applies to use of land for medium- and high-density housing, regional- and local-serving arts, entertainment, retail, office, cultural, open space, civic uses, and institutional uses and facilities. It is General Plan policy to increase the residential population in Downtown. Population density will generally range from 88 to 220 persons per acre.
- **Institutional (FAR <1 to 4):** These areas are designated towards institutional, government, educational, recreational, open space, natural habitat, woodlands, and public service uses and facilities, such as the University of California, BART, Berkeley Unified School District, and East Bay Municipal Utility District facilities.
- **Manufacturing (FAR <1 to 2):** These areas are intended to maintain and preserve areas of Berkeley for manufacturing and industrial uses necessary for a multi-faceted economy and job growth. Appropriate uses for these areas are identified in the West Berkeley Plan.
- **Mixed Use Residential (FAR <1 to 1.5):** These areas are intended to maintain and preserve areas of the City for lighter manufacturing and industrial uses and allow for additional uses, including residential, where determined appropriate by zoning, and only if the use will not weaken Berkeley's manufacturing and industrial economy. Appropriate uses for these areas are

identified in the West Berkeley Plan. Population density will generally range from 22 to 44 persons per acre, where housing is allowed.

- **Waterfront/Marina (FAR 0 to 0.5):** These areas are intended to maintain and preserve areas of Berkeley adjacent to the Bay for open space, recreational uses, waterfront-related commercial and visitor services, boating, and water transit facilities. Appropriate uses for these areas are identified in the Waterfront Plan.
- **Open Space and Recreation**: These areas are intended for parks, open space, pathways, recreational facilities, natural habitat, and woodlands. The Open Space and Recreation land use classification applies to use of land for parks, recreational facilities, schoolyards, community services, and facilities necessary for the maintenance of the areas.
- **Old Santa Fe Right-of-Way**: The approximate location of the Santa Fe Right-of-Way (ROW) is shown in the General Plan Land Use Diagram and is shown for informational purposes only and not intended to serve as a land use classification. Some areas of the ROW are occupied by park uses, some by residential uses, and some vacant.
- **Southside Study Area**: The approximate location of the Southside Plan Study Area is shown in the General Plan Land Use Diagram and is shown for informational purposes only and not intended to serve as a land use classification. The Southside Plan was adopted on September 27, 2011 and serves as a guide for future development in the Southside area (City of Berkeley 2011).
- **University Avenue and West Berkeley Nodes**: Both the West Berkeley Plan and the University Avenue Strategic Plan established specific "nodes" along University Avenue and San Pablo Avenue in which specific regulatory policies and programs would be applied as an overlay to accomplish area plan goals for revitalization in these specific locations.

4.10.2 Regulatory Setting

a. State Regulations

Housing Accountability Act

The Housing Accountability Act (HAA) was passed in 1982 in recognition that “the lack of housing, including emergency shelters, is a critical problem”, and “among the consequences of those actions are discrimination against low-income and minority households, lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration.” The HAA removes barriers to infill housing development projects by expediting housing approvals, and prevents local agencies from disapproving housing development projects for very low, low-, or moderate-income households where appropriate. On September 29, 2017, Governor Brown signed SB 167, AB 1515, and AB 678 to amend the HAA in order to further limit a local agency’s ability to disapprove or reduce the density of residential projects.

Senate Bill 330, Housing Crisis Act of 2019

Senate Bill 330 (SB 330) took effect in 2019 and declared a statewide housing emergency to be in effect until January 1, 2025. SB 330 prohibits cities and counties from the following actions:

- Establishing rules that would change the land use designation or zoning of parcels to a less intensive use or reducing the intensity of the land that was allowed under the specific or general plan as is in effect on January 1, 2018;

- Imposing or enforcing a moratorium on housing development within all or a selection of the local agency's jurisdictions;
- Imposing or enforcing new design standards established on or after January 1, 2020, that are not objective design standards;
- Establishing or implementing limits on permit numbers issued by the local agency unless the limit was approved before January 1, 2005, in a "predominantly agricultural county."

Planning and Zoning Law

State law requires each city and county in California to adopt a general plan for the physical development of the land within its planning area (Government Code Sections 65300-65404). The general plan must contain land use, housing, circulation, open space, conservation, noise, and safety elements, as well as any other elements that the city or county may wish to adopt. The circulation element of a local general plan must be correlated with the land use element.

Zoning authority originates from city and county police power and from the State's Planning and Zoning Law, which sets minimum requirements for local zoning ordinances. The city or county zoning code is the set of detailed requirements that implement the general plan policies at the level of the individual parcel. The zoning code presents standards for different uses and identifies which uses are allowed in the various zoning districts of the jurisdiction. Since 1971, State law has required the city or county zoning code to be consistent with the jurisdiction's general plan. The consistency requirement does not apply to charter cities other than Los Angeles unless the charter city adopts a consistency rule.

Sustainable Communities and Climate Protection Act (SB 375)

The Sustainable Communities and Climate Protection Act (SB 375) supports the State's climate goals by helping reduce greenhouse gas emissions through coordinated transportation, housing, and land use planning. Under the Act, the California Air Resources Board (CARB) set targets for 2020 and 2035 for each of the 18 metropolitan planning organization regions in 2010 and updated them in 2018. Each of the regions must prepare a Sustainable Communities Strategy (SCS), as an integral part of its regional transportation plan, that contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet CARB's targets. The Act establishes some incentives to encourage implementation of the development patterns and strategies included in an SCS. Developers can get relief from certain environmental review requirements under the California Environmental Quality Act (CEQA) if their new residential and mixed-use projects are consistent with a region's SCS that meets the targets (see Public Resources Code Sections 21155, 21155.1, 21155.2, 21159.28).

b. Regional Regulations

Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC) Plan Bay Area 2050

The Association of Bay Area Governments and the Metropolitan Transportation Commission (ABAG/MTC) Plan Bay Area 2050, adopted in October 2021, integrated transportation and land-use plan for the nine-county San Francisco Bay Area, including Alameda County. Plan Bay Area 2050 meets all state and federal requirements for a Regional Transportation Plan and Sustainable Communities Strategy, also referred to as the RTP/SCS. The Plan describes where and how the

region can accommodate the slightly fewer than 1.4 million new households and 1.4 million new jobs projected in the Bay Area by 2050 and details the regional transportation investment strategy over this period. The Plan identifies 35 strategies focus on improving housing, the economy, transportation, and the environment across the Bay Area over a 30-year period. The plan has identified four geographic areas to guide where future growth in housing and jobs would be focused over the next 30 years: Priority Development Areas (PDA), Priority Production Areas (PPA), Transit-Rich Areas (TRA), and High-Resource Areas (HRA). ABAG and MTC developed land use and transportation scenarios in Plan Bay Area 2050 that distributes the total amount of anticipated growth across the region and measure how well each scenario measures against the Plan goals. Based upon performance, the preferred scenario provides a regional pattern of household and employment growth and a corresponding transportation investment strategy (ABAG/MTC 2021).

c. Local Regulations

City of Berkeley General Plan

Adopted in 2001, the Berkeley General Plan is a long-range statement of policies for the development and preservation of Berkeley.[1] The General Plan identifies seven major goals: 1) Preserve Berkeley's unique character and quality of life; 2) Ensure that Berkeley has an adequate supply of decent housing, living wage jobs, and businesses providing basic goods and services; 3) Protect local and regional environmental quality; 4) Maximize and improve citizen participation in municipal decision-making; 5) Create a sustainable Berkeley; 6) Make Berkeley a disaster-resistant community, that can survive, recover from, and thrive after a disaster; and 7) Maintain Berkeley's infrastructure, including streets, sidewalks, buildings, and facilities; storm drains and sanitary sewers; and open space, parks, pathways, and recreation facilities.

The General Plan's goals are implemented through decisions and actions consistent with the objectives policies and actions of each of the nine Elements: Land Use, Transportation, Housing, Disaster Preparedness & Safety, Open Space & Recreation, Environmental Management, Economic Development and Employment, Urban Design & Preservation and Citizen Participation. The General Plan explicitly recognizes that given its broad scope, "inherent tensions exist between Plan objectives and policies that must be balanced against one another through the decision-making process on particular development and land use decisions."[2]

The Land Use Element of the City's General Plan includes goals, policies and actions that support context-sensitive infill development, historic preservation, transit-oriented development, mobility and access that prioritizes alternative modes of transportation, "complete neighborhoods" that are well-served by a balance of commercial, community-serving/institutional and residential uses, and zoning changes to incentivize affordable housing.

City of Berkeley Zoning Ordinance

The General Plan, area plans, and other citywide plans are implemented through Chapter 23 of the Berkeley Municipal Code (BMC), also known as the Zoning Ordinance, and other City ordinances. The City's Zoning Ordinance and associated Zoning Maps set forth specific zoning districts and codify

[1] The City of Berkeley Housing Element of the General Plan was last updated in April 2015. Unlike other General Plan elements, Berkeley's Housing Element is updated every 8 years, according to requirements of the California Housing and Community Development Department.
[2] City of Berkeley General Plan (2001), p.I-2.

development standards that apply to each district. The City of Berkeley is divided the zoning districts listed in Table 4.10-2.

Table 4.10-2 Berkeley Zoning Districts

Name of District	District Symbol
Residential Districts	
Single-Family Residential	R-1
Limited Two-family Residential	R-1A
Environmental Safety Residential	ES-R
Restricted Two-family Residential	R-2
Restricted Multiple-family Residential	R-2A
Multiple-family Residential	R-3
Multi-family Residential	R-4
High Density Residential	R-5
Residential Southside	R-S
Residential Southside Mixed Use	R-SMU
Residential BART Mixed-Use	R-BMU
Commercial Districts	
Corridor Commercial	C-C
University Avenue Commercial	C-U
Neighborhood Commercial	C-N
Elmwood Commercial	C-E
North Shattuck Commercial	C-NS
South Area Commercial	C-SA
Telegraph Avenue Commercial	C-T
Solano Avenue Commercial	C-SO
Downtown Mixed-Use	C-DMU
West Berkeley Commercial	C-W
Adeline Corridor Commercial	C-AC
Manufacturing District	
Manufacturing	M
Mixed Manufacturing	MM
Mixed Use-Light Industrial	MU-LI
Mixed Use-Residential	MU-R
Special Districts	
Specific Plan	SP
Unclassified	U
Overlay Zones (Two or More Districts)	
Hillside	H
Civic Center	C

Name of District	District Symbol
Overlay Zones (One District)	
Dealership	D
Downtown Arts	DA

Notes: The General Plan land use classifications do not encompass all the current zoning districts since the zoning districts were updated in July 2022 while the General Plan was adopted in 2001.

Source: BMC Section 23.108.020

Table 4.10-3 shows the Zoning Districts and their corresponding General Plan land use classifications.

Table 4.10-3 Zoning District and Corresponding General Plan Land Use Classification

General Plan Land Use Classification	Zoning District
Low Density Residential	R-1, ES-R
Low Medium Density Residential	R-1A, R-2
Medium Density Residential	R-2A, R-3
High Density Residential	R-4, R-5, R-BMU
Neighborhood Commercial	C-N, C-E, C-NS, C-SO, C-SA
Avenue Commercial	C-SA, C-1, C-T, C-W, C-AC
Downtown	C-2, C-1, C-DMU
Manufacturing	M, MM, MU-LI
Mixed-Use Residential	MU-R
Southside Area	R-S, R-SMU

Notes: The General Plan land use classifications do not encompass all the current zoning districts since the zoning districts were updated in July 2022 while the General Plan was adopted in 2001.

Source: City of Berkeley 2001, BMC

City of Berkeley 2015-2023 Housing Element

The City of Berkeley Housing Element serves as the City's framework for housing goals, policies, and detailed programs for meeting existing and future housing needs and for increasing affordable housing opportunities. The current 2015-2023 Housing Element addresses the planning period of January 31, 2015 to January 31, 2023 as required by the State Housing Element Law. The Housing Element guides decisions to facilitate the development, rehabilitation, and availability of housing in Berkeley. Details and policies from the Housing Element are discussed in Section 4.12, *Population and Housing*.

City of Berkeley Climate Action Plan (2009)

Adopted in 2009, the Berkeley Climate Action Plan (CAP) outlines a vision for a more sustainable Berkeley and addresses policies and actions for transportation, energy, waste, community engagement and climate adaptation. Chapter 3, Sustainable Transportation and Land Use, of the CAP presents a vision that “cycling, walking, public transit, and other sustainable modes of transportation become mainstream.” This chapter has a goal to “Increase density along transit corridors” and a policy to “encourage the development of housing (including affordable housing) retail services, and employment centers in areas of Berkeley best served by transit.” Other CAP

goals and policies relevant to the project are discussed in more detail in Section 4.7, *Greenhouse Gas Emissions*.

City of Berkeley Resiliency Strategy

The City's Resiliency Strategy, released in 2016, identifies goals and actions to improve the ability of the community to survive, adapt, and thrive through acute shock or chronic challenges including earthquakes, wildfires, and climate change. The six goals include:

1. Build a Connected and Prepared Community
2. Accelerate Access to Reliable and Clean Energy
3. Adapt to the Changing Climate
4. Advance Racial Equity
5. Excel and Working Together within the City Government to Better Serve the Community
6. Build Regional Resilience

Area Plans

The City of Berkeley has adopted multiple area plans in order to provide guidance for development in each specific area and set forth policies relating to land use, housing, transportation, economic development, community character, and public safety. Area plans include the South Berkeley Area Plan (adopted in 1990), the Downtown Plan (adopted in 1990), the West Berkeley Plan (adopted in 1993), the University Avenue Strategic Plan (adopted in 1996), the South Shattuck Strategic Plan (adopted in 1997), the Southside Plan (adopted in 2011), and the Adeline Corridor Specific Plan (adopted in 2020).

4.10.3 Impact Analysis

a. Methodology and Significance Thresholds

The analysis in this section focuses on environmental impacts from the implementation of the project, as well as consistency with any applicable land use plans, policies, or regulations. The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For purposes of this Program EIR, implementation of the project may have a significant adverse impact if it would do any of the following:

1. Physically divide an established community; or
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The consistency analysis describes existing regional and local plans and policies and is intended to fulfill the requirements of *CEQA Guidelines* Section 15125(d). The emphasis of the analysis is on the project's inconsistency and potential conflicts between the project and existing applicable land use plans adopted for the purpose of avoiding or mitigating an environmental effect, and whether inconsistencies, if any, would result in significant environmental effects. The project is considered consistent with the provisions of the identified regional and local plans if it meets the general intent of the applicable plans and does not conflict with directly applicable policies. A given project need not be in perfect conformity with each and every policy nor does state law require precise conformity of a proposed project with every policy or land use designation. Courts have also

acknowledged that general and specific plans attempt to balance a range of competing interests, and that it is nearly, if not absolutely, impossible for a project to be in perfect conformity with each and every policy set forth in the applicable plan. Additionally, in reaching such consistency conclusions, the City may also consider the consequences of denial of a project, which can also result in other policy inconsistencies. For example, Government Code Section 65589.5 explains that the potential consequences of limiting the approval of housing are reduced mobility, urban sprawl, excessive commuting, and air quality deterioration.

For an impact to be considered significant, an inconsistency would also have to result in a significant adverse change in the environment not already addressed in the other resource chapters of this EIR. The analysis below provides a discussion of the most relevant policies from the various planning documents. However, the City's consistency conclusions are based upon the planning documents as a whole.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project physically divide an established community?

Impact LU-1 THE PROPOSED HEU INCLUDES POLICIES AND PROGRAMS TO ENCOURAGE HOUSING DEVELOPMENT ON UNDERUTILIZED AND VACANT SITES AND ALONG ESTABLISHED COMMERCIAL CORRIDORS AND NEIGHBORHOODS. DEVELOPMENT UNDER THE PROPOSED HEU WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY. NO IMPACT WOULD OCCUR.

The proposed project involves policies and programs that would increase the potential number of dwelling units in the City and intensify development in existing urban areas, but would not result in the construction of barriers, such as new roads or other linear development or infrastructure, that would divide the existing communities or neighborhoods. Short-term construction impacts would be mostly contained within the individual development sites themselves.

No new transportation infrastructure would be built under the proposed HEU. Therefore, existing roadways would not be permanently blocked, and temporary construction would not limit access to a community or restrict movement within a community.

The proposed HEU would not divide a community; rather it is designed to meet the City's RHNA and includes implementation programs that would promote the development of existing vacant, underdeveloped or underutilized properties, thereby locating people closer to existing employment, goods and services within an established community. Furthermore, the proposed project includes Housing Programs with requirements for Affirmatively Furthering Fair Housing (AFFH) that puts a great emphasis on anti-displacement and tenant protection. Specifically, Program 1.5 enforces replacement housing when developing on nonvacant sites with existing residential units pursuant to AB 1397. Additionally, the proposed HEU does not include any new infrastructure, or alteration of existing infrastructure or thoroughfares, that may create physical divisions or boundaries where none currently exist. Therefore, no impact related to dividing an established community would occur.

Mitigation Measure

No impact would occur and no mitigation measures would be required.

Threshold 2:	Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact LU-2 The proposed HEU would be consistent with the goals and policies of Plan Bay Area 2050, the Berkeley General Plan, and the BMC. This impact would be less than significant.

The proposed HEU would provide a framework for introducing new housing at all levels of affordability that is within access to transit, jobs, services, and open spaces. Through its identification of sites for future development and implementation of housing programs, the project would encourage development of up to 19,098 new residential units, which would address the City's fair share housing needs as quantified in the RHNA.

The proposed HEU would also include zoning ordinance and zoning map amendments to change levels of discretion, increase permitted densities, and adjust lot coverage, height and setback standards in the R-1, R-1A, R-2, R-2A, and MU-R districts and in the Southside Plan Area.

The following analysis discusses the project's consistency with relevant and applicable plans and regulations, including Plan Bay Area 2050 and the City of Berkeley General Plan. Consistency with Plan Bay Area is presented in Table 4.10-4, and consistency with the General Plan is presented in Table 4.10-5. The project is determined to be either "consistent" or "inconsistent" with the identified goals and policies.

Plan Bay Area 2050

As shown in Table 4.10-4, the project would be consistent with the key goals and strategies of Plan Bay Area 2050. Therefore, the project would not conflict with Plan Bay Area 2050 and impacts would be less than significant.

Table 4.10-4 Project Consistency with Plan Bay Area 2050

Measure	Proposed HEU Project Consistency
Housing. Spur Housing Production for Residents of all Income Levels	
H1. Further strengthen renter protections beyond state law. Building upon recent tenant protection laws, limit annual rent increases to the rate of inflation, while exempting units less than 10 years old.	**Consistent.** The HEU analyzes housing needs for present and future residents. The City's Regional Housing Needs Assessment (RHNA) allocation is 8,934 units, which are distributed across over four income levels. The units would be distributed as is over the four income levels: 2,446 very low units, 1,408 low units, 1,416 moderate units, and 3,664 above moderate units. The allocation described would be protected and not altered. Furthermore, Policies H-3, H-5 and H-9 of the proposed Housing Element Update serves to ensure rent stabilization, ensure below market rate rental housing remains affordable, and preserve existing rental housing.
H2. Preserve existing affordable housing. Acquire homes currently affordable to low and middle-income residents for preservation as permanently deed-restricted affordable housing. **H4. Build adequate affordable housing to ensure homes for all**. Construct enough deed-restricted affordable homes to fill the existing gap in housing for the unhoused community and to meet the needs of low-income households.	**Consistent**. As described above, the Housing Element Update is required to provide 2,446 very low-income units, 1,408 low-income units, 1,416 moderate-income units. The affordable housing would be preserved for these income levels. HEU Goal D Special Needs Housing and Homelessness Prevention and policies under this goal would ensure housing affordability in Berkeley especially for people at the lowest income levels.

Measure	Proposed HEU Project Consistency
H3. Allow a greater mix of housing densities and types in Growth Geographies. Allow a variety of housing types at a range of densities to be built in Priority Development Areas, select Transit-Rich Areas and Select High-Resource Areas.	**Consistent.** As shown in Figure 2-4 of the Project Description (Housing Element Update Sites Inventory Locations), most of the housing inventory sites are generally located in areas near major transportation corridors such as Shattuck Avenue, Cedar Street, and San Pablo Avenue, and near existing residential and commercial development. Additionally, the project would encourage development in the Southside and in other areas throughout the City which are in transit-accessible Priority Development Areas (PDAs). HEU Policy H-17 also aims to promote transit-oriented new construction and encourage construction of new high-density housing on major transit corridors in proximity to transit stations.
H5. Integrate affordable housing into all major housing projects. Require a baseline of 10-20% of new market-rate housing developments of five units or more to be affordable to low-income households.	**Consistent**. Pursuant with the Ordinance Number 936, *Inclusionary Housing*, and Chapter 23C.12 of the BMC, the City requires that all new rental housing with five or more units must provide 20 percent of the units as below market rate units or pay the Affordable Housing Mitigation Fee or provide some below market rate units and pay a prorated fee. Of the 20 percent below market rate units, half must be provided to low-income households, and half must be provided to very-low income households (City of Berkeley 2022). Additionally, HEU Goal A Affordable Housing aims to ensure Berkeley residents have access to quality housing at a range of housing options and prices.
EN4. Maintain urban growth boundaries. Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions.	**Consistent.** The project would facilitate development of housing on vacant and/or underutilized sites mostly in urbanized areas of the City which would reduce pressure to develop open space areas. By placing residents close to jobs and alternative methods of transportation, the project would reduce greenhouse gas emissions and other criteria pollutants associated with vehicle use to help communities stay healthy and safe.

Source: ABAG 2021

City of Berkeley General Plan

As shown in Table 4.10-5, the project would be consistent with the goals, policies, and actions within the General Plan. As noted under Government Code Section 65589.5(a), the Legislature has concluded that "the lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." More specifically, the Legislature's stated intent is "to assure that counties and cities recognize their responsibilities in contributing to the attainment of the state housing goal…to assure that counties and cities will prepare and implement housing elements which…will move toward attainment of the state housing goal" (Government Code Section 65581). The project would help meet the City's RHNA allocation, as well as efficiently utilize vacant, underutilized, and underdeveloped lots within the City to increase the supply of housing. The project would encourage development of housing, which is supportive of the City's goal and policies.

Table 4.10-5 Project Consistency with Relevant General Plan Goals and Policies

General Plan Policy	Proposed HEU Project Consistency
Land Use Element	
Maintain and Preserve the Character of Berkeley	
Policy LU-3 Infill Development. Encourage infill development that is architecturally and environmentally sensitive, embodies principles of sustainable planning and construction, and is compatible with neighboring land uses and architectural design and scale. **Policy LU-7 Neighborhood Quality of Life.** Preserve and protect the quality of life in Berkeley's residential areas through careful land use decisions.	**Consistent.** The proposed project would facilitate infill development on underutilized sites in order to increase density to accommodate a higher number of residents. Individual future projects would be subject to the City's existing general development standards (BMC Chapter 23.304) to ensure that buildings are compatible with neighboring land uses and architectural design and scale. Additionally, future development with two or more units would be required to comply with the City's proposed set of objective development standards which are anticipated to be adopted in Spring 2023. The objective development standards are tailored to streamline approval of housing projects under the HEU by providing a clear and consistent set of review rules and processes. Examples of standards that the City will define include building height, set back distances, and units allowed per acre. This would ensure that future development is compatible with the character and scale of Berkeley according to the City's standards (City of Berkeley 2022).
Policy LU-4 Discretionary Review. Preserve and enhance the aesthetic, environmental, economic, and social character of Berkeley through careful land use and design review decisions.	**Consistent**. Future development would be required to comply with General Plan land use and design policies, and future discretionary review would be required for applicable projects.
Maintain and Enhance Berkeley's Residential Areas	
Policy LU-9 Non-Residential Traffic. Minimize or eliminate traffic impacts on residential areas from institutional and commercial uses through careful land use decisions.	**Consistent**. The proposed project would mostly facilitate development within or adjacent to transportation corridors in proximity to BART stations and bus stations. As discussed in Section 4.14, *Transportation,* the proposed project would not result in unavoidably significant transportation impacts. HEU Policy H-16 would encourage transit-oriented development and would reduce vehicle miles traveled (VMT).
Policy LU-11 Pedestrian- and Bicycle-Friendly Neighborhoods. Ensure that neighborhoods are pedestrian- and bicycle-friendly with well-maintained streets, street trees, sidewalks, and pathways.	**Consistent**. Future development would be required to comply with residential bicycle parking standards pursuant to BMC Section 23.322.090. Implementation of the HEU would not interfere or conflict with the City's pedestrian or bicycle network.
Maintain and Enhance Berkeley's Commercial Areas and the Downtown	
Policy LU-23 Transit-Oriented Development. Encourage and maintain zoning that allows greater commercial and residential density and reduced residential parking requirements in areas with above-average transit service such as Downtown Berkeley.	**Consistent**. **Policy H-16** of the Housing Element Update would encourage construction of new high-density housing on major transit corridors and in proximity to transit stations. Development at the North Berkeley and Ashby BART stations in particular would be transit-oriented development which would allow residents to easily access the BART and reduce the need for/usage of single-occupancy vehicles. Pursuant to Chapter 23.334 of the BMC, developments that provide more affordable housing than required and/or a robust Transportation Demand Management Plan would be able to reduce their parking supply.

General Plan Policy	Proposed HEU Project Consistency
Policy LU-27 Avenue Commercial Areas. Maintain and improve Avenue Commercial areas, such as University, San Pablo, Telegraph, and South Shattuck, as pedestrian-friendly, visually attractive areas of pedestrian scale and ensure that Avenue areas fully serve neighborhood needs as well as a broader spectrum of needs.	**Consistent**. The proposed project would facilitate most development near Avenue Commercial areas such as Shattuck Avenue, San Pablo Avenue, and University Avenue. Future development with two or more units would be required to comply with the City's proposed set of objective development standards, which are anticipated to be adopted in Spring 2023. The objective development standards are tailored to streamline approval of housing projects under the HEU by providing a clear and consistent set of review rules and processes. Examples of standards that the City will define include building height, set back distances, and units allowed per acre. This would ensure that future development is compatible with the character and scale of Berkeley according to the City's standards (City of Berkeley 2022).
Policy LU-32 Ashby BART Station. Encourage affordable housing or mixed-use development including housing on the air rights above the Ashby BART station and parking lot west of Adeline Street.	**Consistent**. The sites inventory for the proposed project currently assumes that 1,200 units from the Ashby and North Berkeley BART Station TOD project would be permitted under the Housing Element Update term from 2023-2031.
Transportation Element	
Automobile Use Reduction	
Policy T-10 Trip Reduction. To reduce automobile traffic and congestion and increase transit use and alternative modes in Berkeley, support, and when appropriate require, programs to encourage Berkeley citizens and commuters to reduce automobile trips, such as: 1. Participation in a citywide Eco-Pass Program (also see Transportation Policy T-3). 2. Participation in the Commuter Check Program. 3. Carpooling and provision of carpool parking and other necessary facilities. 4. Telecommuting programs. 5. "Free bicycle" programs and electric bicycle programs. 6. "Car-sharing" programs. 7. Use of pedal-cab, bicycle delivery services, and other delivery services. 8. Programs to encourage neighborhood-level initiatives to reduce traffic by encouraging residents to combine trips, carpool, telecommute, reduce the number of cars owned, shop locally, and use alternative modes. 9. Programs to reward Berkeley citizens and neighborhoods that can document reduced car use. 10. Limitations on the supply of long-term commuter parking and elimination of subsidies for commuter parking. 11. No-fare shopper shuttles connecting all shopping districts throughout the city.	**Consistent**. As shown in Figure 2-4 of the Project Description (Housing Element Update Sites Inventory Locations), most of the housing inventory sites are generally located in areas near major transportation corridors such as Shattuck Avenue, Cedar Street, and San Pablo Avenue, and near existing residential and commercial development. Additionally, the project would encourage development in the Southside and in other areas of the City which are in transit-accessible PDAs. HEU Policy H-16 also aims to promote transit-oriented new construction and encourage construction of new high-density housing on major transit corridors in proximity to transit stations. As discussed in Section 4.14, *Transportation,* the proposed HEU is estimated to reduce the vehicle miles traveled (VMT) per service population by an estimated seven percent compared to 2040 buildout conditions without the project.

General Plan Policy	Proposed HEU Project Consistency
Urban Design & Preservation	
Protection of Existing Resources	
Policy UD-3 Regulation of Neighborhood Character. Use regulations to protect the character of neighborhoods and districts, and respect the particular conditions of each area.	**Consistent**. Individual future projects would be subject to the City's existing general development standards (BMC Chapter 23.304) to ensure that buildings are compatible with neighboring land uses and architectural design and scale. Additionally, future development with two or more units would be required to comply with the City's proposed set of objective development standards, which are anticipated to be adopted in Spring 2023. The objective standards are tailored to streamline approval of housing projects under the HEU by providing a clear and consistent set of review rules and processes. Examples of standards that the City will define include building height, set back distances, and units allowed per acre. This would ensure that future development is compatible with the character and scale of Berkeley according to the City's standards (City of Berkeley 2022).
New Construction and Alterations	
Policy UD-24 Area Character. Regulate new construction and alterations to ensure that they are truly compatible with and, where feasible, reinforce the desirable design characteristics of the particular area they are in.	**Consistent**. Individual future projects would be subject to the City's existing general development standards (BMC Chapter 23.304) to ensure that buildings are compatible with neighboring land uses and architectural design and scale. Additionally, future development with two or more units would be required to comply with the City's proposed set of objective development standards which are anticipated to be adopted in Spring 2023. The objective standards are tailored to streamline approval of housing projects under the HEU by providing a clear and consistent set of review rules and processes. Examples of standards that the City will define include building height, set back distances, and units allowed per acre. This would ensure that future development is compatible with the character and scale of Berkeley according to the City's standards (City of Berkeley 2022).
Policy UD-33 Sustainable Design. Promote environmentally sensitive and sustainable design in new buildings.	**Consistent.** As discussed in Section 4.5, *Energy*, and Section 4.7, *Greenhouse Gas Emissions,* **f**uture development projects would be required to be constructed in accordance with the latest iteration of CALGreen and the California Energy Code, which include requirements for environmentally sensitive and sustainable design practices. In addition, new construction would be required to be all-electric per the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources.

BMC Consistency

As current zoning would not be able to deliver the level of deed-restricted affordable housing and economic and geographic diversity that the project aims to achieve, the Housing Element Update would contain implementation programs and zoning policies in order to encourage additional housing, especially affordable housing that would support a diversity of income levels and household types. Additionally, under the Housing Element Update, R-1, R-1A, R-2, R-2A, and MU-R districts are anticipated to increase in density in order to facilitate increased development in lower density districts. The City is also pursuing the following zoning modifications under the proposed Southside zoning modifications in order to increase housing capacity and production in the

Southside: building heights, building footprints (including setbacks and lot coverage), parking, ground-floor residential use, and adjustments to the existing zoning district boundaries. This would result in increased height and lot coverage zoning standards in Southside Plan Area. All future development under the project would be required to comply with zoning requirements for residential uses as described in Title 24, *Zoning*, of the BMC.

Upon adoption of the proposed Housing Element Update and the associated zoning and General Plan amendments, the project would comply with the land use requirements set forth by ABAG's Plan Bay Area 2050, the Berkeley General Plan, and the BMC, and therefore, would not result in adverse physical land use impacts.

Mitigation Measures

This impact would be less than significant. No mitigation measures would be required.

c. Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative land use and planning impacts includes the geographic area of the City of Berkeley. Development that is considered part of the cumulative analysis includes buildout of the City's General Plan as well as development proposed under the University of California, Berkeley's Long Range Development Plan (LRDP) and Housing Projects #1 and #2 as described in the Draft EIR dated March 8, 2021 (University of California, Berkeley 2021).

Development under the proposed project would not physically divide an established community, would not result in the introduction of new land uses that would conflict with existing land uses, and would be generally consistent with the City's General Plan goals and policies intended to encourage transit-oriented and sustainable development while protecting the character of the neighborhood. Land use and policy consistency impacts associated with buildout of the City's General Plan would be addressed on a case-by-case basis to determine consistency with applicable plans and policies, except for development under the University of California, Berkeley's (LRDP) which would be subject to their own review process. Development under the LRDP would not be cumulatively significant since land use impacts are site specific. Since other planned projects would be required to be consistent with the General Plan, they would implement the City's vision for Berkeley. These projects would generally reduce motor vehicle trips, trip lengths, and associated environmental impacts by being constructed near transit, jobs, services, and open spaces. Because the project's impacts related to land use compatibility and consistency with local plans and goals would be less than significant, the project's contribution to cumulative land use impacts would be less than significant.

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4.11 Noise

This section evaluates noise and groundborne vibration impacts resulting from the construction and operation of new housing development accommodated by the proposed Housing Element Update. Topics addressed consist of short-term construction and long-term operational noise and vibration, including the exposure of noise-sensitive receivers to substantial or incompatible noise levels. Noise modeling results and the vibration calculations associated with the analysis herein are included in Appendix G.

4.11.1 Setting

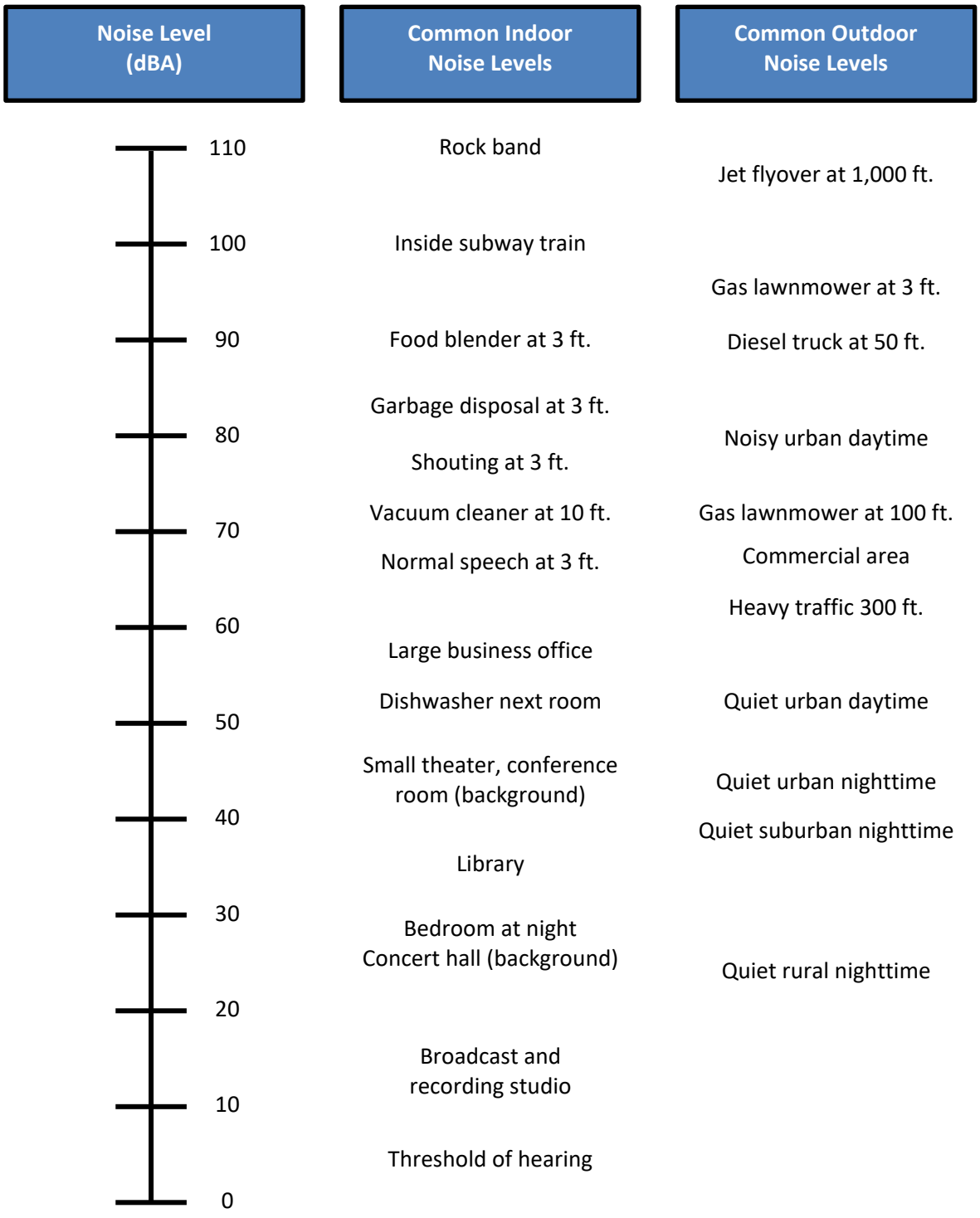
a. Fundamentals of Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Crocker 2007). Common outdoor and indoor noise sources and their typical corresponding A-weighted noise levels are shown in Figure 4.11-1.

Human perception of noise has no simple correlation with sound energy. The perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive an increase (or decrease) of up to 3 dBA in noise levels (i.e., twice [or half] the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (10.5 times the sound energy) (Crocker 2007).

Figure 4.11-1 Examples of Typical Noise Levels



Source: Caltrans 2013

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in sound level as the distance from the source increases. The manner by which noise declines with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, ventilation units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result simply from the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013).

Noise levels may also be reduced by intervening structures. The amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5 dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce occupants' exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs, its frequency, and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed.

One of the most frequently used noise metrics that considers both duration and intensity is the equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, L_{eq} is equivalent to a one-hour period, even when measured for shorter durations as the noise level of a 10- to 30-minute period would be the same as the hour if the noise source is relatively steady. L_{max} is the highest Root Mean Squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period (Crocker 2007). Normal conversational levels at three feet are in the 60- to 65-dBA L_{eq} range and ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (L_{dn} or DNL), which is a 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by DNL and CNEL usually differ by about 0.5 dBA. Quiet suburban areas typically have a CNEL in the range of 40 to 50 dBA, while areas near arterial streets are typically in the 50 to 70+ CNEL range.

Propagation

Sound from a small, localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of approximately 6 dBA for each doubling of distance.

Traffic noise is not a single, stationary point source of sound. Rather, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is approximately 3 dBA for each doubling of distance.

b. Fundamentals of Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of hertz (Hz). The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Descriptors

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in./sec.). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

Response to Vibration

Vibration associated with construction has the potential to be an annoyance to nearby land uses. Caltrans has developed limits for the assessment of vibrations from transportation and construction sources. The Caltrans vibration limits are reflective of standard practice for analyzing vibration impacts. As shown in Table 4.11-1 and Table 4.11-2, the Caltrans *Transportation and Construction Vibration Guidance Manual* (2020) identifies guideline impact criteria for damage to buildings and additional impact criteria for annoyance to humans from transient and continuous/frequent sources.

Table 4.11-1 Building Vibration Damage Potential

Structure and Condition	Maximum PPV (in./sec.)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient mountains	0.12	0.08
Fragile buildings	0.20	0.10
Historic and similar old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls (i.e., a loose steel ball that is dropped onto structures or rock to reduce them to a manageable size). Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV = peak particle velocity; in./sec. = inches per second

Source: Caltrans 2020

Table 4.11-2 Vibration Annoyance Potential

Human Response	Maximum PPV (in./sec.)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severe	2.00	0.40

Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls (i.e., a loose steel ball that is dropped onto structures or rock to reduce them to a manageable size). Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV = peak particle velocity; in./sec. = inches per second

Source: Caltrans 2020

Propagation

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Variability in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is exposed to vibration, a ground-to-foundation coupling loss (the loss that occurs when energy is transferred from one medium to another) will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may amplify the vibration level due to structural resonances of the floors and walls.

c. Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. According to the Berkeley General Plan Environmental Management Element, noise-sensitive uses include but are not limited to residences, child-care centers, hospitals, and nursing homes (City of Berkeley 2001).

Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as hospitals, schools, and churches. However, vibration-sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studios or medical facilities with sensitive equipment). Other features that may have particular sensitivity to groundborne vibration include historic sites and structures. According to the Land Use Element of the City's General Plan, 48 percent of the City is comprised of residential land uses (City of Berkeley 2002). Other sensitive receivers consist of recreational uses (e.g., parks and sensitive wildlife habitat) and institutional uses (e.g., schools, child-care centers, and hospitals). In addition, refer to Section 4.4, *Cultural Resources*, for a discussion of historic properties in the City that may be particularly sensitive to increases in groundborne vibration levels.

d. Existing Conditions

Noise Sources

According to the Berkeley General Plan Environmental Management Element, the most prevalent noise sources in Berkeley are from cars, trucks, buses, trains, industrial plant equipment noise, and activities associated with neighborhoods and schools such as lawn mowing and leaf blowing and children playing. Noise sources related to heavy manufacturing, located mainly in industrialized areas located in West Berkeley, were once a more dominant contributor to the noise environment. However, the West Berkeley Plan, adopted in 1993, has developed more stringent environmental review and regulation, including the mitigation of noise through both industrial and residential measures (City of Berkeley 2002).

As shown in Figure 4.11-1, noisy urban areas or commercial areas (e.g., commercial districts with major arterial roadways and transit routes) can commonly reach noise levels between 60 dBA L_{eq} and 80 dBA L_{eq} during the daytime, whereas a common outdoor noise level associated with a quiet urban area (e.g., residential neighborhood with local or collector streets) is 50 dBA L_{eq} during the daytime. These noise levels typically decrease during nighttime hours as traffic activity slows, such that quiet urban areas commonly experience nighttime noise levels of 40 dBA L_{eq}.

A review of sound measurements collected for recent CEQA documents in Berkeley provides a sample of the varied ambient sound conditions in Berkeley and is displayed in Table 4.11-3. Measured noise levels ranged from 53.3 to 74.7 dBA L_{eq}. These measured ambient noise levels in Berkeley are consistent with the values presented in Figure 4.11-1.

Table 4.11-3 Noise Measurements

Noise Measurement Location	Time Period	Date	dBA L_{eq} Range
North Berkeley [1]	10:14 AM – 12:21 PM	February 26, 2021	53.3 – 65.4
Blake Street[2]	7:02 AM – 8:00 AM	September 10, 2020	54.4 – 61.4
South Berkeley [3]	12:19 PM – 3:15 PM	September 15, 2020	57.1 – 65.9
Adeline Corridor Specific Plan[4]	7:45 AM – 8:45 AM	November 6, 2018	67.6 – 74.7

[1] See Chapter 4.8, Table 4.8-2 of Ashby and North Berkeley BART Stations Transit-Oriented Development Zoning Project Draft EIR

[2] See Section 12, Table 23 of 2015 Blake Street Residential Project Draft IS

[3] See Chapter 4.6, Table 4.6-2 of Southside Zoning Ordinance Amendments Project Draft EIR

[4] See Chapter 4.9, Table 4.9-1 of Adeline Corridor Specific Plan Draft EIR

Vibration Sources

Sources of vibration in the city, similar to that of the noise environment, are also primarily motor vehicles along roadways. Like mobile-source noises, vibration by vehicular movement generally affects numerous receivers along lengths of roadways and depends on pavement and type and weight of the vehicle. Vibration may also be generated by construction equipment (e.g., earth-moving equipment and pile driving); however, these sources are temporary and vary on a project-by-project basis. More permanent, but intermittent, vibration may also be generated by railroad and airport operations, which would affect communities adjacent to these facilities. In addition, commercial or industrial activities may generate vibration from the use of heavy equipment (e.g., businesses that recycle construction debris).

4.11.2 Regulatory Setting

a. Federal Regulations

Occupational Safety and Health Act of 1970

Under the Occupational Safety and Health Act of 1970, the Occupational Safety and Health Administration (OSHA) has adopted regulations designed to protect workers against the effects of occupational noise exposure. These regulations list permissible noise level exposure as a function of the amount of time during which the worker is exposed. The regulations further specify a hearing conservation program that involves monitoring noise to which workers are exposed, ensuring that workers are made aware of overexposure to noise, and periodically testing the workers' hearing to detect any degradation.

b. State Regulations

California Building Code, Title 24, Part 2, Section 1206.4

According to the 2019 California Building Code (CBC), Title 24, Part 2, Section 1206.4 (Allowable Interior Noise Levels) of the California Code of Regulations, interior noise levels attributable to exterior sources shall not exceed 45 CNEL in any habitable room. A habitable room is typically a residential room used for living, sleeping, eating, or cooking. Bathrooms, closets, hallways, utility spaces, and similar areas are not considered habitable rooms for this regulation.

California Department of Transportation

As discussed in the *Environmental Setting* of this section, Caltrans has developed limits for the assessment of vibration from transportation and construction sources, which are reflective of standard practice for analyzing vibration impacts. Table 4.11-1 presents the impact criteria for structural damage to buildings and Table 4.11-2 presents the criteria for annoyance to humans. The State noise and vibration guidelines are to be used as guidance with respect to planning for noise, not standards and/or regulations to which the City of Berkeley must adhere.

c. Local Regulations

Berkeley General Plan Environmental Management Element

The Berkeley General Plan Environmental Management Element is intended to identify sources of potential environmental hazards including noise and provide goals, objectives, and policies that ensure that noise from various sources, including transportation and stationary sources, does not create an unacceptable noise environment. Furthermore, the following actions and policies from the General Plan Environmental Management Element are relative to the proposed Housing Element Update (City of Berkeley 2002):

> **Action EM-43: Noise Reduction.** Reduce significant noise levels and minimize new sources of noise.
>
> A. Increase enforcement of the Noise Ordinance to reduce noise impacts.
> B. Consider improvements to the Noise Ordinance to improve the City's ability to reduce noise impacts.
> C. Promote increased public awareness concerning the negative effects of excessive noise on humans.

Policy EM-44: Noise Prevention and Elimination. Protect public health and welfare by eliminating existing noise problems where feasible and by preventing significant future degradation of the acoustic environment.

A. Incorporate noise considerations into land use planning decisions.
B. Ensure the effective enforcement of City, State, and Federal noise levels by appropriate City departments.
C. Coordinate with the California Occupational Safety and Health Administration (Cal-OSHA) to provide information on and enforcement of occupational noise requirements within the City of Berkeley.
D. Support Federal and State legislation to lower allowable noise level on all motor vehicles.

Policy EM-45: Traffic Noise. Work with local and regional agencies to reduce local and regional traffic, which is the single largest source of unacceptable noise in the city.

A. Encourage neighborhood traffic calming strategies that cause motorists to slow down and decrease noise levels in all residential areas. (Also see Transportation Policy T-20.)
B. Through the taxi permit process, restrict taxis and shuttles from honking in neighborhoods.
C. Minimize potential transportation noise through proper design of street circulation, coordination of routing, and other traffic control measures.
D. Promote and encourage new vehicle technologies to reduce transportation noise levels.
E. Construct a noise barrier for Aquatic Park. (Also see Open Space and Recreation Policy OS-8.)
F. Enforce muffler laws.
G. Work with AC Transit to reduce bus noise. (Also see Transportation Policy T-2.)
H. Establish noise emission limits on City public works projects and vehicles, such as refuse collection trucks, and work with other large institutions in the city, such as BUSD, to reduce vehicle noise emissions.

Policy EM-46: Noise Mitigation. Require operational limitations and all feasible noise buffering for new uses that generate significant noise impacts near residential, institutional, or recreational uses.

A. Promote use of noise insulation materials in new construction and major rehabilitation.

B. Mitigate significant noise impacts on parks and public open space, whenever feasible. (Also see Open Space and Recreation Policy OS-12.)

Action EM-47: Land Use Compatibility. Ensure that noise-sensitive uses, including, but not limited to, residences, child-care centers, hospitals and nursing homes, are protected from detrimental noise levels.

A. Noise sensitive development proposals should be reviewed with respect to the Land Use Compatibility Guidelines below.

City of Berkeley Municipal Code

The City's noise standards, found in Chapter 13, Section 40 (Community Noise) of the City of Berkeley Municipal Code (BMC), set forth hours of operation for certain activities and standards for determining when noise is deemed to be a disturbance.

As shown in Table 4.11-4, the City has adopted land use compatibility standards for use in assessing the compatibility of various land use types that are exposed to noise levels. According to the City's standards shown in Table 4.11-4, ambient noise up to 60 dBA L_{dn} is normally acceptable for low density residences whereas ambient noise up to 65 dBA L_{dn} is normally acceptable for medium density residences. These standards also establish maximum interior noise levels for new residential development, requiring that sufficient insulation be provided to reduce interior ambient noise levels to 45 dBA L_{dn} (City of Berkeley 2022).

Table 4.11-4 Recommended Maximum Noise Levels

Land Use Category	Time Period	Exterior Normally Acceptable [3] (dBA L_{dn})	Exterior Normally Unacceptable (dBA L_{dn})	Interior Acceptable (dBA L_{dn})
Low Density Residential [1]	10:00 p.m. – 7:00 a.m. 7:00 a.m. – 10:00 p.m.	55 45	Above 55 Above 45	40 45
Medium Density Residential [2]	10:00 p.m. – 7:00 a.m. 7:00 a.m. – 10:00 p.m.	60 55	Above 60 Above 55	40 45
Commercial	10:00 p.m. – 7:00 a.m. 7:00 a.m. – 10:00 p.m.	65 60	Above 65 Above 60	40 45
Industry	10:00 p.m. – 7:00 a.m. 7:00 a.m. – 10:00 p.m.	70	Above 70	40 45

[1] Low density consists of the following zoning districts: R-1, R-2, R-1A, R-2A, and ESR.

[2] Medium density includes R-3 and above.

[3] Levels not to be exceeded more than 30 minutes any hour

Source: City of Berkeley 2022

Furthermore, Section 13.40.030 of the City Code declares that loud, unnecessary, and unusual noise is a nuisance and is unlawful. The criteria for determining whether a nuisance exists includes the ambient noise level, the sound level of the objectionable noise, the intensity of the noise, whether

the noise is continuous or intermittent, the duration and tonal content of the noise, the proximity of the noise to sleeping facilities, the zoning of the area, and the nature of the source. The Code specifically prohibits construction noise between 7:00 p.m. to 7:00 a.m. on weekdays and 8:00 p.m. to 9:00 a.m. on weekends and legal holidays.

There may be instances, especially in existing older buildings, where compliance with noise standards set forth in the BMC may not be economically or technically feasible, and therefore, the Environmental Health Director may grant administrative exceptions to those standards on a case by-case basis after balancing the number of decibels and the amount of time the offending noise exceeds the allowed limit, the number of persons affected, and the cost of reducing the decibels or amount of time to come into compliance with this chapter. Such determination may be appealed to the City Manager within 30 days of the decision.

4.11.3 Impact Analysis

a. Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the proposed Housing Element Update's noise and vibration impacts would be significant if it would:

1. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
2. Generate excessive groundborne vibration or groundborne noise levels; or
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

The following discussion identifies specific thresholds used to analyze the general CEQA thresholds listed above.

Construction Noise Thresholds

As described under Section 4.11.2, *Regulatory Framework*, Section 13.40.030 of the BMC restricts construction hours to not occur during nighttime hours between 7:00 p.m. and 7:00 a.m. Monday through Friday, or between 8:00 p.m. and 9:00 a.m. on weekends. The City does not establish construction noise level limits during these periods. In the absence of applicable local noise level limits, this analysis references guidance from the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* to establish a quantified threshold against which to assess the impact of construction noise (FTA 2018); FTA recommends that reasonable noise criteria may include those shown in Table 4.11-5. Construction noise would be significant if it exceeded this noise criteria.

Table 4.11-5 Construction Noise Criteria

Land Use	Daytime L_{eq} (8-hour)	Nighttime L_{eq} (8-hour)
Residential	80	70
Commercial	85	85
Industrial	90	90

Source: FTA 2018

Operational Noise Thresholds

The City has adopted noise standards in the BMC that regulate on-site operational noise sources. The proposed Housing Element Update would result in a significant impact if the accommodated 19,553 housing units generate noise from on-site sources in excess of BMC standards included in Chapter 13, (as described under Section 4.11.2, *Regulatory Framework*), which collectively regulate noise from operations that are typical to residential uses (e.g., sound-amplifying devices, HVAC equipment, lawn maintenance equipment, hand tools, wheeled equipment, outdoor activities).

Off-site operational noise (i.e., roadway noise) would result in a significant impact if housing development accommodated under the proposed Housing Element Update would cause the ambient noise level measured at the property line of affected uses to increase by 3 dBA, which would be a barely perceptible increase in traffic noise.

Land Use Compatibility Thresholds

According to the City's land use compatibility standards shown in Table 4.11-4, ambient noise up to 60 dBA L_{dn} is normally acceptable for low density residences whereas ambient noise up to 65 dBA L_{dn} is normally acceptable for medium density residences. In addition, ambient noise up to 70 dBA L_{dn} is potentially acceptable to residences. These standards also establish maximum interior noise levels for new residential development, requiring that enough insulation be provided to reduce interior ambient noise levels to 45 dBA L_{dn} (City of Berkeley 2022).

Groundborne Vibration Thresholds

The City has not adopted a significance threshold to assess vibration impacts during construction and operation. Therefore, the Caltrans *Transportation and Construction Vibration Guidance Manual* (2020) is used to evaluate potential construction vibration impacts related to both potential building damage and human annoyance. Construction vibration impacts from housing development would be significant if vibration levels exceed the Caltrans criteria shown in Table 4.11-1 and Table 4.11-2. For example, impacts would be significant if vibration levels exceed 0.5 in./sec. PPV for residential structures and 2.0 in./sec. PPV for commercial structures, which is the limit where minor cosmetic (i.e., non-structural) damage may occur to these buildings. Construction vibration impacts would also be significant if vibration levels exceed 0.12 in./sec. PPV for extremely fragile historic buildings, as shown in Table 4.11-1. In addition, construction vibration impacts would cause significant human annoyance at nearby receivers if vibration levels exceed 0.25 in./sec. PPV, which is the limit where vibration becomes distinctly perceptible.

b. Methodology

As discussed in Section 2, *Project Description*, the proposed Housing Element Update is a plan to accommodate forecasted growth and existing and future need for housing. The following discussion describes the methodology, including models, used to evaluate the significance of potential noise and vibration impacts related to the forecasted construction and operation of 19,097 housing units accommodated by the proposed Housing Element Update, particularly for construction noise, on-site and off-site operational noise, and construction vibration.

Construction Noise

The primary source of temporary noise associated with the proposed Housing Element Update would be construction activities associated with accommodated housing development. Construction

equipment can be considered to operate in two modes: stationary and mobile. Stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around a construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Each phase of construction has its own noise characteristics due to specific equipment mixes; some will have higher continuous noise levels than others and some may have high-impact intermittent noise levels (FTA 2018). Therefore, construction noise levels may fluctuate depending on the type of equipment being used, construction phase, or equipment location. In typical construction projects on vacant sites, grading activities typically generate the highest noise levels because grading involves the largest equipment and covers the greatest area. Foundation excavation and construction is often the second loudest phase, followed by paving and building construction.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle, or percent of operational time, of the activity to determine the L_{eq} of the operation (FTA 2018).

For assessment purposes, noise levels for common construction equipment provided in the FTA *Transit Noise and Vibration Impact Assessment* (2018) guidance document were used to analyze potential noise levels associated with future development under the proposed Housing Element Update. The FTA provides typical noise levels at 50 feet from various types of equipment. Construction noise was also estimated using the FHWA's Roadway Construction Noise Model (RCNM) (2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at a distance of 50 feet from future development. Model results are included in Appendix F.

On-site Operational Noise

The primary on-site noise sources associated with operation of housing developments, including in mixed use developments, and those discussed in this analysis, would include noise from stationary heating, ventilation, and air conditioning (HVAC) equipment, on-site vehicle movement (e.g., delivery and trash hauling), and outdoor activities. Analysis of outdoor activity considers the existing noise environment and refers to regulations included in the City's noise ordinance (i.e., Chapter 13) and the General Plan Environmental Management Element.

Specific planning data for HVAC systems are not available at this stage of analysis; however, for a reasonable assessment, specification for a typical to larger-sized residential condenser was used to determine project HVAC noise. The unit used for this analysis is a Carrier 38HDR060 split system condenser. The manufacturer's noise data lists the unit as having a sound power level of 72 dBA (Carrier 2011).

Off-site Operational Noise

Housing development accommodated under the proposed Housing Element Update would generate motor vehicle trips, thereby increasing off-site traffic on area roadways. Traffic noise impacts are analyzed based on data from the *Vehicle Miles Traveled (VMT) Impact Assessment Memorandum* prepared by Kittelson & Associates in June 2022, which is included as Appendix G. The overall increase in traffic noise was estimated using VMT data from the Transportation Assessment for existing conditions (Year 2020future without project conditions (i.e., Year 2031 without the

proposed Housing Element Update), and future with project conditions (i.e., Year 2031 with the proposed Housing Element Update). Residential development under the proposed Housing Element Update would generate vehicle trips, thereby increasing traffic on area roadways.

Groundborne Vibration

Operation of housing development accommodated by the proposed Housing Element Update would not include substantial vibration sources (e.g., use of heavy equipment). Rather, construction activities would have the greatest potential to generate groundborne vibration affecting sensitive receivers and/or structures adjacent to a construction site, especially during grading and when a site is located near a historic site or structure. As discussed in Section 4.4, *Cultural Resources*, there are several historic districts in Berkeley. Three housing inventory sites are known as of the date of this report to contain properties which are listed in, or eligible for the NRHP, CRHR, or designated City of Berkeley Landmarks, and therefore are considered historical resources pursuant to *CEQA Guidelines* Section 15064.5(a).

A quantitative assessment of potential vibration impacts from construction activities was conducted using equations developed by Caltrans (Caltrans 2020). Table 4.11-6 shows typical vibration levels for various pieces of construction equipment used in the construction vibration assessment.

Table 4.11-6 Typical Vibration Levels for Construction Equipment

Equipment	PPV (in./sec.) at 25 Feet
Pile Driver (Impact)	0.644
Pile Driver (Sonic)	0.170
Vibratory Roller	0.210
Hoe Ram	0.089
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Truck	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Sources: FTA 2018; Caltrans 2020

Because groundborne vibration could cause physical damage to structures and is measured in an instantaneous period, vibration impacts are typically modeled based on the distance from the location of vibration-intensive construction activities, which is conservatively assumed to be edge of a project site, to the edge of the nearest off-site structures. For assessment purposes, vibration levels for the construction equipment shown in Table 4.11-6 were modeled at various incremental distances between 25 feet and 100 feet to analyze potential vibration levels associated with future development under the proposed Housing Element Update. Vibration calculations are included in Appendix G to this EIR.

c. Project Impacts and Mitigation Measures

Threshold 1:	Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact NOI-1 CONSTRUCTION ASSOCIATED WITH HOUSING DEVELOPMENT ACCOMMODATED UNDER THE PROPOSED HEU WOULD BE REQUIRED TO COMPLY WITH THE ALLOWED DAYTIME CONSTRUCTION HOURS AS SET FORTH IN THE BERKELEY MUNICIPAL CODE AND THEREFORE, WOULD NOT OCCUR DURING NIGHTTIME HOURS WHEN PEOPLE ARE MORE SENSITIVE TO NOISE. LARGER DEVELOPMENTS COULD INVOLVE CONSTRUCTION WITH LENGTHY DURATIONS, SUBSTANTIAL SOIL MOVEMENT, USE OF LARGE, HEAVY-DUTY EQUIPMENT, AND/OR PILE DRIVING NEAR NOISE-SENSITIVE LAND USES THAT WOULD EXCEED THE APPLICABLE FTA DAYTIME NOISE LIMITS. IMPLEMENTATION OF CITY STANDARD CONDITIONS OF APPROVAL FOR CONSTRUCTION NOISE WOULD REDUCE CONSTRUCTION NOISE LEVELS, BUT MAY NOT REDUCE THEM TO BELOW THRESHOLDS FOR EVERY PROJECT. THEREFORE, IMPACTS GENERATED BY TEMPORARY CONSTRUCTION NOISE WOULD BE SIGNIFICANT AND UNAVOIDABLE.

Future construction activity would require the use of a variety of noise-generating equipment that would result in temporary increases in ambient noise levels on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receiver, and presence or absence of noise attenuation barriers. Typical noise levels at 50 feet from various types of equipment that may be used during construction are listed in Table 4.11-7. The loudest noise levels are typically generated by impact equipment (e.g., pile drivers) and heavy-duty equipment (e.g., cranes, scrapers, and graders). Construction noise would occur intermittently throughout construction, and in some instances, multiple pieces of equipment may operate simultaneously, generating overall noise levels that are incrementally higher than what is shown in Table 4.11-7.

Table 4.11-7 Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA) at 50 Feet from Source
Air Compressor	80
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	82
Grader	85
Jackhammer	88
Loader	80
Paver	85

Equipment	Typical Noise Level (dBA) at 50 Feet from Source
Pile-driver (Impact)	101
Pile-driver (Sonic)	95
Pneumatic Tool	85
Pump	77
Roller	85
Saw	76
Scarifier	83
Scraper	85
Shovel	82
Truck	84

Sources: FTA 2018

Sensitive receivers are located throughout Berkeley and could be exposed to noise associated with construction activities from reasonably foreseeable development under the proposed Housing Element Update. As discussed in Section 4.11.1, Environmental Setting, sensitive receivers in the City mainly consist of residences but also include child-care centers, hospitals, nursing homes, churches, and schools. Based on the location of sites shown on Figure 2-4 in Section 2, Project Description, this analysis assumes that construction activities for most projects under the Housing Element Update would occur within 50 feet of sensitive receivers. As shown in Table 4.11-7, sensitive receivers would be exposed to noise levels ranging from 76 to 88 dBA at 50 feet from typical construction equipment and could reach as high as 101 dBA through the use of pile drivers. However, a typical construction day includes the operation of multiple pieces of equipment at once with noise levels averaged over the construction day. For assessment purposes, a construction noise level at 50 feet from the source was estimated using RCNM and was based on an excavator, dozer, and jackhammer operating simultaneously. In addition, a separate scenario was also analyzed with these pieces of equipment and an impact pile driver. These pieces of equipment generate some of the highest noise levels during demolition and grading phases of construction. As shown in Table 4.11-8, the combined noise level (dBA Leq) from these pieces of equipment is estimated at 84 dBA Leq at 50 feet without a pile driver, and 95 dBA Leq at 50 feet with a pile driver.

Table 4.11-8 Typical Construction Noise Level at 50 Feet

Equipment	dBA Leq at 50 Feet
Excavator, Dozer, Jackhammer *without* Impact Pile Driver	84
Excavator, Dozer, Jackhammer *with* Impact Pile Driver	95

See Appendix G for RCNM results.

Construction noise levels would vary depending on the type of equipment, the duration of use, the distance to receivers, and the potential for pile driving. Engine noise reduction technology, including silencers, continues to improve, but heavy construction equipment still generates noise exceeding ambient levels that could cause intermittent annoyance to nearby receivers. Noise associated with construction of most development under the proposed Housing Element Update would be typical of residential construction in urban areas but could exceed the eight-hour 80 dBA L_{eq} daytime significance threshold at residences.

As previously discussed in *Methodology* of this section, housing development accommodated under the proposed Housing Element Update that could result in significant construction noise would tend to include relatively lengthy construction durations (i.e., longer than 18 months), two or more subterranean levels, use of multiple pieces of heavier equipment (i.e., cranes, excavators, dozers), simultaneous use of multiple pieces of equipment, and generally noisier activities, such as the potential for pile driving. While these larger projects are not considered typical, they could potentially result in significant noise impacts, particularly upon adjacent residential zones or other nearby sensitive receivers, and would temporarily increase ambient noise levels above FTA noise limits.

To minimize the effect of construction noise on sensitive receptors, the City would impose its Standard Conditions of Approval. The following Standard Condition of Approval would apply to projects involving construction in residential zoning districts:

> Construction Hours. Construction activity shall be limited to between the hours of 8:00 AM and 6:00 PM on Monday through Friday, and between 9:00 AM and Noon on Saturday. No construction-related activity shall occur on Sunday or any Federal Holiday.

For projects involving construction in non-residential districts, the following Standard Condition of Approval would apply:

> Construction Hours. Construction activity shall be limited to between the hours of 7:00 AM and 6:00 PM on Monday through Friday, and between 9:00 AM and 4:00 PM on Saturday. No construction-related activity shall occur on Sunday or any Federal Holiday.

These conditions would restrict construction activity to daytime hours on Monday through Saturday, avoiding adverse effects on sensitive receptors during normal sleeping hours and reducing exposure to construction noise on weekends.

Additionally, the City would impose the following Standard Condition of Approval:

> Construction Noise Reduction Program. The applicant shall develop a site specific noise reduction program prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible, subject to review and approval of the Zoning Officer. The noise reduction program shall include the time limits for construction listed above, as measures needed to ensure that construction complies with BMC Section 13.40.070. The noise reduction program should include, but shall not be limited to, the following available controls to reduce construction noise levels as low as practical:
>
> A. Construction equipment should be well maintained and used judiciously to be as quiet as practical.
> B. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.
> C. Utilize “quiet” models of air compressors and other stationary noise sources where technology exists. Select hydraulically or electrically powered equipment and avoid pneumatically powered equipment where feasible.
> D. Locate stationary noise-generating equipment as far as possible from sensitive receptors when adjoining construction sites. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible.
> E. Prohibit unnecessary idling of internal combustion engines.

F. If impact pile driving is required, pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.

G. Construct solid plywood fences around construction sites adjacent to operational business, residences or other noise-sensitive land uses where the noise control plan analysis determines that a barrier would be effective at reducing noise.

H. Erect temporary noise control blanket barriers, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.

I. Route construction related traffic along major roadways and away from sensitive receptors where feasible.

Construction Noise Management – Public Notice Required. At least two weeks prior to initiating any construction activities at the site, the applicant shall provide notice to businesses and residents within **500 feet** of the project site. This notice shall at a minimum provide the following: (1) project description, (2) description of construction activities, (3) daily construction schedule (i.e., time of day) and expected duration (number of months), (4) the name and phone number of the Project Liaison for the project that is responsible for responding to any local complaints, (5) commitment to notify neighbors at least four days in advance of authorized extended work hours and the reason for extended hours, and (6) that construction work is about to commence. The liaison would determine the cause of all construction-related complaints (e.g., starting too early, bad muffler, worker parking, etc.) and institute reasonable measures to correct the problem. A copy of such notice and methodology for distributing the notice shall be provided in advance to the City for review and approval.

Noise Reduction Plan. Applicants are required to develop a site-specific noise reduction program prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible. The noise reduction program would include several elements that would reduce the exposure of sensitive receptors to construction noise, such as the following:

- Equipping all internal combustion engine-driven equipment with mufflers in good condition
- Pre-drilling foundation pile holes to minimize the use of pile drivers
- Installing solid plywood fences around construction sites adjacent to sensitive receptors
- Erecting temporary noise control blanket barriers along building façades facing construction sites.

The type of construction equipment, proximity of sensitive receivers to the site, and the overall duration of construction are key factors in determining whether construction-related noise would be significant at the project-level as opposed to determining construction noise impacts at the programmatic level. Based on typical construction equipment noise levels, the anticipated duration of construction activities, and type of equipment used for larger housing developments, the proposed Housing Element Update could result in potentially significant construction noise impacts on a project-specific basis at nearby sensitive receivers and the Standard Conditions of Approval above would not reduce noise levels to 80 dBA. Therefore, this impact is potentially significant.

Mitigation Measures

The standard conditions discussed above are equivalent to feasible mitigation measures for each project proposed under the Housing Element Update. Additional mitigation measures beyond the standard conditions are not feasible.

Significance After Mitigation

As discussed above, the City's Standard Conditions of Approval for large projects would reduce construction noise levels to the maximum extent feasible. These conditions would include the installation of temporary sound barriers, which are the most effective advanced measure to reduce noise from construction sites adjacent to sensitive receptors. No further measures are available to provide additional reductions in construction noise. However, construction noise levels could still exceed the City's standards for stationary equipment in both multi-family residential and commercial zones. Furthermore, construction noise levels could exceed the City's standards at multiple sites where the proposed amendments would facilitate development in Berkeley. Therefore, this impact would be significant and unavoidable.

Threshold 1:	Would the project result in generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact NOI-2 HOUSING DEVELOPMENT ACCOMMODATED UNDER THE PROPOSED HEU COULD INCLUDE MECHANICAL EQUIPMENT (I.E., HVAC), DELIVERY AND TRASH TRUCKS, AND OTHER NOISE-GENERATING ACTIVITIES. HOWEVER, SUCH ACTIVITIES WOULD BE SIMILAR TO THE EXISTING NOISE ENVIRONMENT. IN ADDITION, ON-SITE ACTIVITIES WOULD BE REQUIRED TO COMPLY WITH APPLICABLE NOISE STANDARDS IN THE BERKELEY MUNICIPAL CODE. FURTHERMORE, WHILE HOUSING DEVELOPMENT WOULD GENERATE VEHICLE TRIPS IN THE CITY, THE INCREASE IN MOBILE NOISE WOULD NOT RESULT IN A PERCEPTIBLE (3-DBA OR GREATER) NOISE INCREASE. PERMANENT NOISE INCREASES DUE TO OPERATION OF NEW DEVELOPMENT UNDER THE PROPOSED HEU WOULD BE LESS THAN SIGNIFICANT.

Housing development accommodated under the proposed Housing Element Update would include residential development at increased intensity and density throughout the City that would generate on-site operational noise from stationary sources and off-site operational noise from vehicle trips. Typical noise sources associated with residential uses include stationary HVAC equipment, on-site vehicle movement (e.g., delivery and trash hauling), outdoor activities, and off-site traffic.

On-site Operational Noise

HVAC EQUIPMENT

Based on manufacturer's specifications, a Carrier 38HDR060 split-system with a sound power level of 72 dBA would generate a noise level of approximately 57 dBA at a distance of seven feet. As shown in Figure 4.11-1, an area with ambient noise levels in the vicinity of 60 dBA L_{dn} exists around the neighborhood north and south of University Avenue. Elsewhere in Berkeley, ambient noise levels are generally below 70 dBA L_{dn} and in most cases below 65 dBA L_{dn}. Therefore, in the case where the actual ambient conditions are not known, noise from HVAC equipment could exceed the city's presumed ambient noise conditions when compared to a reference noise level 57 dBA at a distance of seven feet from the HVAC equipment source. However, noise levels from HVAC

equipment associated with housing development would be comparable to noise levels of HVAC equipment associated with the existing urban environment. Furthermore, the design and placement of new HVAC equipment would be required to comply with Section 13.40.070 of the BMC, which states that stationary machines and other devices located on the exterior of structures which generate sounds perceptible outside the perimeters of the lot on which the machine or other device is located must be installed with such sound transmission control measures to adequately minimize or eliminate the transmission of the sound to a level not to exceed 60 dBA on weekdays and 50 dBA on weekends for single family residential beyond property perimeters. Stationary equipment shall not exceed 65 dBA on weekdays and 55 dBA on weekends for multi-family residential areas[1]. Furthermore, any motor, machinery, pump, such as swimming pool equipment, etc., shall be sufficiently enclosed or muffled and maintained so as not to create a Noise Disturbance in accordance with Section 13.40.050 or 13.40.060.Therefore, operation of HVAC equipment would have a less than significant noise impact.

VEHICLE ACTIVITY (DELIVERY AND TRASH HAULING)

Future residential development may increase the number of delivery and trash hauling trucks traveling through the City to individual development sites. Increased delivery and trash hauling trucks could intermittently expose various sensitive receivers to increased truck noise. Section 23130 of the California Motor Vehicle Code establishes maximum sound levels of 86 dBA L_{eq} at 50 feet for trucks operating at speeds less than 35 miles per hour. While individual delivery truck and/or loading or trash pick-up operations would likely be audible at properties adjacent to individual development, such operations are already a common occurrence in the urban environment. In addition, solid waste pick-up operations are typically scheduled during daytime hours when people tend to be less sensitive to noise. Furthermore, these noise events from trucks are typically transient and intermittent, and do not occur for a sustained period of time. Therefore, the project would not result in a substantial permanent increase in ambient noise levels from trash and delivery trucks due their prevalence in the city, resulting in a less than significant impact.

OUTDOOR ACTIVITY AREAS

Housing developments would generate noise from conversations, music, television, or other outdoor sound-generating equipment (e.g., leaf blowers), particularly in the event future residents maintain open windows or such activities take place on balconies. However, these noise-generating activities would be similar to those of the existing urban environment. Moreover, Section 13.40.070 of the BMC prohibits operating or permitting the operation of any mechanically powered saw, sander, drill, grinder, lawn or garden tool, or similar tool before 7:00 a.m. on a weekday (or before 9:00 a.m. on a weekend or holiday) or after 7:00 p.m. on a weekday (or after 8:00 p.m. on a weekend or holiday) such that the sound therefrom across a residential or commercial real property line violates Section 13.40.050 or 13.40.060. Furthermore, Section 19.29 of the BMC includes the 2019 California Residential Code, as adopted in Title 24 Part 2.5 of the California Code of Regulations. Required compliance with code enforcement would reduce operational noise impacts related to conversations and sound-generating equipment to a less than significant level.

[1] Maximum sound levels for repetitively scheduled and relatively long term operation (period of 10 days or more) of stationary equipment.

Off-site Operational Noise

The overall increase in traffic noise from the project was estimated using vehicle trip (VT) data from the Transportation Assessment prepared by Kittelson & Associates for existing conditions (i.e., Year 2020 without the proposed Housing Element Update) and future with Project conditions (i.e., Year 2031 with the proposed Housing Element Update). These daily VT scenarios are shown in Table 4.11 9.

Table 4.11 9 Daily Vehicle Trip Summary

	Total Daily Vehicle Trips
Baseline Conditions Without proposed Housing Element Update (2020)	3,213,590
Future with proposed Housing Element Update (2031)	3,391,463
Change in Vehicle Trips	**+177,873**
Percent Change in Vehicle Trips (%)	**5.5%**

Source: Kittelson & Associates 2022

As shown in Table 4.11 9, daily VT would increase by approximately 6 percent over existing 2020 conditions by the year 2031 under the proposed Housing Element Update. A 6 percent increase in traffic on a roadway would equate to an increase of 0.2 dBA. The project would not double the existing mobile noise source and would not increase noise levels by even the most conservative threshold of 3 dBA, which is considered a barely perceptible noise increase. Although a 6 percent or more increase in traffic may occur at the local level in areas where substantial new housing is proposed, a doubling of traffic is still not anticipated to occur based on the citywide increase of 6 percent. Therefore, off-site traffic noise impacts would less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

Threshold 2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Impact NOI-3 HOUSING DEVELOPMENT ACCOMMODATED UNDER THE PROPOSED HEU WOULD NOT INVOLVE OPERATIONAL ACTIVITIES THAT WOULD RESULT IN SUBSTANTIAL VIBRATION LEVELS (E.G., USE OF HEAVY EQUIPMENT OR MACHINERY). CONSTRUCTION ACTIVITIES WOULD BE REQUIRED TO IMPLEMENT THE CITY'S STANDARD CONDITIONS OF APPROVAL THAT CONTROL VIBRATION. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

It is not anticipated that operation of residential housing development would involve activities that would result in substantial vibration levels, such as use of heavy equipment or machinery. Operational groundborne vibration in the vicinity of development associated with the proposed Housing Element Update would be primarily generated by vehicular travel on the local roadways. According to the FTA *Transit Noise and Vibration Impact Assessment* (2018) guidance document, rubber tires and suspension systems dampen vibration levels from trucks to a level that is rarely perceptible. Therefore, traffic vibration levels associated with the expected additional trips from the proposed Housing Element Update would not be perceptible by sensitive receivers. Impacts related to operational groundborne vibration would be less than significant. The remainder of this analysis focuses on impacts relate to construction activities associated with future housing development.

Construction activities associated with housing development accommodated by the proposed Housing Element Update would result in varying degrees of groundborne vibration depending on the equipment and methods employed. Construction equipment causes vibration that spreads through the ground and diminishes in strength with distance. Buildings with foundations in the soil in the vicinity of a construction site respond to these vibrations with varying results ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels, and slight damage at the highest levels. Construction vibration is a localized event and is typically only perceptible to a receiver that is in close proximity to the vibration source.

Construction for housing development would require heavy equipment, particularly development with certain geologic conditions that may require pile driving. Pile driving would be required if the project engineer determined that it was necessary and pile driving alternatives were not feasible. Pile driving more often occurs for buildings with subterranean parking garages or tall buildings (e.g., six or more stories). Such heavy equipment could potentially operate within 25 feet of nearby buildings when accounting for equipment setbacks. As shown in Table 4.11-10, general construction equipment such as a vibratory roller would generate vibration levels up to 0.21 in./sec. PPV at 25 feet, while more intensive equipment such as pile driving could generate a vibration level of approximately 0.64 in./sec. PPV at 25 feet. Vibration levels shown in bolded and underlined text exceed one or more of the Caltrans criteria shown in Table 4.11-1 and Table 4.11-2.

Table 4.11-10 Construction Equipment Noise Levels

	PPV (in./sec.)				
Equipment	**25 Feet**	**50 Feet**	**75 Feet**	**100 Feet**	**125 Feet**
Pile Driver (Impact)	**0.644**[1,2,3,4]	**0.300**[1,4]	**0.192**[1]	**0.140**[1]	**0.110**[1]
Pile Driver (Sonic)	**0.170**[1]	0.079	0.051	0.037	0.029
Vibratory Roller	**0.210**[1]	0.098	0.063	0.046	0.036
Hoe Ram	0.089	0.042	0.027	0.019	0.015
Large Bulldozer	0.089	0.042	0.027	0.019	0.015
Caisson Drilling	0.089	0.042	0.027	0.019	0.015
Loaded Truck	0.076	0.036	0.023	0.017	0.013
Jackhammer	0.035	0.016	0.011	0.008	0.006
Small Bulldozer	0.003	0.001	<0.001	<0.001	<0.001

Notes: Vibration levels shown in bolded and underlined text exceed one or more of the Caltrans criteria shown in Table 4.11-1 and Table 4.11-2. Superscripts specify the threshold exceeded by each piece of equipment.

[1] Exceeds the 0.1 in./sec. Caltrans damage threshold for historic sites (and other critical locations).

[2] Exceeds the 0.5 in./sec. Caltrans damage threshold for historic and other/similar old buildings.

[3] Exceeds the 0.5 in./sec. Caltrans damage threshold for older residential structures.

[4] Exceeds the 0.25 in./sec. Caltrans human annoyance threshold.

Sources: FTA 2018; Caltrans 2020

According to Caltrans impact criteria shown in Table 4.11-1, the damage threshold for historic sites (which are most sensitive to impacts from groundborne vibration) is 0.12 in./sec. PPV. Groundborne vibration from hoe rams, bulldozers, caisson drilling, loaded trucks, and jackhammers would not exceed the 0.1 in./sec. PPV threshold for sensitive historic sites. While groundborne vibration from vibratory rollers would only exceed the threshold for building damage for historic sites at 25 feet from the source, vibration levels from pile driving would exceed one or more of the building damage thresholds shown in Table 4.11-1 for historic sites, general old buildings, and older and newer

residential structures. Furthermore, vibration levels associated with pile driving would also exceed the threshold of 0.25 in./sec. PPV for human annoyance at various distances up to 75 feet, as shown in Table 4.11-10.

As discussed in Section 4.4, *Cultural Resources*, a portion of Shattuck Avenue has been identified as an eligible historic district for its significance in Berkeley's early history, with a period of significance of 1895 to 1958. Although all buildings would be subject to potential impacts from construction vibration, buildings with historic significance would each have varying degrees of susceptibility to groundborne vibration damage depending on the structural integrity of said buildings.

To minimize the effect of construction vibration, the City would impose its Standard Conditions of Approval. The following Standard Condition of Approval would apply to projects involving construction in residential zoning districts:

> Damage Due to Construction Vibration. The project applicant shall submit screening level analysis prior to, or concurrent with demolition building permit. If a screening level analysis shows that the project has the potential to result in damage to structures, a structural engineer or other appropriate professional shall be retained to prepare a vibration impact assessment (assessment). The assessment shall take into account project specific information such as the composition of the structures, location of the various types of equipment used during each phase of the project, as well as the soil characteristics in the project area, in order to determine whether project construction may cause damage to any of the structures identified as potentially impacted in the screening level analysis. If the assessment finds that the project may cause damage to nearby structures, the structural engineer or other appropriate professional shall recommend design means and methods of construction that to avoid the potential damage, if feasible. The assessment and its recommendations shall be reviewed and approved by the Building and Safety Division and the Zoning Officer. If there are no feasible design means or methods to eliminate the potential for damage, the structural engineer or other appropriate professional shall undertake an existing conditions study (study) of any structures (or, in case of large buildings, of the portions of the structures) that may experience damage. This study shall establish the baseline condition of these structures, including, but not limited to, the location and extent of any visible cracks or spalls; and include written descriptions and photographs.

With implementation of the Standard Conditions of Approval, groundborne vibration from vibratory rollers and vibration levels from pile driving would not occur in a manner that would damage buildings. Impacts would be less than significant.

Mitigation Measure

The Standard Conditions of Approval listed above is equivalent to feasible mitigation measures for projects proposed under the Housing Element Update. No additional mitigation measures are required.

Threshold:	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Impact NOI-4 **HOUSING DEVELOPMENTS ACCOMMODATED UNDER THE PROPOSED HEU WOULD NOT BE EXPOSED TO INTERMITTENT NOISE LEVELS FROM OVERHEAD FLIGHT PATTERNS FROM AIRPORTS IN THE CITY AS THERE ARE NONE LOCATED WITHIN THE CITY. FURTHERMORE, WHILE THE PROJECT WOULD NOT EMPHASIZE BUILDING HOUSING IN THE IMMEDIATE VICINITY OF THE AIRPORT, ALL RESIDENTIAL DEVELOPMENT WOULD, NONETHELESS, BE REQUIRED TO INCORPORATE NOISE INSULATION FEATURES PER STATE AND LOCAL STANDARDS TO REDUCE INTERIOR NOISE LEVELS TO BELOW 45 DBA. THEREFORE, THE IMPACT OF AIRPORT OR AIRSTRIP OPERATIONS ON NEW DEVELOPMENT WOULD BE LESS THAN SIGNIFICANT.**

As discussed in Section 4.8, *Hazards and Hazardous Materials*, the Berkeley General Plan Environmental Management Element does not identify any airports in the City. The nearest airport to the City of Berkeley is the Oakland (OAK) Airport which is located 11 miles south. According to the Oakland International Airport Land Use Compatibility Plan, the City Berkeley is located outside of the airport's noise contours and the airport influence area illustrated in Figure 3-1 of the Airport Land Use Compatibility Plan (Alameda County 2010). Therefore, the proposed Housing Element Update would not expose people residing or working in the plan area to excessive noise levels. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation measures are required.

d. Cumulative Impacts

The geographic area to analyze cumulatively considerable noise impacts includes Berkeley and immediately adjacent areas that could be indirectly affected by noise generated in the city.

Construction Noise

Construction of future development projects in Berkeley would produce temporary noise impacts that would be localized to a project site and sensitive receivers within the immediate vicinity. Therefore, only sensitive receivers located in close proximity to each construction site would be potentially affected by each activity. Nonetheless, construction activities associated with individual housing development projects accommodated under the proposed Housing Element Update may overlap for some time with construction activities for other development projects. Typically, if a development site is 500 feet or more away from another site then noise levels would have attenuated to a point that they would not combine to produce a cumulative noise impact. Therefore, construction noise levels would typically become cumulative only if two development sites were to have construction occurring within 500 feet of each other. However, under a worst-case scenario, noise from construction activities for two projects within 1,000 feet of each other could contribute to a cumulative noise impact for sensitive receivers located equidistant between the two construction sites with concurrent on-site activities.

Construction activities associated with future development would be required to comply with Section 13.40 of the BMC and would not occur during nighttime hours between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, and between the hours of 8:00 p.m. and 9:00 a.m. on weekends and holidays. It is anticipated that even with implementation of the Standard Conditions listed

under Impact NOI-1, construction noise levels associated with some of the housing development proposed under the proposed Housing Element Update would not be reduced below the applicable FTA noise limits for construction noise on a case-by-case basis. Nonetheless, larger development projects could combine together, or combine with smaller development projects. Based on the locations of the potential housing sites displayed in Figure 2-4 of Section 2, *Project Description*, this could substantially increase noise levels at specific neighboring noise-sensitive receivers since many sites are located in proximity to each other. Therefore, concurrent construction of development projects accommodated under the proposed Housing Element Update could result in cumulatively considerable impacts. This impact would be cumulatively considerable and cumulative impacts would be significant and unavoidable.

On-site Operational Noise

On-site operational noise impacts are localized to an individual development site and sensitive receivers within the immediate vicinity. Future development in the City would include mechanical equipment, loading, trash pick-up, and other noise-generating activities. However, such activities would be typical of the urban environment in the City and on-site activities would be required to comply with applicable provisions of the BMC. The incremental effect of the proposed Housing Element Update with respect to on-site operational noise would not be cumulatively considerable and cumulative impacts would be less than significant.

Off-site Operational Noise

Cumulative development through the year 2031 would generate vehicle trips, thereby increasing traffic on area roadways. As shown in Table 4.11 9, future daily VT levels by the year 2031 with future development from the proposed Housing Element Update, which accounts for cumulative residential development in the city, would not double existing VT levels or increase mobile noise by more than 3 dBA. Therefore, the effect of the proposed Housing Element Update on off-site traffic noise would not be cumulatively considerable and cumulative impacts would be less than significant.

Groundborne Vibration

Operational groundborne vibration impacts are localized to a project site and sensitive receivers within the immediate vicinity. However, it is not anticipated that new residential development within the City would include substantial sources of operational ground-borne vibration. Therefore, cumulative impacts related to operational ground-borne noise and vibration at any sensitive receiver would not be significant. Impacts related to operational groundborne vibration would not be cumulatively considerable and cumulative impacts would be less than significant.

Construction of future development projects in the City would produce temporary vibration impacts that would be localized to a project site and sensitive receivers in the immediate vicinity. Therefore, only sensitive receivers located in close proximity to each construction site would be potentially affected by each individual activity. Nonetheless, construction activities associated with individual housing development projects from the proposed Housing Element Update may overlap for some time with construction activities for other development projects. For the combined vibration impact from simultaneous construction projects to reach cumulatively significant levels, intense construction from these projects would have to occur simultaneously in close proximity to a sensitive receiver. With implementation of the Standard Condition of Approval to control vibration, intense vibration impacts during construction for future development in Berkeley would be less than

significant. Therefore, concurrent construction of development projects accommodated under the proposed Housing Element Update in combination with the cumulative projects would not reach levels such that cumulative impacts would occur. . Impacts related to construction groundborne vibration would not be cumulatively considerable and cumulative impacts would be less than significant.

Airport Noise

Aircraft-related noise impacts occur largely in the vicinity of airports or airstrips. Although citywide growth could increase the number of people who are exposed to overhead aircraft-related noise impacts, such impacts would be localized in nature. In addition, new residential development would not result in a direct increase to aircraft operations that would increase noise exposure to aircraft overflight patterns within and outside the city. The proposed Housing Element Update would have no contribution to any cumulative impact related to airport hazards or noise. Impacts related to airport or airstrip noise would not be cumulatively considerable and cumulative impacts would be less than significant.

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4.12 Population and Housing

This section describes the existing population, housing, and employment characteristics of Berkeley and evaluates the potential impacts related to population and housing that could result from implementation of the proposed House Element Update.

4.12.1 Setting

Population, housing, and employment data are primarily available on a city/town, county, regional, and state level. This EIR uses data collected and provided at the city level, supplemented by data available at the census tract level.

a. Current Population and Housing

Table 4.12-1 provides 2022 estimates of population and housing for Berkeley. Berkeley has an estimated 2022 population of 124,563 and 52,921 housing units, with an average household size of 2.17 people (California Department of Finance 2022).

Table 4.12-1 Current Population and Housing Stock for Berkeley

	City of Berkeley	Alameda County
Population (# of people)	124,563	1,651,979
Average Household Size (persons/household)	2.17	2.66
Total Housing Units (# of units)	52,921	633,198
Vacant Housing Units	4,544 (8.6%)	31,957 (5.0%)

Source: California Department of Finance 2022

Household Composition

Small households (one to two persons per household) traditionally occupy units with zero to two bedrooms; family households (three to four persons per household) normally occupy units with three to four bedrooms. Large households (five or more persons per household) typically occupy units with four or more bedrooms. The number of units in relation to the household size may reflect preference and economics. Many small households obtain larger units and some large households live in small units. As shown in Table 4.12-1, the average household size in Berkeley was an estimated 2.17 persons in 2022.

b. Population, Housing, and Employment Projections

Table 4.12-2 shows population, housing, and employment projections for Berkeley based on the growth forecasts provided by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) in Plan Bay Area 2040. According to the Plan Bay Area 2040 population projections, Berkeley's population was anticipated to grow 13 percent by the year 2040. ABAG and MTC project relatively small employment growth (4 percent) in Berkeley between 2020 and 2040.

Table 4.12-2 2040 Plan Bay Area Population, Housing, and Employment Projections for Berkeley

	2022	2040 (projected)	Projected 2022-2040 Growth (Percent Increase)
Population (# of people)	124,563[1]	140,935[2]	16,372 (13%)
Housing (# of units)	52,921	55,370[2]	2,449 (5%)
Employment (# of jobs)	116,435[3]	121,670[2]	5,235 (4%)

[1] Source: California Department of Finance 2022

[2] ABAG and MTC 2017

[3] Based on 2020 data

Plan Bay Area 2050 is the most recent regional long-range plan and regional growth forecast for the Bay Area (ABAG and MTC 2021). Though it does not include projections by city, it does include employment and housing projections for Northwest Alameda County which includes Albany, Berkeley, and Emeryville. These projections are shown in Table 4.12-3.

Table 4.12-3 2050 Plan Bay Area Population, Housing, and Employment Projections for Northwest Alameda County

	2015	2050 (projected)	Projected Growth (Percent Increase)
Housing (# of units)	73,000	115,000	42,000 (57%)
Employment (# of jobs)	115,000	162,000	7,000 (5%)

Source: ABAB and MTC 2021

4.12.2 Regulatory Setting

c. State Regulations

California Housing Law

California Housing Element law (Government Code Sections 65580 to 65589.8) requires that local jurisdictions outline the housing needs of their community, the barriers or constraints to providing that housing, and actions proposed to address these concerns over an eight-year planning period. In addition, Housing Element law requires each city and county to accommodate its “fair share” of the region’s projected housing need over the Element planning period. Cities and counties must demonstrate that adequate sites are available to accommodate this need, and that the jurisdiction allows for development of a variety of housing types. This housing need requirement is known as the Regional Housing Needs Allocation (RHNA) and apportions to each jurisdiction part of the Bay Area’s projected need (City of Berkeley 2015).

The Sustainable Communities and Climate Protection Act of 2008 (SB 375, Steinberg)

Senate Bill (SB) 375 focuses on aligning transportation, housing, and other land uses to achieve regional greenhouse gas (GHG) emission reduction targets established under the California Global Warming Solutions Act, also known as Assembly Bill (AB) 32. SB 375 requires Metropolitan Planning Organizations (MPO) to develop a Sustainable Communities Strategy (SCS) as part of the Regional

Transportation Plan (RTP), with the purpose of identifying policies and strategies to reduce per capita passenger vehicle-generated GHG emissions. As set forth in SB 375, the SCS must: (1) identify the general location of land uses, residential densities, and building intensities within the region; (2) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period; (3) identify areas within the region sufficient to house an eight-year projection of the regional housing need; (4) identify a transportation network to service the regional transportation needs; (5) gather and consider the best practically available scientific information regarding resource areas and farmland in the region; (6) consider the state housing goals; (7) establish the land use development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, will reduce GHG emissions from automobiles and light-duty trucks to achieve GHG emission reduction targets set by the California Air Resources Board (CARB), if there is a feasible way to do so; and (8) comply with air quality requirements established under the Clean Air Act.

The City of Berkeley is located in the jurisdiction of ABAG, a Joint Powers Agency established under California Government Code Section 6502 et seq. Pursuant to federal and State law, ABAG serves as a Council of Governments, a Regional Transportation Planning Agency, and the MPO for the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma and contains 101 cities. ABAG is responsible for preparing the RTP/SCS and RHNA in coordination with other State and local agencies. These documents include population, employment, and housing projections for the region.

Existing law requires local governments to adopt a housing element as part of their general plan and update the housing element every four to eight years. SB 375 requires the RHNA to allocate housing units within the region in a manner consistent with the development pattern adopted by the SCS.

AB 1763

AB 1763, effective January 1, 2020, amends the State Density Bonus Law (Section 65915) to allow for taller and denser 100 percent affordable housing developments, especially those near transit, through the creation of an enhanced affordable housing density bonus.

California Housing Accountability Act

This State law, originally enacted in 1982 and last amended in 2017, prevents localities from disapproving proposed developments that comply with “all applicable, objective general plan, zoning, and subdivision standards and criteria,” unless they find that the development would have an unavoidable impact on public health or safety that can only be mitigated by rejecting the project or reducing its size (Hernandez and Golub 2017). Compliance with objective standards and criteria is defined as “substantial evidence that would allow a reasonable person to conclude” that a project complies. The Housing Accountability Act also prevents localities from disapproving or reducing the size of developments that have a minimum amount of affordable housing (either 20 percent of units for lower-income households or 100 percent of units for moderate-income households), except under specific circumstances. Mixed-use developments with at least two-thirds of their square footage devoted to residential use also qualify for this protection.

Senate Bill 35

In 2017, California enacted Senate Bill (SB) 35 to streamline the approval of affordable housing projects. This law applies in localities that are not meeting their RHNA goals for construction of

above-moderate income housing units or units for households below 80 percent of the area median income (AMI) (California Legislative Information 2017). These thresholds under SB 35 apply to the City of Berkeley. Applicable localities are required to streamline the approval of eligible housing projects by providing a ministerial approval process. To qualify for streamlining, a project must meet all of a range of criteria related to affordability, including but not limited to the number of units, residential zoning, floor area dedicated to residential uses, environmental constraints, demolition of residential units, historic buildings, and consistency with objective zoning standards (California Legislative Information 2017). CEQA review is not required for eligible projects because they are subject to a ministerial approval process.

Housing Crisis Act

The Housing Crisis Act of 2019 (SB 330) seeks to speed up housing production in the next half decade by eliminating some of the most common entitlement impediments to the creation of new housing, including delays in the local permitting process and cities enacting new requirements after an application is complete and undergoing local review—both of which can exacerbate the cost and uncertainty that sponsors of housing projects face. In addition to speeding up the timeline to obtain building permits, the bill prohibits local governments from reducing the number of homes that can be built through down-planning or down-zoning or the introduction of new discretionary design guidelines. The bill is in effect as of January 1, 2020 and expires on January 1, 2030.

SB 330 also regulates demolition of existing housing. It prohibits urbanized jurisdictions from approving a housing development that requires demolition of residential units unless the project creates at least as many units as would be demolished (California Legislative Information 2019). Local jurisdictions also are prohibited from approving a project that would demolish occupied or vacant “protected units,” unless the project meets several criteria (e.g., replacing all protected units, providing relocation benefits, and giving a right of first refusal to displaced residents for comparable units in the new development). Protected units are defined as subject to a covenant, ordinance, or law that restricts rent to levels affordable to affordable to persons and families of lower or very low income; subject to rent control; or occupied by low or very low income households; among other factors. These requirements for demolition do not supersede local demolition controls that are more protective of lower income households.

d. Regional

Regional Housing Needs Assessment (RHNA)

ABAG prepares the RHNA mandated by State law so that local jurisdictions can use this information during their periodic updates of the General Plan Housing Element. The RHNA identifies the housing needs for very low income, low income, moderate income, and above moderate-income groups, and allocates these targets among the local jurisdictions that comprise ABAG. The RHNA addresses existing and future housing needs based on the most recent U.S. Census, data on forecasted household growth, historical growth patterns, job creation, household formation rates, and other factors. The need for new housing is distributed among the four income groups so that each community moves closer to the regional average income distribution, referred to as a “social equity adjustment.” The most recent RHNA allocation, the 6th Cycle Final RHNA Plan, was adopted by ABAG’s Executive Board on December 16, 2021. The City of Berkeley was assigned a RHNA of 8,934 units for the 2023 to 2031 planning period. Local jurisdictions are required by State law to update their General Plan Housing Elements based on the most recently adopted RHNA allocation.

Association of Bay Area Governments

ABAG produces growth forecasts in four-year cycles so that other regional agencies, including the MTC and the Bay Area Air Quality Management District (BAAQMD), can use the forecasts to make funding and regulatory decisions. The ABAG projections are the basis for the RTP, regional Ozone Attainment Plan, the BAAQMD's Clean Air Plan, and the EBMUD's Urban Water Management Plan. In this way, ABAG projections have practical consequences that shape growth and environmental quality. General plans, zoning regulations, and growth management programs of local jurisdictions inform the ABAG projections. The projections are also developed to reflect the impact of "smart growth" policies and incentives that could be used to shift development patterns from historical trends toward a better jobs-housing balance, increased preservation of open space, and greater development and redevelopment in urban core and transit-accessible areas throughout the region. ABAG calculates the RHNA for individual jurisdictions within Alameda County, including Berkeley.

Plan Bay Area

Plan Bay Area 2050 was adopted on October 21, 2021. Plan Bay Area 2050 is a limited and focused update of the region's previous integrated Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Plan Bay Area, adopted in 2013. Plan Bay Area 2050 builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic and financial trends from the last four years (ABAG and MTC 2021).

In 2008, MTC and ABAG initiated a regional effort (FOCUS) to link local planned development with regional land use and transportation planning objectives. Through this initiative, local governments identified Priority Development Areas (PDAs). The PDAs form the implementing framework for Plan Bay Area. The PDAs are areas along transportation corridors which are served by public transit that allow for opportunities for development of transit-oriented development, infill development within existing communities that are expected to take in most of the future development. Overall, over two-thirds of all regional growth by 2040 is allocated within PDAs. The PDAs throughout the Bay Area are expected to accommodate 78 percent (or over 509,000 units) of new housing and 62 percent (or 690,000) of new jobs. Designated PDAs in Berkeley include: University Avenue, San Pablo Avenue, Telegraph Avenue (which was later amended to include the Southside), Adeline Street, South Shattuck Avenue, and the Downtown.

e. Local Regulations

City of Berkeley Municipal Code

In addition to the goals stated in the City's Housing Element, the City of Berkeley has a history of programs and initiatives to protect existing affordable housing and create new supplies of affordable housing, some of which are codified in the Berkeley Municipal Code (BMC) and described below.

- **Rent Stabilization and Eviction for Good Cause Program.** In 1980, Berkeley residents passed the Rent Stabilization and Eviction for Good Cause Ordinance (BMC Chapter 13.76). The Ordinance is one of the strongest rent stabilization laws in the state and regulates residential rents for most rental units in Berkeley. For virtually all of Berkeley's approximately 26,000 rental units, the Ordinance provides tenants with increased protection against unwarranted evictions helping to maintain affordable housing and preserve community diversity (City of Berkeley 2022a).

- **City of Berkeley Ellis Act Implementation Ordinance.** The Ellis Implementation Ordinance establishes the process for withdrawing residential rental property from the rental housing market (BMC Chapter 13.77).
- **Relocation Ordinance.** BMC Section 13.84 requires property owners to provide certain protections and compensation for tenants who are temporarily displaced due to repairs needed to bring their unit into compliance.
- **Financial Mitigation of Adverse Impact on Displaced Persons.** BMC Section 13.77.055 states that the tenants of any residential rental unit who are required to move as a result of the owner's withdrawal of the accommodation from rent or lease shall be entitled to a relocation payment in the sum of $15,000 from the owner.
- **Good Cause Required for Eviction.** No landlord shall be entitled to recover possession of a rental unit covered by the terms of BMC Chapter 13.76.130, unless said landlord shows the existence of one of the grounds for eviction specified in the chapter. Relocation assistance is required to tenant households where at least one occupant has resided in the unit for one year or more and additional assistance to low-income households; or households with disabled or elderly tenants, minor children, or tenancies which began prior to January 1, 1999.
- **Condo Conversion Limits.** BMC Section 21.28.040 implements the Condominium Conversion Ordinance that restricts property owners from converting rental units to condominiums. Condominium conversion removes multifamily rental housing from the market and can decrease the number of units available to rental households with lower incomes. Accordingly, Berkeley's Ordinance limits the approval of condominium conversions to 100 units per year and charges a fee which is deposited into the City's Housing Trust Fund to offset the impact of reducing the rental housing stock.
- **Demolition Controls.** The City's Demolition and Dwelling Unit Controls (BMC Chapter 23.326) limits the ability of property owners to demolish or eliminate existing housing units and requires one-to-one replacement of removed units, or payment of an impact fee for affordable housing, in order to protect the affordable housing supply and existing tenants.
- **Density Bonus.** The State Density Bonus Law, originally adopted by California in 1979, allows new residential development to be built at a higher density than is allowed under local zoning if the project includes units affordable for low-income households. The BMC enforces this law and calculates a project's density bonus based on a project's number of below-market rate units, the income level targeted by these units, and the proposed project size.
- **Inclusionary Housing Ordinance.** The City of Berkeley Inclusionary Housing Ordinance for ownership housing (BMC Section 23.C.12) requires developers of market-rate ownership housing to include affordable ownership units or pay a fee.
- **Affordable Housing Mitigation Fee.** In 2011, the City Council enacted an Affordable Housing Mitigation Fee that requires developers of new market-rate rental projects to pay a fee (BMC Section 22.20.065). Effective July 1, 2020, this fee is $39,746 per new unit of rental housing, payable at the issuance of a certificate of occupancy (City of Berkeley 2022b).[1] If the fee is paid in its entirety no later than issuance of the building permit, the fee is $36,746 per new unit. Developers can reduce this fee by including units affordable to low-income households, and the fee is waived if at least 20% of a development's units are affordable. Revenues generated from

[1] Effective as of July 1, 2018. The City of Berkeley Housing Mitigation Fee is adjusted annually based on the California Construction Cost Index.

these fees go to the City's Housing Trust Fund and are used to develop or preserve affordable housing.

- **Commercial Linkage Fee.** The City established an affordable housing fee linkage fee on commercial development in 1993 (BMC Section 22.20.065). The commercial linkage fee is levied on developers of new commercial development. Fees range from $2.25 to $4.50 per square foot, depending on building use. Revenues from these fees go to the City's Housing Trust Fund.

Other City of Berkeley Programs/Initiatives

The City also provides a number of programs and initiatives that support the policies and ordinances described above:

- **Eviction Prevention.** The City's Housing Retention Program provides financial assistance to tenants to avoid eviction due to non-payment of rent. Qualifying households can receive one-time grants up to $5,000 to prevent eviction and maintain permanent housing.[2] The Housing and Community Services Department administers this program and partners with the East Bay Community Law Center to conduct intake for applicants.
- **Family, Senior and Disabled Housing.** The City supports and encourages projects that include units affordable and suitable for households with children and large families, support housing programs that increase the ability of senior households to remain in their homes or neighborhoods and encourage provision of an adequate supply of suitable housing to meet the needs of people with disabilities.
- **Senior and Disabled Home Rehabilitation Loan Program.** The Housing and Community Services Department oversees the Senior and Disabled Rehabilitation Loan Program, which enables low-income senior and disabled homeowners to make essential health, safety, and accessibility repairs. This program provides eligible Berkeley homeowners with interest-free, deferred payment loans of up to $100,000.
- **Housing Trust Fund.** A housing trust fund is a designated source of public funds—generated through various means—that is dedicated to creating affordable housing. The City created its Housing Trust Fund in 1990, and the fund receives revenue from Affordable Housing Mitigation Fees, Commercial Linkage fees, federal Community Development Block Grant funds, and federal HOME funds. Affordable housing developers can apply for loans from the Housing Trust Fund to support their projects, and the Housing and Community Services Department administers the fund.

4.12.3 Impact Analysis

a. Methodology and Significance Thresholds

The proposed project does not involve specific development projects and so the project itself would not result in direct physical changes to population or housing. However, effects on population and housing could occur as a result of the proposed zoning changes. Future development projects could replace existing housing units or add new units, increasing Berkeley's population. Population growth could result in physical changes related to transportation, air quality, noise, and public services and utilities, as well as other environmental resource areas. These physical impacts are analyzed under the other environmental topics in this EIR.

[2] Currently, residents who have been financially impacted by the COVID-19 pandemic may be eligible for up to $10,000 in additional assistance under the City's Housing Retention Program (Berkeley 2020).

In accordance with Appendix G of the CEQA Guidelines, the proposed project would result in a significant impact on the environment related to population and housing if it would:

1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Although CEQA requires an EIR to consider a project's growth-inducing impacts, CEQA provides that the EIR "should not assume that growth is necessarily beneficial, detrimental, or of little significance." The underlying purpose of the Housing Element Update is to accommodate housing needs, which includes needs as a result of population growth and existing growth in the City. Even substantial growth is not a significant impact if it accommodates growth projections for the City that can be accommodated by existing or planned facilities and services, and is consistent with the City's General Plan, as well as State and regional policies and regulations. As such, a significant impact for purposes of this threshold is whether the updates to the Housing Element will induce unplanned growth.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact POP-1 THIS EIR ASSUMES FULL BUILDOUT OF 19,098 RESIDENTIAL UNITS IN BERKELEY THROUGH 2031, WHICH EQUATES TO A POPULATION INCREASE OF AN ESTIMATED 47,443 RESIDENTS COMPARED TO THE EXISTING POPULATION. HOWEVER, GROWTH RESULTING FROM THE PROJECT IS ANTICIPATED AND WOULD NOT CONSTITUTE SUBSTANTIAL UNPLANNED POPULATION GROWTH. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

For the purposes of this EIR, buildout under the proposed HEU would add up to 19,098 additional residential units to the city by the year 2031 (see Section 2, *Project Description*). This additional housing would lead to an increase of approximately 47,443 residents in the city from 2023 to 2031, as shown in Table 4.12-4.

Table 4.12-4 Housing Element Update Population Estimates

Unit Type[1]	Persons per Unit	# of Units	Population
Single Family	3.5	113	396
Accessory Dwelling Units	1.5	800	1,200
R-1	3	770	2,310
Southside Multi-Family	2.5	1,000	2,500
BART Stations Multi-Family	2.5	2,400	6,000
Other Multi-Family[2]	2.5	14,015	35,038
Total		**19,098**	**47,443**

[1] Based on unit types assumed in the transportation analysis prepared by Kittelson & Associates 2022. Numbers may not add due to rounding.

[2] Including middle housing rezoning in the R-1A, R-2, R-2A, and MU-R

In the unlikely event that all potential buildout of the EIR Sites Inventory and in the middle housing rezoning districts and Southside occurs, and assuming the growth is all new and not already accounted for under existing projections, the total population of the city in 2031 would be 172,006 (124,563 current population + 47,443 new residents), or a population increase of approximately 38%.

The proposed project would be consistent with State requirements for the RHNA and would be within the growth forecasts for Northwest Alameda County in Plan Bay Area 2050, which projects a 57% increase in population for Northwest Alameda County.

Further, growth under the propose HEU would be concentrated in locations where such development is encouraged by adopted plans due to their proximity to transit and transportation corridors. ABAG has designated several PDAs in Berkeley. PDAs are transit-rich areas that are intended to accommodate most future development in the Bay Area. Designated PDAs in Berkeley include: University Avenue, San Pablo Avenue, Telegraph Avenue (which was later amended to include the Southside), Adeline Street, South Shattuck Avenue, and the Downtown. By focusing development in areas with existing transit infrastructure, PDAs minimize growth in undeveloped parts of the Bay Area, helping to reduce reliance on automotive travel, vehicle miles traveled, and associated greenhouse gas emissions (ABAG 2022). Many of the inventory sites are within PDAs along University Avenue, San Pablo Avenue, Telegraph Avenue, at the Ashby BART Station site, and in the Southside.

In addition, the State requires that all local governments adequately plan to meet the housing needs of their communities (HCD 2021). Given that the State is currently in an ongoing housing crisis due to an insufficient housing supply, the additional units under the proposed project would further assist in addressing the existing crisis and meeting the housing needs of the City's communities. Furthermore, the proposed HEU would first be submitted to the HCD for review and approval to ensure that it would adequately address the housing needs and demands of the City. Approval by the HCD would ensure that population and housing growth under the 2023-2031 Housing Element would not be substantial or unplanned.

Lastly, this analysis is conservative because it assumes a maximum buildout scenario and includes sites already planned for development and maximum buildout under the proposed zoning changes. The project's actual contribution to population growth may be less than estimated in Table 4.12-4. In addition, the project would not involve the extension of roads or other infrastructure that could indirectly lead to population growth. As discussed in Section 4.13, *Public Services and Recreation,* and Section 4.16, *Utilities and Service Systems,* the city is mostly developed and is supported by existing public services and infrastructure which are sufficient to serve the additional housing units. Therefore, the project would not result in substantial unplanned population growth, either directly or indirectly. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation is required.

Threshold 2:	Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact POP-2 IMPLEMENTATION OF PROPOSED PROJECT WOULD NOT RESULT IN THE DISPLACEMENT OF SUBSTANTIAL NUMBERS OF PEOPLE OR HOUSING. THE PROPOSED PROJECT WOULD FACILITATE THE DEVELOPMENT OF NEW HOUSING IN ACCORDANCE WITH STATE AND LOCAL HOUSING REQUIREMENTS, WHILE PRESERVING EXISTING RESIDENTIAL NEIGHBORHOODS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

"Substantial" displacement would occur if the proposed project would displace more residences than would be accommodated through growth facilitated by the project. The goal of the proposed project is to accommodate and encourage new residential development in Berkeley at the inventory sites and in other locations such as the North Berkeley and Ashby BART station sites, the middle housing rezoning districts, and in the Southside. The proposed project addresses the need for future housing development beyond that required by the RHNA to account for a reasonable sites buffer. This buffer of additional units, which is considered in the inventory of candidate housing sites analyzed in this EIR, is intended to help the City address future "no net loss," if it becomes necessary to identify a replacement site for the Housing Element Update if a site is developed with fewer units or at a higher income category than assumed in the sites inventory. A portion of the housing units would be developed at a density range that could accommodate low and very-income housing as required to meet the RHNA 6th Cycle allocation. Development under the proposed HEU could result in up to an estimated 19,098 new housing units developed by 2031. The types of housing units anticipated under the proposed project would generally fall into the following categories of development projects: single-family, multi-family residential, and/or mixed-use development on vacant sites, redevelopment of existing nonresidential and residential sites that would allow residential use or higher density residential use. Therefore, overall, the proposed HEU would add to the City's housing stock to meet housing goals.

On an individual site basis, it is possible that some redevelopment projects could result in displacement of current housing. However, the proposed HEU includes policies to reduce displacement impacts. For example, Policy H-5 in the HEU seeks to protect tenants from large rent increases, arbitrary evictions, hardship from relocation, and the loss of their homes. For displaced residents with lower incomes, Policies H-1 through H-3 in the HEU seek to increase affordable housing for Berkeley residents with lower income levels, develop additional funds for permanently affordable housing, and ensuring below market rate rental housing remains affordable for the longest period that is economically and legally feasible. In addition, projects that involve demolition or elimination of dwelling units would be subject to BMC Chapter 23.326, which stipulates that demolition of dwelling units only be approved if it is found that the elimination of the dwelling units would not be materially detrimental to the housing needs and public interest of the affected neighborhood and the city. Further, BMC Chapter 23.326 includes tenant protections for displaced residences. When demolition of an occupied unit is approved, the project applicant is required to provide assistance with moving expenses and subsidize the rent differential for a comparable replacement unit. If a tenant is displaced due to the owner withdrawing the building from rent or lease or for repairs to bring the unit into compliance, BMC Chapters 13.77.055 and 13.84 entitle the tenant to relocation compensation and certain protections. Lastly, BMC Chapter 13.76.130 requires landlords to have good cause for evictions and provide relocation assistance to households as specified in Section 13.76.130A.9.

In summary, the proposed project would facilitate the development 19,098 additional dwelling units throughout Berkeley. Proposed residential units would provide additional housing opportunities for residents if residents are displaced during buildout of the proposed project. Therefore, the proposed project would not result in the net loss or displacement of housing, necessitating the construction of replacement housing elsewhere. This impact would be less than significant.

Mitigation Measures

This impact would be less than significant. No mitigation is required.

c. Cumulative Impacts

Inducement of Substantial Population Growth

As discussed in Section 3, *Environmental Setting*, the topic of population and housing has cumulative implications on the entire Bay Area region, not just on the City of Berkeley. Therefore, this cumulative impact analysis is based on Plan Bay Area 2050, the Bay Area's most recent RTP/SCS. The proposed HEU would accommodate projected citywide population and housing growth through 2031. By its nature, the impact analysis under Impact POP-1 considers cumulative impacts associated with population growth throughout the City and consistent with the Plan Bay Area. The Housing Element Update incorporates regional growth anticipated by ABAG's RHNA projections and thus considers cumulative growth. The proposed HEU would not considerably contribute to a significant impact associated with unplanned population growth.

Displacement of People and Housing

Implementation of the proposed HEU would accommodate the City's forecasted population and housing demand through 2031. The proposed HEU would result in an overall net increase of housing units in the City, including affordable housing, and would not result in substantial displacement of people or housing. Other jurisdictions in the region are updating their respective Housing Elements and have similar impacts related to displacement, but they would contain programs and policies to provide housing for low-income and special needs populations. While the proposed HEU would have no direct physical effects, subsequent development under the proposed HEU could result in the demolition of some existing housing units within Berkeley. However, the proposed HEU includes policies to minimize the loss of existing housing and to promote the growth of affordable housing. Continued implementation of existing City regulations, policies and programs also would preserve existing housing stock and assist those at risk of displacement. As a result, implementation of the proposed HEU would not considerably contribute to a significant cumulative impact from the displacement of substantial numbers of existing housing units or people.

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4.13 Public Services and Recreation

This section evaluates potential environmental impacts from implementation of the proposed HEU with respect to the following public services: fire protection services, police protection services, public schools, and parks and recreation facilities. Other public facilities and services such as water, wastewater, and solid waste are addressed in Section 4.16, *Utilities and Service Systems*.

4.13.1 Setting

a. Fire Protection

The Berkeley Fire Department (BFD) provides fire protection and emergency medical services for the city of Berkeley. This service area represents 11 square miles and approximately 124,563 residents. The BFD operates seven fire stations including seven engine companies, two truck companies and four ambulances (City of Berkeley 2022a). The BFD is organized into five divisions, including: Office of the Fire Chief, Administrative and Fiscal Services, Operations, Fire Prevention, and Special Operations. The department has 140 full time equivalent employees (Berkeley Fire Department 2022). The Berkeley Fire Department is responsible for protecting life and property. As needed, these Fire Officers are available 24/7 to respond to fire incidents. The eastern edge of the City of Berkeley is in a very high severity fire hazard zone, as discussed in more detail in Section 4.17, *Wildfire*.

Facilities

The Fire Department maintains seven fire stations within City limits as shown in Figure 4.13-1:

- Station 1: 2442 Eighth Street
- Station 2: 2029 Berkeley Way
- Station 3: 2710 Russell Street
- Station 4: 1900 Marin Avenue
- Station 5: 2680 Shattuck Avenue
- Station 6: 999 Cedar Street
- Station 7: 3000 Shasta Road

Response Times

The BFD has an average response time of five minutes and fifteen seconds (5:15) from when the station receives the call to the first unit arriving on the scene. The median response time is 4:46 (City of Berkeley 2021).

b. Police Services

The Berkeley Police Department (BPD) provides police protection services to the city of Berkeley. The BPD is organized into five divisions, including: Office of the Chief, Operations, Investigations, Professional Standards, and Support Services. The BPD consists of 154 sworn officers and is headquartered at 2100 Martin Luther King Jr. Way.

Figure 4.13-1 Fire and Police Stations in Berkeley

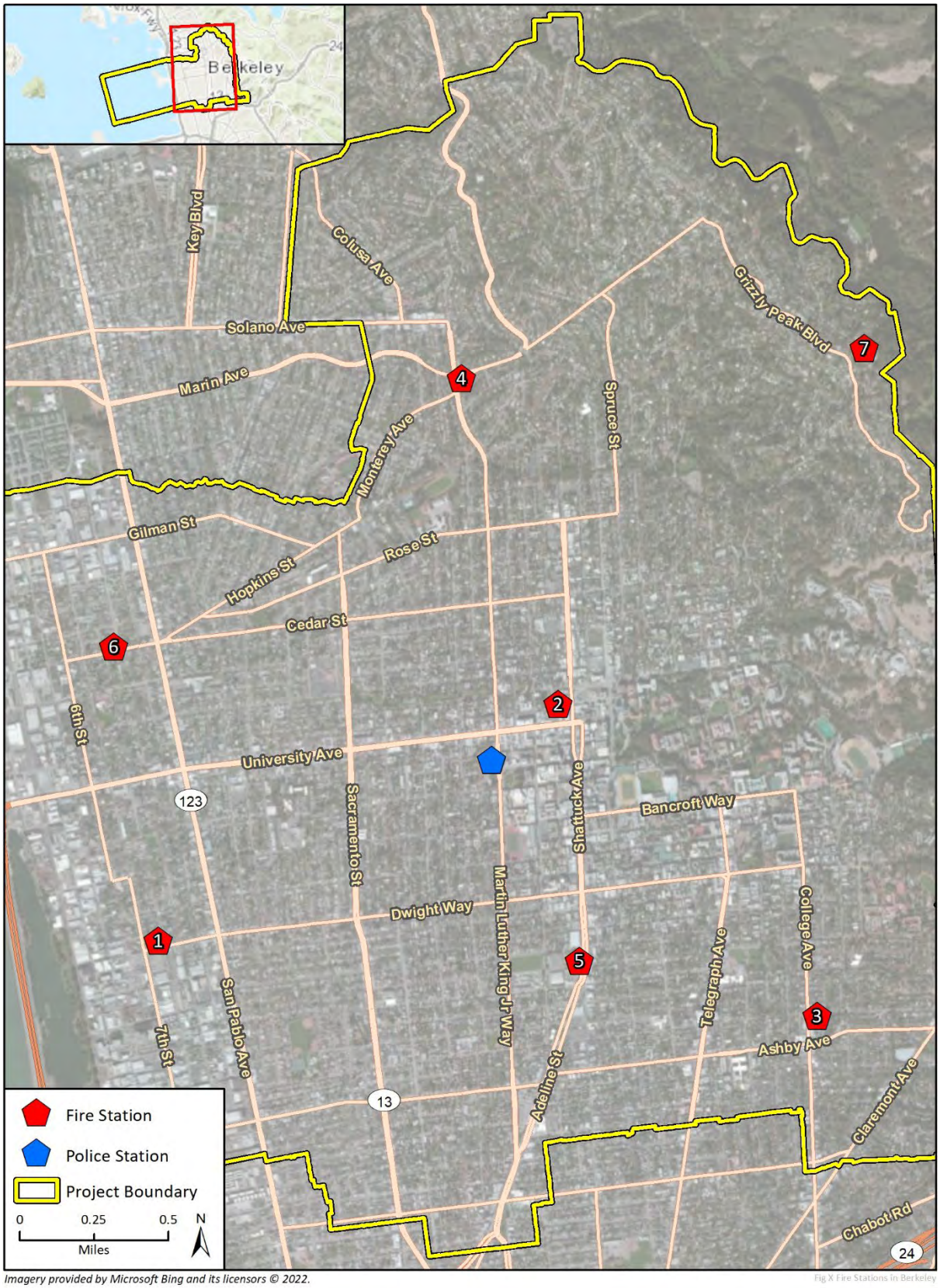

Fig X Fire Stations in Berkeley

Response Times

According to Lieutenant Matt McGee of the Community Services Bureau with the BPD, BPD response times are subject to variations depending on available personnel, call volumes, and other patrol demands. A priority 1 call for the BPD, a call which requires immediate response and there is reason to believe that an immediate threat to life exists, has an average response time of 6.2 minutes. A priority 3 call for the BPD, which requires an immediate response but does not present a significant threat of physical injury or major property damage, has an average response time of 31.6 minutes.

c. Schools

The Berkeley Unified School District (BUSD) operates three preschools, 11 elementary schools (grades K-5), three middle schools (grades 6-8), one large comprehensive high school (grades 9-12), a continuation high school (grades 9-12), and an adult school (BUSD 2020a). The District's overall enrollment for the 2020-2021 school year was 9,559 students (Ed-Data.org 2022).

BUSD is divided into three elementary school zones: Central, Northwest, and Southeast. Two of the middle schools are zoned, while one is a magnet school. Parents of students entering the District fill out an enrollment form and list their preferences for schools. Parents may request any school in the district, but first priority will be given to students living within a school's attendance zone.

d. Parks

The City of Berkeley's Parks, Recreation and Waterfront Department administers recreation centers and maintains the parks, waterfront, and urban forest within the city limits. In this department, the Parks Division maintains 54 parks; 21 turf medians, triangles, and dividers; 44 parking and vacant lots; 75 paths, walks and steps; 40 undeveloped paths; and the Berkeley Marina (City of Berkeley 2020b). There are 250 acres of parkland within city limits, which is a ratio of approximately two park acres per 1,000 residents (City of Berkeley 2022b). In addition to the public open space managed by the City's Parks Divisions, Berkeley contains parts of the Bay Trail and the 1,854-acre McLaughlin Eastshore State Park, and residents are adjacent to the East Bay Regional Park District's 2,079-acre Tilden Regional Park and 208-acre Claremont Canyon Regional Preserve. Including these additional parklands, Berkeley's park acres-to-persons ratio increases to approximately 25.5 acres per 1,000 residents. Parks are shown in Figure 4.13-2.

Several recreational facilities within the University campus may also serve as parks and recreational uses for residents. The University has a general philosophy of keeping the campus open for the public to utilize open spaces.

Figure 4.13-2 Parks in Berkeley

4.13.2 Regulatory Setting

a. Federal

There are no federal regulations pertaining to public services that are applicable to this analysis. Applicable State and local regulations are described below.

b. State

California Fire and Building Code

The State of California provides minimum standards for building design through the California Building Code (CBC), which is located in Part 2 of Title 24, California Building Standards Code, of the CCR. The CBC is based on the International Building Code but has been amended for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Code of Regulations

The California Code of Regulations, Title 5 Education Code, governs all aspects of education within the State. California State Assembly Bill 2926 (AB 2926) – School Facilities Act of 1986 – was enacted by the State of California in 1986 and added to the California Government Code (Section 65995). It authorizes school districts to collect development fees, based on demonstrated need, and generate revenue for school districts for capital acquisitions and improvements. It also established that the maximum fees which may be collected under this and any other school fee authorization are $1.50 per square foot ($1.50/ft^2) for residential development and $0.25/ft^2 for commercial and industrial development. AB 2926 was expanded and revised in 1987 through the passage of AB 1600, which added Section 66000 et seq. of the Government code. Under this statute, payment of statutory fees by developers serves as total mitigation under CEQA to satisfy the impact of development on school facilities. However, subsequent legislative actions have alternatively expanded and contracted the limits placed on school fees by AB 2926.

California Senate Bill 50

As part of the further refinement of the legislation enacted under AB 2926, the passage of SB 50 in 1998 defined the Needs Analysis process in government Code Sections 65995.5-65998. Under the provisions of SB 50, school districts may collect fees to offset the costs associated with increasing school capacity as a result of development. SB 50 generally provides for a 50/50 State and local school facilities match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether State funding is available; whether the school district is eligible for State funding; and whether the school district meets certain additional criteria involving bonding capacity, year-round schools, and the percentage of moveable classrooms in use.

California Government Code sections 65995-65998 sets forth provisions to implement SB 50. Specifically, in accordance with section 65995(h), the payment of statutory fees is “deemed to be

full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization…on the provision of adequate school facilities." The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Pursuant to Government Code section 65995(i), "A State or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in section 56021 or 56073 on the basis of a person's refusal to provide school facilities mitigation that exceeds the amounts authorized pursuant to this section or pursuant to section 65995.5 or 65995.7, as applicable."

California Education Code section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.

State Public Park Preservation Act (California Public Resource Code Section 5400 – 5409)

The State Public Park Preservation Act is the primary instrument for protecting and preserving parkland in California. Under the Act, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This ensures a no net loss of parkland and facilities.

Quimby Act (California Government Code Section 66477)

The Quimby Act allows cities and counties to adopt park dedication standards/ordinances requiring developers to set aside land, donate conservation easements, or pay fees towards parkland when property is subdivided.

c. Local

Berkeley General Plan

Fire Protection Goals, Policies, and Actions

The Disaster Preparedness and Safety Element and the Transportation Element of the City's General Plan contain the following policies and actions related to fire protection services (City of Berkeley 2001a, 2001c):

> **Policy S-1 Response Planning.** Ensure that the City's emergency response plans are current and incorporate the latest information on hazards, vulnerability, and resources. (Also see Transportation Policy T-28.)
>
> > **Action G.** Conduct coordinated planning and training between local and regional police, fire, and public health agencies in preparation for natural and man-made disasters, and ensure that the City's disaster response communication technologies are compatible with regional agency communication technologies.

Policy S-22 Fire Fighting Infrastructure. Reduce fire hazard risks in existing developed areas.

Action A. Develop proposals to make developed areas more accessible to emergency vehicles and reliable for evacuation. Consider restricting on-street parking, increasing parking fines in hazardous areas, and/or undergrounding overhead utilities. Require that all private access roads be maintained by a responsible party to ensure safe and expedient passage by the Fire Department at any time, and require approval of all locking devices by the Fire Department. Ensure that all public pathways are maintained to provide safe and accessible pedestrian evacuation routes from the hill areas.

Action B. Evaluate existing access to water supplies for fire suppression. Identify, prioritize, and implement capital improvements and acquire equipment to improve the supply and reliability of water for fire suppression. Continue to improve the water supply for firefighting to assure peak load water supply capabilities. Continue to work with EBMUD to coordinate water supply improvements. Develop aboveground, (transportable) water delivery systems.

Action C. Provide properly staffed and equipped fire stations and engine companies. Monitor response time from initial call to arrival and pursue a response time goal of four minutes from the nearest station to all parts of the city. Construct a new hill area fire station that has wildland firefighting equipment and ability.

Policy S-23 Property Maintenance. Reduce fire hazard risks in existing developed areas by ensuring that private property is maintained to minimize vulnerability to fire hazards.

Action A. Continue and expand existing vegetation management programs.

Action B. Property owners shall be responsible for maintaining their structures at a reasonable degree of fire and life safety to standards identified in adopted codes and ordinances.

Action C. Promote smoke detector installation in existing structures. Require the installation of smoke detectors as a condition of granting a permit for any work on existing residential and commercial buildings and as a condition for the transfer of property.

Action D. Promote fire extinguisher installation in existing structures, particularly in kitchens, garages, and workshops.

Action E. Require bracing of water heaters and gas appliances and the anchoring of houses to foundations to reduce fire ignitions following earthquakes.

Policy S-24 Mutual Aid. Continue to fulfill legal obligations and support mutual aid efforts to coordinate fire suppression within Alameda and Contra Costa Counties, Oakland, the East Bay Regional Park District, and the State of California to prevent and suppress major wildland and urban fire destruction.

Action A. Work with inter-agency partners and residents in vulnerable areas to investigate and implement actions to improve fire safety, using organized outreach activities and councils such as the Hills Emergency Forum and the Diablo Fire Safe Council.

Action B. Establish close coordination with the California Department of Forestry to minimize the risk of wildland fire in the hill areas.

Policy S-25 Fire Safety Education. Use Fire Department personnel to plan and conduct effective fire safety and prevention programs.

Action A. Provide fire safety presentations and programs to local schools, community groups, and neighborhoods.

Action B. Provide fire safety classes for high-occupancy institutional land uses, and commercial and industrial occupancies.

Action C. Develop and implement a program to improve public awareness and disseminate appropriate warnings during times of high fire danger.

Policy T-28 Emergency Access. Provide for emergency access to all parts of the city and safe evacuation routes. (Also see Disaster Preparedness and Safety Policy S-22.)

Action A. Do not install new full diverters or speed humps on streets identified on the Emergency Access and Evacuation Network map unless it is determined by the Fire and Police Departments that the installation will not significantly reduce emergency access or evacuation speeds. The Fire Department should be able to access all Berkeley locations within four minutes (see Disaster Preparedness and Safety Element). All other proposed traffic calming devices or obstructions to the free flow of traffic on these streets should be reviewed by the Fire and Police Departments to ensure that the proposed change will not significantly increase emergency response times or hinder effective evacuation of adjacent neighborhoods.

Action B. Maintain and improve pedestrian pathways throughout the city that are dedicated for public use and provide an alternative to the streets in case of an emergency evacuation.

Action C. Maintain and make available to the public up-to-date maps of all emergency access and evacuation routes.

Action D. Where necessary, consider parking restrictions to ensure adequate access for emergency vehicle access and evacuation in hill area neighborhoods with narrow streets.

Action E. Prioritize evacuation routes for undergrounding of overhead utilities.

Police Protection Goals, Policies, and Actions

The Disaster Preparedness and Safety Element, the Transportation Element and the Economic Development & Employment Element of the City's General Plan provide the following policies and actions related to police protection services (City of Berkeley 2001a, 2001c, 2001e):

Policy S-1 Response Planning. Ensure that the City's emergency response plans are current and incorporate the latest information on hazards, vulnerability, and resources. (Also see Transportation Policy T-28.)

Action G. Conduct coordinated planning and training between local and regional police, fire, and public health agencies in preparation for natural and man-made disasters, and ensure that the City's disaster response communication technologies are compatible with regional agency communication technologies.

Policy T-28 Emergency Access. Provide for emergency access to all parts of the city and safe evacuation routes. (Also see Disaster Preparedness and Safety Policy S-22.)

Action A. Do not install new full diverters or speed humps on streets identified on the Emergency Access and Evacuation Network map unless it is determined by the Fire and Police Departments that the installation will not significantly reduce emergency access or evacuation speeds. The Fire Department should be able to access all Berkeley locations within four minutes (see Disaster Preparedness and Safety Element). All other proposed traffic calming devices or obstructions to the free flow of traffic on these streets should be reviewed by the Fire and Police Departments to ensure that the proposed change will not significantly increase emergency response times or hinder effective evacuation of adjacent neighborhoods.

Policy ED-4 Neighborhood and Avenue Commercial Districts. Provide programs and services to assist neighborhood and avenue commercial districts. (Also see Land Use Policies LU-26 and LU-27.)

Action A. City efforts in neighborhood and avenue commercial zones should:

1. Maintain adequate levels of police presence.

Schools Goals, Policies, and Actions

The Land Use Element of the City's General Plan has the following policies and actions related to schools (City of Berkeley 2001b):

Policy LU-13 Basic Goods and Services. Ensure that neighborhoods are well served by commercial districts and community services and facilities, such as parks, schools, child-care facilities, and religious institutions.

Action B. Maximize joint City/Unified School District use of and planning for facilities such as recreation, libraries, and cultural centers.

Parks and Recreation Goals, Policies, and Actions

The Open Space and Recreation Element of the Berkeley General Plan cites a goal in the City's 1977 Master Plan of providing 2 acres of parkland per 1,000 people. This element also has the following policies related to parks and recreation (City of Berkeley 2001d):

Policy OS-2 Maintenance, Repair, and Enhancements. Within the context of open space resource allocations, give highest priority to maintaining and improving the City's existing network of open space and recreation facilities.

Policy OS-4 Working with Other Agencies. Work with the Berkeley Unified School District, the University of California, the East Bay Municipal Utility District, and the East Bay Regional Park District to improve, preserve, maintain, and renovate their open space and recreation facilities.

Policy OS-6 New Open Space and Recreational Resources. Create new open space and recreational resources throughout Berkeley.

Policy OS-7 Serving Disadvantaged Populations. Within the context of open space resource allocations for new or expanded facilities, give high priority to providing additional facilities for populations that are disadvantaged or underserved.

Policy OS-8 Community Gardens. Encourage and support community gardens as important open space resources that build communities and provide a local food source.

Policy OS-14 Regional Open Space. Coordinate with regional open space agencies such as the East Bay Regional Park District, neighboring cities, and private sector and nonprofit institutions to maintain, improve, and expand the region's open space network.

The Land Use Element of the City's General Plan has the following policies and actions related to parks and recreation (City of Berkeley 2001d):

Policy LU-13 Basic Goods and Services. Ensure that neighborhoods are well served by commercial districts and community services and facilities, such as parks, schools, child-care facilities, and religious institutions.

Action B. Maximize joint City/Unified School District use of and planning for facilities such as recreation, libraries, and cultural centers.

In 1986, City of Berkeley voters passed the Berkeley Public Parks and Open Space Preservation Ordinance ("Measure L") which requires the Berkeley City Council to preserve and maintain existing public parks and open space according to the following regulations:

1. That wherever public parks and open space currently exist in Berkeley, such use shall continue and be funded at least to allow the maintenance of the present condition and services.
2. That all undedicated or unimproved open space owned or controlled by the City of Berkeley (including land held by the City in trust) shall be retained and funded by the Berkeley City Council to enable public recreational use of those lands.
3. That those census tracts containing less than the Master Plan guideline of two acres of parks and open space per 1,000 population shall be singled out as having a high priority for funding the acquisition, development and maintenance of parks and recreational facilities.

Berkeley Municipal Code

Chapter 19.48, Berkeley Fire Code, of the Berkeley Municipal Code (BMC) adopts the 2019 California Fire Code as the City's fire code and provides City-specific amendments, as necessary. This chapter regulates the use of construction materials and requires the installation of specific fire safety features in new construction in Berkeley. Additionally, this chapter requires the coordination of the review of development applications between the City and the MOFD and regulates building design, siting, and vegetation management to enhance maximum fire prevention and protection

Berkeley Local Hazard Mitigation Plan

The City adopted its Local Hazard Mitigation Plan in 2019. The mitigation goals and priorities of the City's LHMP are to increase Berkeley's level of preparation for potential disasters and to minimize the impacts associated with natural and man-made hazards; identify strategies and tools to facilitate community disaster and hazards awareness and education; provide for the safety of Berkeley citizens by maintaining efficient, well-trained, and adequately equipped City personnel; encourage a disaster-resistant City and surrounding area by reducing the potential for loss of life, property damage, and environmental degradation from disasters and hazards; reduce the vulnerability of public and private facilities and infrastructure to the effects of earthquakes, fire, and landslides; and promote conditions and strategies that will accelerate the capacity for physical and

economic recovery from disasters and hazards (City of Berkeley 2019). The City Fire Department and Police Department is designated to respond to hazards and emergencies in Berkeley.

Berkeley Unified School District – School Facilities Fee

Per SB 50 (described above, the Berkeley Board of Education adopted a School Facility Fee for new housing and commercial development in order to help the Berkeley Unified School District (BUSD) meet the costs of expanding their facilities to accommodate increased enrollment caused by new development. These fees are directed towards maintaining adequate service levels, which would ensure that impact to schools that could result from development projects in the project sites would be offset by development fees and, in accordance with State law, reduce potential impacts to a less-than-significant level

4.13.3 Impact Analysis

a. Significance Thresholds and Methodology

According to Appendix G of the *CEQA Guidelines*, impacts related to public services and recreation from implementation of the proposed project would be significant if it would:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for any of the public services:
    a. Fire protection;
    b. Police protection;
    c. Schools;
    d. Parks; or
    e. Other public facilities;
2. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
3. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impacts related to thresholds 1(a), 1(b), 1(c), 1(d), 2 and 3 are analyzed below. Impacts related to other public facilities (Threshold 1(e)) such as water, wastewater and landfills are addressed in Section 4.16, *Utilities and Service Systems*.

This analysis considers the *CEQA Guidelines* Appendix G thresholds, as described above, in determining whether the proposed Project, including future development accommodated by the proposed HEU, would result in impacts related to the provision of public services. The evaluation was based on reviewing the regulations and determining their applicability to the proposed HEU. Public services information was acquired through review of relevant documents and communications with City staff, BFD, BPD, and BUSD. The determination that the proposed HEU would or would not result in "substantial" adverse effects concerning public services considers the relevant policies and regulations established by local and regional agencies, the proposed HEU's

compliance with such policies, and whether the HEU would create the need for new or expanded facilities, the construction of which could result in environmental impacts.

In *City of Hayward v. Trustees of California State University* (2015) 242 Cal.App.4th 833, the Court of Appeal held that significant impacts under CEQA consist of adverse changes in any of the physical conditions within the area of a project and potential impacts on public safety services are not an environmental impact that CEQA requires a project applicant to mitigate: "[T]he obligation to provide adequate fire and emergency medical services is the responsibility of the city. (Cal. Const., art. XIII, § 35, subd. (a)(2) ["The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services."].) Thus, the need for additional fire and police protection services is not an environmental impact that CEQA requires a project proponent to mitigate.

b. Project Impacts and Mitigation Measures

Threshold 1a:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-1 DEVELOPMENT FACILITATED BY THE PROPOSED HEU WOULD RESULT IN AN INCREASE OF POPULATION AND BUILDINGS WITHIN BERKELEY. THE PROJECTED POPULATION INCREASE WOULD INCREASE DEMAND FOR FIRE PROTECTION SERVICES AND POTENTIALLY CREATE THE NEED FOR A NEW OR ALTERED FIRE STATION. HOWEVER, COMPLIANCE WITH POLICIES IN THE 2020 GENERAL PLAN WOULD REDUCE IMPACTS RELATED TO FIRE SERVICE FACILITIES TO A LESS THAN SIGNIFICANT LEVEL.

The proposed HEU would not expand the BFD service area but would result in an increased population within the existing service area. As described in Section 2, *Project Description*, the proposed HEU could facilitate the development of approximately 19,098 housing units. The additional housing units would result in approximately 47,443 additional persons in Berkeley and the BFD district (see Section 4.12, *Population and Housing*, for population estimation methodology). The increase in residents associated with the project could increase demand for fire protection and emergency medical services such that additional staff, equipment or facilities would be needed to meet response time goals.

The continued implementation of policies and actions in the Berkeley General Plan would improve the ability of fire protection facilities to serve this future development and allow fire protection services to maintain response time goals. Policy S-22 in the City's Disaster Preparedness and Safety Element calls for the City to provide adequately staffed and equipped Fire Stations and to pursue a response time goal of four minutes from the nearest station to all parts of Berkeley.

Further, future development under the proposed HEU would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code, under BMC Section 19.48. In some cases, older buildings not constructed to today's more stringent levels of fire-safety regulation would be replaced by new buildings compliant with existing regulations, improving fire safety on those sites. Compliance with designs and standards and other fire safety requirements would reduce the demand for fire protection services and thereby reduce the need for new fire stations. Future development under the proposed HEU would be required to comply with abatement of fire-related hazards and pre-fire management prescriptions as outlined

under the California Health and Safety Code and the California Fire Plan. A list of typical fire-related requirements included in these codes and that would apply to typical residential projects allowed by the proposed HEU are as follows:

a. Adequate marking of exterior building openings
b. Openings and fire escape stairs and balconies
c. Internal access, including via hallways and doorways
d. Manual and automatic fire alarm systems
e. Fire Fighter Air Replenishment Systems
f. Internal building sprinkler systems
g. New fire hydrants
h. External fire protection (setbacks, fire-resistant materials, etc.)

New residential projects allowed by the proposed HEU would be reviewed for compliance with these requirements and compliance with other building and safety regulations several times during different phases of project development. During the entitlement and pre-application phase, new residential projects that require Use Permits are subject to an Interdepartmental Roundtable Review. As a part of this review, representatives from several City departments, including the Building and Safety Division, the Transportation Division, and the Fire Department, review the entitlement plan set and provide comments regarding Fire and Building Code requirements that will apply to the project. If the plans present a potential access or safety issue, this review offers an early opportunity to identify the problem and discuss solutions. For example, the Fire Department can suggest that an additional stairway be included in a residential building to provide additional egress. During the building permit process, projects are reviewed again by several City departments, including the Fire Department, to ensure compliance with all applicable code regulations. If a project does not comply with code requirements related to fire safety and access, the applicant will be issued a correction letter, which must be addressed before the building permit is approved. During the construction process, projects are subject to regular inspections to ensure that buildings are being constructed in accordance with the approved plans. Finally, after construction is complete, the projects are subject to regular inspections to confirm continued structural adequacy and safety.

In November 2020, the City of Berkeley passed Measure FF, which mandates that the City adopt an ordinance enacting a tax on construction and improvements within Berkeley. Measure FF is estimated to generate $8.5 million annually, which would be used to implement a state-of-the-art 911 dispatch system to ensure rapid assistance to emergency medical calls, increase ambulance and paramedic capacity, to better meet the needs of all residents, and strengthen wildfire, earthquake and other disaster prevention and preparedness with new, expanded emergency warning systems, fire fuel reduction and evacuation planning. These funds will allow the Fire Department to address increased call volumes and emergency medical service needs that result from city-wide increases in residential density, including the anticipated increase allowed under the proposed HEU.

Due to compliance with Fire Code requirements and other City efforts to ensure adequate fire protection services, with the increased demand for fire protection services associated with the proposed HEU response time goals would continue to be met. Therefore, impacts related to fire protection facilities under the proposed HEU would be less than significant.

Should the BFD and the City determine that new or expanded facilities are needed to provide fire protection services to Berkeley, it is not known where such facilities would be located. No location

has been identified for a new fire station as part of the proposed HEU. Nonetheless, this EIR analyzes the impact associated with development on vacant and underutilized sites throughout Berkeley. A potential future facility would likely be developed as infill development on one of the inventory sites. As infill development, it is not anticipated that the construction of a new fire station would cause additional significant environmental impacts beyond those identified in this EIR. The environmental effects of constructing a fire station would be consistent with the impacts determined in other sections of this EIR, which would be less than significant or less than significant with mitigation with the exception of impacts related to historical resources and construction noise. When and if the Fire Department proposes a new station and identifies an appropriate site and funding, the City will conduct a complete evaluation of the station's environmental impacts under CEQA.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation is required.

Threshold 1b:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-2 DEVELOPMENT FACILITATED BY THE PROPOSED HEU WOULD RESULT IN AN INCREASE IN THE CITY'S POPULATION. THE PROJECTED POPULATION INCREASE WOULD INCREASE DEMAND FOR POLICE PROTECTION SERVICES AND POTENTIALLY CREATE THE NEED FOR NEW OR ALTERED POLICE SERVICE FACILITIES. HOWEVER, COMPLIANCE WITH POLICIES IN THE 2020 GENERAL PLAN WOULD REDUCE IMPACTS RELATED TO POLICE FACILITIES TO A LESS THAN SIGNIFICANT LEVEL.

Implementation of the proposed HEU would increase the population served by the Berkeley Police Department. Although the Police Department does not factor in population increases when determining its staffing needs, population growth in Berkeley could result in an increase in reported incidents, leading to longer response times unless the Police Department increases staffing. Police protection services are not typically "facility-driven," meaning such services are not as reliant on facilities in order to effectively patrol a beat. An expansion of, or intensification of development within, a beat does not necessarily result in the need for additional facilities if police officers and patrol vehicles are equipped with adequate telecommunications equipment in order to communicate with police headquarters. However, if the geographical area of a beat is expanded, population increases, or intensification/redevelopment of an existing beat results in the need for new police officers, new or expanded facilities may be needed.

Policies in the City's General Plan listed above aim to ensure that there is adequate staffing to meet existing service demands. Police protection service levels would continue to be evaluated and maintained by BPD in accordance with existing policies, procedures and practices as development occurs over the lifetime of the HEU. Future housing developers would be required to submit a service questionnaire to the BPD in conjunction with their applications to ensure that police protection services are available to serve the proposed housing development.

Should the BPD and the City determine that new or expanded facilities are needed to provide police protection services to Berkeley, it is not known where such facilities would be located. No location has been identified for a new police station as part of the proposed HEU. Nonetheless, this EIR

analyzes the impact associated with development on vacant and underutilized sites throughout Berkeley. A potential future facility would likely be developed as infill development on one of the inventory sites. As infill development, it is not anticipated that the construction of a new police station would cause additional significant environmental impacts beyond those identified in this EIR. The environmental effects of constructing a police station would be consistent with the impacts determined in other sections of this EIR, which would be less than significant or less than significant with mitigation with the exception of impacts related to historical resources and construction noise. When and if the Police Department proposes a new station and identifies an appropriate site and funding, the City will conduct a complete evaluation of the station's environmental impacts under CEQA.

Therefore, the impact related to police protection services and facilities would be less than significant.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation is required.

Threshold 1c:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Impact PS-3 DEVELOPMENT FACILITATED UNDER THE PROPOSED HEU WOULD RESULT IN AN INCREASE IN POPULATION IN BERKELEY, RESULTING IN THE NEED FOR ADDITIONAL OR EXPANDED SCHOOL FACILITIES. HOWEVER, GOVERNMENT CODE 65995 (B) WOULD REQUIRE FUNDING FOR THE PROVISION OR EXPANSION OF NEW SCHOOL FACILITIES TO OFFSET IMPACTS FROM NEW RESIDENTIAL DEVELOPMENT. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The proposed project would not directly affect local schools but would generate new students entering the BUSD. As shown in Table 2-2 in Section 2, *Project Description*, the proposed project could result in 19,098 new dwelling units in Berkeley by 2031. In the study prepared for BUSD's adopted School Facilities Fee on new residential and commercial/industrial development, the District used a blended student generation rate of 0.191 for all housing types (BUSD 2016). Based on this generation rate, development under the proposed project would add an estimated total of 3,648 new students over time (through 2031). These students would be distributed throughout the schools that serve Berkeley depending on their grade level and on their location. The addition of 3,648 new students would result in an increase of 39 percent from the BUSD enrollment of 9,409 students in the 2020-21 school year (Ed-Data.org 2022).

However, to offset a project's potential impact to schools as discussed in Regulatory Setting, Government Code 65995 (b) establishes the base amount of allowable developer fees a school district can collect from development projects located within its boundaries. The fees obtained by BUSD are used to maintain the desired school capacity and the maintenance and/or development of new school facilities. Future development facilitated by proposed project would be required to pay school impact fees which, pursuant to Section 65995 (3) (h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), are "deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or

reorganization." Additionally, BUSD utilizes an "controlled choice" student assignment system to meet zone-wide diversity goals and to ensure appropriate seating capacity at schools (BUSD 2022). BUSD will continue to evaluate demand, capacity, and plans for facility needs as future projects under the Housing Element are built out, including any required adjustments to the zones in the controlled choice program relative to new student population generated from additional housing development in Berkeley.

There are no planned improvements to add capacity through expansion. In the event that BUSD constructs a new school or physically alters an existing facility, a project-specific environmental analysis would be required under CEQA to address site-specific environmental concerns. As described above, existing laws and regulations would require funding for the provision or expansion of new school facilities to offset impacts from new residential development and impacts would be less than significant.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation is required.

Threshold 1d:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?
Threshold 2:	Would the proposed project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
Threshold 3:	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact PS-4 DEVELOPMENT ASSOCIATED WITH THE PROPOSED HEU WOULD INCREASE THE POPULATION OF BERKELEY AND THE USE OF EXISTING PARKS AND RECREATIONAL FACILITIES. HOWEVER, NO PLANS FOR THE EXPANSION OR CONSTRUCTION OF NEW PARKS OR RECREATIONAL FACILITIES ARE ANTICIPATED. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The proposed HEU would not include the provision of new parks or the physical alteration of existing parks or recreation centers. As described in Section 2, *Project Description*, full buildout of the project would increase the population in Berkeley by 47,443 new residents by 2031, which would increase use of parks.

In addition to the public open space managed by the City's Parks Divisions, Berkeley contains parts of the Bay Trail and the Eastshore State Park, and Tilden Regional Park and Claremont Canyon Regional Preserve are adjacent to Berkeley. When considering parkland adjacent, the ratio of parkland per resident would be approximately 25.5 acres per 1,000 residents.

Policies and actions in Berkeley's Open Space and Recreation Element, referenced above in Section 4.13.2 *Regulatory Setting,* are designed ensure that adequate parks and recreational facilities are provided to accommodate increase in new residents.

In accordance with General Plan policies, the City continually evaluates and plans for expansion or renovations of parks and recreation facilities as need to accommodate demand. For example,

Ohlone Park is currently planned for $2,300,000 in investment to renovate existing features. Compliance with General Plan policies, particularly OS-1, OS-2, OS-6, would ensure park facilities are kept up to date and park acreage to population ratio is maintained within Berkeley. Compliance with General Plan policies and actions would potentially result in development of new recreational opportunities including parks. Should future park or recreational facilities be identified for construction, it is not known where such facilities would be located. No location has been identified for new facilities of the proposed HEU. Nonetheless, this EIR analyzes the impact associated with development on vacant and underutilized sites throughout Berkeley. A potential future facility would likely be developed as infill development on one of the inventory sites. As infill development, it is not anticipated that the construction of facilities in would cause additional significant environmental impacts beyond those identified in this EIR. The environmental effects of constructing facilities would be consistent with the impacts determined in other sections of this EIR, which would be less than significant or less than significant with mitigation with the exception of impacts related to historical resources and construction noise. When and if the Parks Department proposes new facilities and identifies an appropriate site and funding, the City will conduct a complete evaluation of the station's environmental impacts under CEQA.

City of Berkeley goals and policies regulations and Standard Conditions of Approval discussed throughout this EIR would ensure that impacts from construction of new parks and enhancements to existing parks are reduced to the extent feasible. Impacts to parks and recreation would be less than significant.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation is required.

c. Cumulative Impacts

Cumulative development in Berkeley, including but not limited to new development facilitated by the Housing Element, would increase demand for public services provided by the City, including fire and police protection services, parks, and libraries. As described in Section 3, *Environmental Setting*, cumulative development involves buildout associated with the proposed HEU in combination with development under the University of California, Berkeley's Long Range Development Plan.

Fire Protection

The HEU in combination with buildout under the LRDP could increase population such that there is an increase in reported incidents, leading to longer response times unless the Fire Department increases staffing. As described above under Impact PS-1, with continued implementation of General Plan policies, Fire Code requirements, and with additional funding sources under Measure FF, it is not anticipated that a new fire station is needed to serve cumulative development in Berkeley. Therefore, the cumulative impacts related to fire protection facilities would be less than significant, and the proposed HEU's contribution to these impacts would not be cumulatively considerable.

Police Protection

The HEU in combination with buildout under the LRDP could increase population such that there is an increase in reported incidents, leading to longer response times unless the Police Department increases staffing. Should additional staffing be needed to serve the areas around the project sites accounting for future cumulative development, staffing is reviewed each budget cycle and considers

historical and current year information related to police services. Overall, although additional staffing is may be needed, it is not anticipated that additional police department facilities would be needed to serve cumulative growth in the project areas. Further, the University of California Police Department would assist with police protection services for University-owned properties. Therefore, the cumulative impacts related to police facilities would be less than significant, and the proposed HEU's contribution to these impacts would not be cumulatively considerable.

Schools

Cumulative development would increase the number of children attending BUSD schools. However, as stated in Impact PS-3, compliance with Senate Bill 50 would require applicants for future development in Berkeley to pay school impact fees established to offset potential impacts from new development. Therefore, pursuant to CGC Section 65994(h), the cumulative impact relating to school capacity would be less than significant, and the HEU's contribution to this impact would not be cumulatively considerable.

Parks and Recreation Facilities

Cumulative projects also would increase demand for park and recreational facilities. As described in Section 3, *Environmental Setting*, cumulative development involves buildout associated with the University of California, Berkeley's LRDP, which would involve construction of a new housing development to replace the open space at People's Park. This would result in a decrease of 2.8 acres of park land as well as additional residents in Berkeley that would utilize City park and recreation spaces. Nonetheless, University housing projects would primarily serve University students and staff who would have access to recreational opportunities associated with the University campus. Because existing parkland in and near Berkeley is adequate to serve overall demand, it is not anticipated that population growth from cumulative development would result in substantial deterioration of existing park facilities. As described in the *Impact Analysis* section above, the project would increase the population of Berkeley thereby reducing the ratio of parkland within the city limits to parkland ratio to approximately 1.69 acres per 1,000 residents, which is below the City's goal of two acres of parkland per 1,000 people. Nonetheless, when considering parkland adjacent to the City such as the Eastshore State Park, Claremont Canyon Regional Park, and Tilden Regional Park, the ratio of parkland per resident would be substantially higher, approximately 25.5 acres per 1,000 residents, which is well above the City's goal. There are planned improvements to parks and recreational facilities near HEU sites and future development on the sites would involve public and private open space for future residents. Therefore, cumulative development would not result in a significant impact related to parks, and the HEU would not make a considerable contribution to a cumulative impact.

4.14 Transportation

This section describes the potential impacts related to transportation, including conflicts with transportation plans, vehicle miles traveled (VMT), project-related transportation hazards, and emergency access, associated with the implementation of the proposed Housing Element Update (HEU). The information provided in this section was based primarily on research and analysis provided by a VMT Impact Assessment authored by Kittelson and Associates (Kittelson), included as Appendix G to this report.

4.14.1 Setting

a. Existing Street Network

The street network serving the city is described below.

Regional

Regional access to Berkeley is provided through several freeways and state highways, including Interstate 80/580 (I-80/580), State Route 24 (SR 24), and State Routes 13 (Ashby Avenue) and 123 (San Pablo Avenue).

Major Streets/Arterials

- **San Pablo Avenue (SR 123)** is a major north-south state highway that runs about 7.4 miles between Interstate 580 in Oakland in the south and Interstate 80 in Richmond in the north. It spans for approximately 2.5 miles in the City of Berkeley. It is a four-lane boulevard with a median strip for its entire length. San Pablo Avenue is used as an alternate route to the Eastshore Freeway (Interstate 80) when that freeway is congested. San Pablo Avenue is maintained by the California Department of Transportation (Caltrans). The speed limit on San Pablo Avenue is 30 miles per hour (mph). On-street parking is provided along both sides of the street. SR 123 is part of the National Highway System, a network of highways that are considered essential to the country's economy, defense, and mobility by the Federal Highway Administration (FHWA).
- **Ashby Avenue (SR 13)** is an east-west major state highway that runs about 9.8 miles between Interstate 580 in Oakland in the south and Interstate 80 in Berkeley in the west. It spans for approximately 3.5 miles in the City of Berkeley. It is generally a four-lane highway with some two-lane sections that is enclosed by the eastern hills of Oakland and the entire freeway lies within the earthquake fault zone of the Hayward Fault. The speed limit on Ashby Avenue is 25 mph. On-street parking is provided at some portions of Ashby Avenue. However, during the peak commute hours, on-street parking prohibitions on the north side of the street in the morning and the south side in the evening provide an additional automobile lane east of San Pablo Avenue. SR 13 is part of the California Freeway and Expressway System, and is part of the National Highway System, a network of highways that are considered essential to the country's economy, defense, and mobility by the FHWA.
- **Adeline Street** is a northeast-southwest major street with four to six automobile lanes and a center median. On-street parking is provided on both sides of the street either as parallel parking or as angled parking with a raised buffer between the parking and the adjacent through automobile lanes. A combination of metered, time limited, and unrestricted parking options are

available along the corridor. A Class II bicycle lane is provided on Adeline Street from Ashby Avenue to Fairview Street and a cycletrack (Class IV facility) is provided on Adeline Street from Ashby Avenue to Stuart Street. Alameda-Contra Costa Transit District (AC Transit) Line F runs along Adeline Street. The speed limit on Adeline Street is 25 miles per hour (mph).

- **Shattuck Avenue** is a north-south four lane major street that connects with Adeline Street. Most blocks of Shattuck Avenue provide angled parking on both sides of the street with a raised buffer between the parking and the adjacent through automobile lanes. South of Adeline Street, Shattuck Avenue is a collector street with two lanes and on-street parallel parking. AC Transit Line 18 runs along Shattuck Avenue. The speed limit on Shattuck Avenue is 25 mph.
- **Martin Luther King (MLK), Jr. Way** is a north-south major street with two lanes in each direction. MLK Jr. Way is adjacent to Adeline Street in the vicinity of the Ashby BART station and is concurrent with Adeline Street between Fairview and 63rd Streets before separating to the south of the station at the border with the City of Oakland. On-street parking is provided along most of the street. AC Transit Line 12 runs along MLK Jr. Way. The roadway's speed limit is 25 mph.
- **Dwight Way** is an eastbound two-lane one-way major street north of the Ashby station. Dwight Way provides on-street parking on both sides of the street. AC Transit Line 36 runs along Dwight Way. The speed limit is 25 mph.
- **Sacramento Street** is a north-south major street with two lanes in each direction with a raised center median. On-street parking is available along most of the street on both sides of the roadway. AC Transit Lines 52, 88, 688, and J run along Sacramento Street. The speed limit is 30 mph from Rose Street to the southern city limits.
- **University Avenue** is an east-west arterial with two travel lanes in both directions and a raised center median. It is designated as a scenic route. On-street parking is available on both sides of the roadway. AC Transit Lines 51B, 800, and FS run along University Avenue. The speed limit is 25 mph, except from the Eastshore Highway to Fifth street, where the speed limit is 35 mph. The City of Berkeley Vision Zero Plan and 2020 Pedestrian Plan identifies University Avenue as a High-Injury Street.

b. Traffic Conditions

Analysis Methodology

This section examines how proposed updates based on the housing element would impact the transportation system under the California Environmental Quality Act (CEQA). This section uses the metric of vehicle miles traveled to analyze transportation-related impacts consistent with Senate Bill 743 and the state *CEQA guidelines*. Pursuant to California Public Resources Code section 21099(b(2) and *CEQA Guidelines* §15064.3, "a project's effect on automobile delay shall not constitute a significant environmental impact." Because the City has updated its CEQA thresholds in accordance with these state regulations, this analysis does not make significance conclusions with respect to changes to Levels of Service (LOS).

Vehicle Miles Traveled

Vehicle miles traveled (VMT) is determined by multiplying the number of vehicular trips by the trip distance in miles. For example, one vehicle that travels ten miles in a day generates 10 VMT. For the purposes of this Environmental Impact Report (EIR), VMT is expressed on a daily basis for a typical weekday. VMT values in this analysis represent the full length of a given trip and are not truncated

at jurisdiction boundaries. Additionally, these VMT values are for trips beginning or ending in the City (i.e., are associated with land uses within the City of Berkeley). Trips passing through the City without stopping are not included in these VMT estimate, as the City has little to no control over such trips.

Although the absolute amount of VMT may be reported, transportation impact analysis is typically based on VMT expressed as an efficiency metric. VMT efficiency metrics, such as VMT per resident and VMT per employee, allow the VMT performance of different land use quantities to be compared. Such metrics provide a measure of travel efficiency and help depict whether people are traveling by vehicle more or less over time, across different areas, or across different planning scenarios. A per-capita or per-employee decline in VMT compared to a baseline conditions indicates that the land use patterns and transportation network are operating more efficiently.

The regional travel demand model maintained by Alameda County Transportation Commission (Alameda CTC) is used to identify the VMT generated by land uses in Berkeley as well as the entire county. One measure of VMT is used in this analysis:

- **VMT per capita for residential land uses**. Includes VMT for all trips produced by a dwelling unit's residents, such as to work, school, or shop, on a typical weekday. VMT estimates for the 2020 baseline modeled conditions are shown in Table 4.14-1.

Table 4.14-1 Demographics and VMT Per Capita, 2020 Baseline Conditions

Units	Bay Area Region	Berkeley
Population	7,915,267	128,004
Residential VMT	180,468,151	1,436,244
VMT Per Capita	22.80	11.22

Source: Alameda County, Kittelson & Associates, Inc. 2022

According to the California Office of Planning and Research (OPR) Technical Advisory, screening thresholds can be used to quickly identify projects that can be expected to cause a less than significant impact without conducting a detailed study (OPR 2018). The City of Berkeley guidelines include several screening criteria. The criterion applicable to the project is the "Projects in Low VMT Areas" criterion. According to the Low VMT Areas criterion, projects that are located in low-VMT areas and that have characteristics similar to other uses already located in those areas can be presumed to generate VMT at similar rates. The low-VMT areas in Berkeley are defined based on the results of the Alameda County Transportation Commission (CTC) Travel Demand Model and are summarized in VMT maps.

c. Transit Access and Circulation

Transit service providers in the City include the National Railroad Passenger Corporation (Amtrak), a passenger railroad service that provides intercity service across the United States; Bay Area Rapid Transit (BART), which provides regional rail service; and Alameda-Contra Costa Transit District (AC Transit), which provides local and Transbay bus service with connections to the Transbay Terminal in San Francisco. Each service is described below.

BART

BART provides regional rail service throughout the East Bay and across the Bay to San Francisco and the Peninsula. There are three BART stations in the City of Berkeley, including the Downtown Berkeley, North Berkeley, and the Ashby BART stations.

AC Transit

AC Transit is the primary bus service provider in 13 cities and adjacent unincorporated areas in Alameda and Contra Costa Counties, with Transbay service to destinations in San Francisco and San Mateo Counties. AC Transit service in Berkeley is described in Table 4.14-2

Table 4.14-2 AC Transit Service in Berkeley

				Frequency	
Route #	Service Description	Stops Serving Plan Area	Hour of Service	Peak	Off Peak
6	Downtown Oakland to Downtown Berkeley via Telegraph Ave. and Southside Berkeley (UC campus).	Downtown Berkeley BART UC Berkeley Telegraph Avenue	Monday- Sunday: 5:00 AM to 1:00 AM	12-15 minutes	12-15 minutes
7	El Cerrito del Norte BART to Downtown Berkeley via Arlington Ave. and Shattuck Ave.	Downtown Berkeley BART Shattuck Avenue The Circle	Weekdays: 8:08 AM to 7:08 PM	30 min	30 min
12	Northwest Berkeley to Oakland Jack London Sq. via Gilman St., Monterey Av., MLK Jr. Way, 55th St., Temescal District, Pleasant Valley Av., Piedmont Av. Grand Av., and Broadway	MLK Jr. Way at Ashby BART, and Adeline St. at Alcatraz Av.	Monday- Sunday: 6:00 AM to midnight	20 min	30 min
18	University Village, Albany, to Lake Merritt BART via Solano Av., Shattuck Av., MLK Jr. Way, downtown Oakland.	Shattuck Av. at Dwight Way, Parker St. Derby St., Stuart St., Russell St, and Ashby Av.	Weekdays: 5:15 AM to 12:50 AM; Weekends: 6:00 AM to 12:50 AM	15 min	20 min
36	Bancroft Way & Piedmont Ave., Berkeley to West Oakland BART via Bancroft Way/Durant Ave., Shattuck Ave., Dwight Way, 7th St., Public Market Emeryville, Shellmound St., 40th St., and Adeline St.	UC Berkeley Dwight Way 7th Street	Everyday: 5:49 AM – 11:50 AM	29 min	29 min
80	El Cerrito BART Station to Claremont Hotel via Central Av., Pierce St., University Village, 6th St., 7th St., and Ashby Av.	Ashby Av. at MLK Jr. Way, Adeline St., and Shattuck Av.	Monday- Sunday: 6:00 AM to 10:35 PM	20 min	20 min
688 [1]	Supplementary Route - Grand Av. & MacArthur Blvd., Oakland, to Monterey Av. & Hopkins Av. via MacArthur Blvd., Park Blvd., Mountain Blvd., Broadway Terrace, Broadway, College Av., Alcatraz Av., and Sacramento St.	Alcatraz Av. at Adeline St.	Weekdays: 6:45 AM to 7:30 AM and 3:45 PM to 4:30 PM	-	-

Route #	Service Description	Stops Serving Plan Area	Hour of Service	Frequency	
				Peak	Off Peak
800 [2]	All Nighter Route - Richmond BART to San Francisco, via San Pablo Av., University Av., Telegraph Av. and downtown Oakland	Shattuck Ave at Dwight Way, Parker St., and Derby St., Adeline St. at Ward St. and Oregon St., and Ashby Av. at Adeline St.	Weekdays: 12:15 AM to 6:30 AM; Weekends: 11:40 PM to 8:20 AM	30 min	60 min
F	Transbay Route - UC Campus to San Francisco via Shattuck Av., Adeline St. 40th St., and Emeryville	Shattuck Ave at Dwight Way and Parker St., Adeline St. at Oregon St., Ashby Av., Ashby BART, and Alcatraz Av.	Weekdays: 5:10 AM to 1:30 AM; Weekends: 5:00 AM to 12:45 AM	30 min	30 min
51B	Rockridge BART to Berkeley Amtrak and Berkeley Marina, via College Av., Bancroft Way / Durant Av., Shattuck St., Downtown Berkeley, and University Av.	University Av. at Sacramento St. and Acton St.	Monday-Sunday: 5:00 AM to 12:15 AM	15 min	15 min
52	University Village to UC Berkeley Campus, via University Village, Cedar St., Sacramento St., and University Av., looping the UC campus via Hearst Av., Gayley St., Bancroft Way, and Shattuck Av. (Downtown Berkeley)	Cedar St. and Sacramento St; Sacramento St. and Delaware St. (North Berkeley BART), and University Av.	Monday-Sunday: 8:15 AM to 8:30 PM	20 min	20 min
65	Downtown Berkeley to Lawrence Hall of Science or Senior Ave. and Grizzly Peak Blvd. via Hearst Ave., Euclid Ave. and Grizzly Peak Blvd.	Addison St & Oxford St. Euclid Ave & Grizzly Peak Blvd, Centennial Dr & Lawrence Hall of Science	Monday – Friday: 7:33 AM – 7:34 PM	1 hr	1 hr
67	Downtown Berkeley to Grizzly Peak Blvd. and Spruce St. via Oxford St. and Spruce St.	Downtown Berkeley BART Oxford Street Spruce Street Beloit Avenue	Monday – Friday: 8:12 AM – 6:42 PM	30 min	30 min
72	Hilltop Mall to Jack London Square via Moyers Rd., Contra Costa College, San Pablo Ave., El Cerrito del Norte BART, and downtown Oakland.	El Cerrito Plaza BART El Cerrito del Norte BART12th Street/Oakland City Center BART19th St. Oakland BART Oakland Jack London Square Ferry Terminal Hilltop Mall Contra Costa College	Monday – Friday: 4:50 AM – 7:50 PM Weekends: 5:29 AM – 8:28 PM	24 min 30 min	24 min 30 min
72M	Point Richmond to Jack London Square via Garrard Blvd., Macdonald Ave., El Cerrito del Norte BART, San Pablo Ave. and downtown Oakland.	San Pablo Avenue	Everyday: 520 AM – Midnight	-	-

Route #	Service Description	Stops Serving Plan Area	Hour of Service	Frequency	
				Peak	Off Peak
72R	San Pablo Rapid — Contra Costa College to Jack London Square via El Cerrito del Norte BART, San Pablo Ave. and downtown Oakland.	San Pablo Avenue	Monday – Friday 6:30 AM – 8:00 PM Weekends: 7:30 AM – 7:30 PM	-	-
88	From Downtown Berkeley to Lake Merritt BART via University Ave., Sacramento St., Market St. and downtown Oakland.	Downtown Berkeley University Avenue Sacramento Street	Everyday: 5:30 AM – 10:50 PM	20 min	20 min
604	North Berkeley BART to Oakland Hebrew Day School, Head Royce High School and Bentley School via University Av., Southside Berkeley, College Av. and Ashby Av.	North Berkeley BART; Sacramento St. and University Av.	Monday, Tuesday, Thursday, and Friday: 8:05 AM to 8:45 AM and 3:30 PM to 4:15 PM	-	-
688 [1]	Supplementary Route - Grand Av. & MacArthur Blvd., Oakland, to Monterey Av. & Hopkins Av. via MacArthur Blvd., Park Blvd., Mountain Blvd., Broadway Terrace, Broadway, College Av., Alcatraz Av., and Sacramento St.	Alcatraz Av. at Adeline St.	Weekdays: 6:45 AM to 7:30 AM and 3:45 PM to 4:30 PM	-	-
800	All Nighter Route - Richmond BART to San Francisco, via San Pablo Av., University Av., Telegraph Av. and downtown Oakland.	Shattuck Av. at Dwight Way, Parker St., and Derby St., Adeline St. at Ward St. and Oregon St., and Ashby Av. at Adeline St.	Weekdays: 12:15 AM to 6:30 AM; Weekends: 11:40 PM to 8:20 AM	30 min	60 min
802	All Nighter. Berkeley Amtrak to Uptown Oakland via San Pablo Ave.	Berkeley Amtrak, University Ave and San Pablo Ave, 40th St & San Pablo Ave, T.L. Way (20th St) & Broadway	Everyday: 12:41 AM- 4:41 AM	60 min	60 min
851	All Nighter. Downtown Berkeley to Fruitvale BART via Southside Berkeley (UC campus), College Ave., Broadway, Uptown Oakland, Downtown Oakland, Webster St., Santa Clara Ave., Broadway, and Fruitvale Ave.	The 851 bus (Downtown Berkeley) has 57 stops departing from Fruitvale BART and ending in Shattuck Av & Allston Way.	Everyday: 12:15 AM – 4:15 AM	60 min	60 min
E	Caldecott Ln. and Tunnel Rd. to Salesforce Transit Center, San Francisco via Claremont Ave.	Caldecott Lane and Tunnel Road	Mondays – Fridays:4:20 PM – 6:55 PM	-	-
F	UC campus to Salesforce Transit Center, San Francisco via Shattuck Ave., Adeline St., Market St., 40th St., and Shellmound St.	Hearst Avenue Bancroft Way Shattuck Avenue Adeline Street	Everyday: 12:10 AM – 11:40 PM	30 min	30 min

Route #	Service Description	Stops Serving Plan Area	Hour of Service	Frequency	
				Peak	Off Peak
FS	Solano Ave. & Colusa St. to Salesforce Transit Center, San Francisco via Shattuck Ave. and University Ave	Thousand Oaks Shattuck Avenue University Avenue	Monday – Friday: 6:10 AM – 7:52 AM	-	-
G	Salesforce Transit Center, San Francisco to El Cerrito Plaza BART via I-80, University Ave., San Pablo Ave., Solano Ave., Colusa Ave. and Fairmount Ave.	University Avenue	Monday – Friday 7:25 AM – 6:25 PM	-	-
J	Transbay Route - Richmond BART to San Francisco, via Sacramento St. and University Av., Berkeley to Salesforce Transit Center, San Francisco via Sacramento St., Ashby Av. and Christie St.	Sacramento St. and Ashby Avenue and University Av.	Weekdays: 7:00 AM to 9:00 AM and 5:00 PM to 7:00 PM	60 min	60 min

Note: Service routes and times listed are reflective of pre-COVID19 pandemic conditions.

[1] Transit information reflects conditions from March 31, 2020

[2] Transit information reflects conditions from August 9, 2020

Source: AC Transit 2022a

d. Pedestrian Conditions

Pedestrian facilities include crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access destinations such as institutions, businesses, public transportation, and recreation facilities. A continuous sidewalk network is provided in Berkeley connecting to nearby residential, commercial, and retail facilities. Crosswalks and pedestrian signals are provided at major intersections.

e. Bicycle Conditions

Based on the *City of Berkeley Bicycle Plan* (City of Berkeley 2017), bicycle facilities are classified into several types, including:

- **Class 1 Multi-Use Paths** – provide a completely separated, exclusive right-of-way for bicycling, walking, and other non-motorized uses.
- **Class 2 Bicycle Lanes** – are striped, preferential lanes for one-way bicycle travel on roadways. Some Class 2 bicycle lanes include striped buffers that add a few feet of separation between the bicycle lane and traffic lane or parking aisle.
- **Class 3 Bicycle Routes** – are signed bicycle routes where riders share a travel lane with motorists. Bicycle boulevards (Class 3E) are a special type of Class 3 bicycle route where the shared travel way has low motor vehicle volumes and low speed that prioritize convenient and safe bicycle travel through traffic calming strategies, wayfinding signage, and traffic control adjustments
- **Class 4 Cycletrack** – is an on-street bicycle lane that is physically separated from motor vehicle traffic by a vertical element or barrier, such as a curb, bollards, or parking aisle.

According to the *City of Berkeley Bicycle Plan*, Berkeley has the fourth highest bicycle commute mode share (8.5 percent) of any city in the United States. Total, there is an estimated 51 miles of bikeways throughout Berkeley (City of Berkeley 2017).

4.14.2 Regulatory Setting

Local, regional, State, and Federal policies regulate many aspects of the City's transportation system, including planning and programming; design; operations; and funding. While the City of Berkeley has primary responsibility for the maintenance and operation of local transportation facilities, there is ongoing coordination between Berkeley staff and regional, state, and federal agencies to plan, manage, and enhance the City's transportation assets; these entities include Alameda County, Alameda County Transportation Commission (ACTC), Metropolitan Transportation Commission (MTC), Caltrans, regional transit providers and Federal Highway Administration.

a. State Regulations

California Department of Transportation (Caltrans)

Caltrans is the owner and operator of the state highway system, which includes facilities in and around Berkeley. In its Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG), 2020, Caltrans developed an approach for evaluating the transportation impacts of land use projects and plans on state highway facilities; this document does not address the impacts of transportation projects (Caltrans 2020). In accordance with current CEQA requirements, the TISG does not consider vehicle delay in its evaluation of transportation impacts, instead focusing on VMT. The purposes of the TISG include providing guidance to lead agencies regarding when they should analyze potential impacts to the state highway system; to aid Caltrans staff in reviewing projects; and to ensure consistency in the assessment of impacts and identification of non-capacity increasing mitigation measures.

State Senate Bill 375

Senate Bill (SB) 375, signed in August 2008, directs each of the state's 18 major Metropolitan Planning Organizations to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, the California Air Resources Board (CARB) adopted final regional targets for reducing greenhouse gas (GHG) emissions from 2005 levels by 2020 and 2035.

The intent of SB 375 is to use the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) to integrate regional land use, regional housing need allocations (RHNA), environmental, and transportation planning to ensure efficient regional planning in the future that leads to reduced greenhouse gas emissions from land and transportation uses. As a result of SB 375, preparation of local RHNA Plans are required to be coordinated and consistent with the RTP/SCS for the length of the housing element cycle. Local governments play a large role in helping to develop the transportation and land use scenarios used in the SCS development process.

State Senate Bill 743

Senate Bill (SB) 743, passed in 2013, resulted in several statewide CEQA changes. It required the California Governor's Office of Planning and Research (OPR) to establish new metrics for determining the significance of transportation impacts of projects within transit priority areas (TPAs) and allows OPR to extend use of the metrics beyond TPAs. OPR selected VMT as the preferred

transportation impact metric and applied their discretion to require its use statewide. This legislation also established that aesthetic and parking effects of a residential, mixed-use residential, or employment center projects on an infill site within a TPA are not significant impacts on the environment. The revised CEQA Guidelines that implement this legislation became effective on December 28, 2018, and state that vehicle LOS and similar measures related to delay shall not be used as the sole basis for determining the significance of transportation impacts for land use projects, and that as of July 1, 2020, this requirement shall apply statewide. The OPR "Technical Advisory on Evaluating Transportation Impacts in CEQA" (December 2018) includes specifications for VMT methodology and recommendations for significance thresholds, screening of project that may be presumed to have less than significant impacts, and mitigation. Lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on substantial evidence.

Screening criteria include:

- Small projects: The Technical Advisory concludes that, absent any information to the contrary, projects that generate 110 trips per day or less may be assumed to cause a less-than-significant transportation impact.
- Projects near transit stations: Projects located within ½ mile of an "existing major transit stop" or an "existing stop along a high-quality transit corridor" would have a less-than-significant impact on VMT.
- Affordable residential development: Projects consisting of a high percentage of affordable housing may be assumed to cause a less-than-significant transportation impact on VMT because they may improve jobs-housing balance and/or otherwise generate less VMT than market-based units.
- Redevelopment projects: If a proposed redevelopment project leads to a net overall decrease in VMT (when compared against the VMT of the existing land uses), the project would lead to a less-than-significant transportation impact.
- Local-serving retail: Trip lengths may be shortened and VMT reduced by adding "local-serving" retail opportunities that improve retail destination proximity. Page 17 of the Technical Advisory generally describes retail development including stores less than 50,000 square feet as local-serving. In May 2020, OPR staff indicated during online webinars that any retail building that is 50,000 square feet or less may be considered local-serving.

The Technical Advisory recommends thresholds for a general plan, area plan, or community plan where it may have a significant impact on transportation if proposed new residential, office, or retail land uses would in aggregate exceed the respective thresholds recommended for land use projects. For example, a general plan's residential generated VMT under cumulative conditions would be compared to 15 percent below the baseline citywide or region-wide average to determine impact significance. Another approach commonly used by local and regional agencies is to determine the total VMT per capita (or service population) for the area under consideration for baseline conditions and compare it to the total VMT per capita with the proposed plan in the horizon year. If the VMT per capita is lower in the horizon year with the plan than the VMT per capita under existing conditions, the plan may have a less than significant impact on VMT.

Other key guidance includes:

- VMT is the most appropriate metric to evaluate a project's transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office projects on a "per rate" basis. Specifically, OPR recommends VMT per capita for residential projects and VMT per employee for office projects.
- OPR recommends that a per capita or per employee VMT that is fifteen percent (15 percent) below that of existing development may be a reasonable threshold (page 10). In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. OPR notes that this threshold is supported by evidence that connects this level of reduction to the State's emissions goals.
- For retail projects, OPR recommends measuring the net decrease or increase in VMT in the planning area with and without the project. The recommended impact threshold is any increase in total VMT.
- Cities and counties still have the ability to use measures of delay such as LOS for other plans, studies, or network monitoring. However, according to CEQA section 15064.3, Determining the Significance of Transportation Impacts, "effect on automobile delay shall not constitute a significant environmental impact."

California Building Code

California provides minimum standards for building design through the California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The CBC is based on the 1997 Uniform Building Code with modifications specific for California conditions. The CBC provides fire and emergency equipment access standards for public roadways, which include specific width, grading, design and other specifications for roads which provide access for fire apparatus. Street modifications in the City of Berkeley are subject to these and other modified State standards. The City of Berkeley adopted the 2019 edition of the CBC in 2019.

b. Regional

Alameda County Transportation Commission

The Alameda County Transportation Commission (Alameda CTC) coordinates transportation planning efforts throughout Alameda County and programs federal, state, regional, and local funding for project planning and implementation. Through its Congestion Management Program (CMP), Alameda CTC oversees and monitors the operations and performance of roadways in the CMP network, which consist of freeways and major arterials that provide connectivity in the County. The Land Use Analysis Program of the CMP requires local jurisdictions to evaluate the potential impacts of proposed land use changes (e.g.., General Plan amendments, and developments estimated to generate 100 or more net new PM peak hour automobile trips) on the CMP network.

c. Local

City of Berkeley General Plan

The Transportation Element of the Berkeley General Plan (2001) contains the following policies and actions relevant to the proposed project:

Policy T-2: Public Transportation Improvements. Encourage regional and local efforts to maintain and enhance public transportation services and seek additional regional funding for public and alternative transportation improvements.

Policy T-4: Transit First Policy. Give priority to alternative transportation and transit over single-occupant vehicles on Transit Routes identified on the Transit Network map.

Policy T-10: Trip Reduction. To reduce automobile traffic and congestion and increase transit use and alternative modes in Berkeley, support, and when appropriate require, programs to encourage Berkeley citizens and commuters to reduce automobile trips, such as:

1. Participation in a citywide Eco-Pass Program (also see Transportation Policy T-3)
2. Participation in the Commuter Check Program
3. Carpooling and provision of carpool parking and other necessary facilities
4. Telecommuting programs
5. "Free bicycle" programs and electric bicycle programs
6. "Car-sharing" programs
7. Use of pedal-cab, bicycle delivery services, and other delivery services
8. Programs to encourage neighborhood-level initiatives to reduce traffic by encouraging residents to combine trips, carpool, telecommute, reduce the number of cars owned, shop locally, and use alternative modes
9. Programs to reward Berkeley citizens and neighborhoods that can document reduced car use
10. Limitations on the supply of long-term commuter parking and elimination of subsidies for commuter parking
11. No-fare shopper shuttles connecting all shopping districts throughout the city

Policy T-12: Education and Enforcement. Support, and when possible require, education and enforcement programs to encourage carpooling and alternatives to single-occupant automobile use, reduce speeding, and increase pedestrian, bicyclist, and automobile safety.

Policy T-14: Private Employers. Encourage private employers to reduce the demand for automobile travel through transportation demand management programs that include elements such as:

1. Trip reduction incentives such as Commuter Check and Eco-Pass.
2. Flexible work hours and telecommuting to reduce peak-hour commute congestion.
3. Carpool and vanpool incentives to reduce single-occupancy vehicle use.
4. Provision of mass transit pass/credit instead of free employee parking (parking "cash-out" programs).
5. Providing bicycle facilities.
6. Market pricing mechanisms for employee parking to reduce automotive use and discourage all-day parking.
7. Local hiring policies.
8. Numerical goals for trip reduction

Policy T-15: Local Hiring. Establish Berkeley residency as a preference for hiring, and encourage other public employers, institutions, and private employers to hire locally. (Also see Economic Development and Employment Policy ED-1.)

Policy T-16: Access by Proximity. Improve access by increasing proximity of residents to services, goods, and employment centers. (Also see Land Use Policies LU-13 and LU-23, Housing Policy H-16, and Environmental Management Policy EM-41 Action B.)

Action A. Locate essential commercial and other services in transit-oriented locations to reduce the need for cars and enable people living near transit and services to reduce auto trips.

Action B. Encourage higher density housing and commercial infill development that is consistent with General Plan and zoning standards in areas adjacent to existing public transportation services.

Action D. Encourage siting of child-care facilities and other services in large residential or commercial facilities to reduce traffic impacts associated with child-care drop-off and pick-up.

Action E. In locations served by transit, consider reduction or elimination of parking requirements for residential development.

Policy T-17: Transportation Planning. Involve local residents, businesses, and institutions in all stages of transportation planning

Policy T-18: Transportation Impact Analysis and Vehicle Miles Traveled.[1] When considering transportation impacts under the California Environmental Quality Act, the City shall consider how a plan or project affects all modes of transportation, including transit riders, bicyclists, pedestrians, and motorists, to determine the transportation impacts of a plan or project. Plans and projects shall be designed to deliver significant benefits to travel by pedestrians, bicycle, or transit, and/or reduced impacts on air quality, greenhouse gas emissions, and safety. For the purposes of CEQA, Vehicle Miles Traveled (VMT) shall be the metric used to analyze the transportation impacts of a plan or project.

Policy T-19: Air Quality Impacts. Continue to encourage innovative technologies and programs such as clean-fuel, electric, and low-emission cars that reduce the air quality impacts of the automobile. (Also see Environmental Management Policies EM-18 through EM-22.)

Action A. Establish bicycle and low-emission vehicle preferred parking areas.

Action B. Install electric vehicle charging stations in all City-owned parking facilities downtown and at major parking facilities and employment centers.

Policy T-24: Ashby Avenue. Take actions necessary to reduce congestion, improve pedestrian and bicycle crossings, and improve the quality of life for residents on Ashby Avenue.

Policy T-33: Disabled Parking and Passenger Zones. Ensure adequate disabled parking and passenger drop-off zones.

[1] Amendment to Policy T-18: Level of Service can be found in the City of Berkeley VMT Criteria and Thresholds, June 29, 2020. file:///C:/Users/gcarsky/Downloads/2020-11-17%20Item%2018%20General%20Plan%20Amendment%20%20Vehicle%20Miles.pdf

Action A. Require access to adequate disabled parking and passenger drop-off zones in all new commercial and residential developments.

Policy T-39: High-Tech Parking. To make the most efficient use of available land, encourage consideration of high-tech computerized parking (e.g., lifts and or "robotics") when replacing existing public parking or when providing off-street parking for multi-family residential projects.

Policy T-40: Parking Impacts. When considering parking impacts under the California Environmental Quality Act for residential projects with more than two units located in the Avenue Commercial, Downtown, or High Density Residential land use classifications, any significant parking impacts identified that result from the project should be mitigated by improving alternatives to automobile travel and thereby reducing the need for parking. Examples include improvements to public transportation, pedestrian access, car sharing programs, and bicycle facility improvements. Parking impacts for these projects should not be mitigated through the provision of additional parking on the site. The City finds that:

1. Parking supply and demand may easily be adjusted by changing local pricing policies and by changing how the supply is managed.
2. As the parking supply increases or parking costs decrease, automobile use becomes a more attractive transportation alternative and demand for parking increases. As parking supply decreases and its price increases, demand decreases.
3. Increasing the parking supply increases automobile use, which causes a measurably negative impact on the environment

Policy T-41: Structured Parking. Encourage consolidation of surface parking lots into structured parking facilities and redevelopment of surface lots with residential or commercial development where allowed by zoning.

Action C. Provide parking and recharging facilities for alternative vehicles such as bicycles and electric and low-emission vehicles.

Action D. Whenever feasible, orient automobile access to parking lots and garages away from designated bicycle ways and boulevards and avoid blank walls along pedestrian ways.

Policy T-43: Bicycle Network. Develop a safe, convenient, and continuous network of bikeways that serves the needs of all types of bicyclists, and provide bicycle-parking facilities to promote cycling.

Action A. Expand the supply of highly secure bicycle parking near transit hubs and commercial areas.

Action B. Encourage business owners to provide bicycle parking, showers, and lockers for employees and bicycle parking for customers.

Policy T-49: Disabled Access. Improve pedestrian access for the entire disabled community.

Action B. Use regulation and incentives to require or encourage accessibility upgrades for private businesses.

Action C. Encourage businesses to exceed the minimum standards set by the ADA "readily achievable barrier removal" requirement.

Policy T-50: Sidewalks. Maintain and improve sidewalks in residential and commercial pedestrian areas throughout Berkeley and in the vicinity of public transportation facilities so that they are safe, accessible, clean, attractive, and appropriately lighted.

Policy T-51: Pedestrian Priority. When addressing competing demands for sidewalk space, the needs of the pedestrian shall be the highest priority.

Policy T-52: Pedestrian Safety and Accessibility. Provide safe and convenient pedestrian crossings throughout the city.

City of Berkeley VMT Regulations

CEQA Guidelines §15064.3(b) indicates that land use projects would have a significant impact if the project resulted in vehicle miles traveled (VMT) exceeding an applicable threshold of significance. In June 2020, the City of Berkeley adopted the following thresholds of significance for VMT analysis according to the guidance from OPR:

- A residential project's VMT impact is considered less-than-significant if its household VMT per capita is at least 15 percent below the regional average household VMT per capita.
- An employment-generating project's VMT impact is considered less-than-significant if its home-work VMT per worker is at least 15 percent below the regional average home-work VMT per worker.

In addition, the City of Berkeley has developed screening criteria to provide project applicants with a conservative indication of whether a project could result in potentially significant VMT impacts. If the screening criteria are met by a project, the applicant would not need to perform a detailed VMT assessment for their project. The City's screening criteria include the following:

- Projects within Transit Priority Areas
- Low-income housing projects
- Small Projects: Projects defined as generating 836 daily VMT or less
- Locally Serving Public Facility: Projects that generally encompass government, civic, cultural, health, and infrastructure uses which contribute to and support community needs and mostly generate trips within the local area
- Projects in Low VMT Areas: Projects that are located in low-VMT areas and that have characteristics similar to other uses already located in those areas can be presumed to generate VMT at similar rates. The low-VMT areas in Berkeley are defined based on the results of the Alameda CTC model (see Figure 4.6-1) and include the following:
    - Residential projects will be screened out if located in an area that has household VMT per capita that is 15 percent lower than the baseline regional average.
    - Office and industrial projects will be screened out if located in an area that has homework VMT per worker that is 15 percent lower than the baseline regional average.

General Plan Policy T-18 indicates that for the purposes of CEQA, VMT shall be the metric used to analyze the transportation impacts of a plan or project. The City shall also focus on elements such as safety, site access, and circulation when assessing a plan or project's impact.

City of Berkeley Vision Zero Resolution and Vision Zero Action Plan

The Berkeley City Council adopted a Vision Zero Policy (Resolution 68,371-N.S.) in March 2018, with a goal of eliminating traffic deaths and severe injuries by 2028. This resolution directed a Vision Zero task force to develop a Vision Zero Action Plan, which was subsequently created and approved by City Council in March 2020. The plan contains the following policies relevant to the proposed project:

Policy 1.1: Collaboration with City departments, regional and community partners, and mobility providers to achieve Vision Zero Goals.

Policy 2.1: Prioritize high-injury streets and the most vulnerable street users.

Policy 2.2: Design for vulnerable users of the transportation network, including people of all ages and abilities.

Policy 2.3: Deliver Vision Zero traffic safety infrastructure improvements both reactively and proactively.

Policy 3.1: Create a culture of traffic safety by promoting awareness through public information programs and campaigns.

City of Berkeley Complete Street Policy

The Berkeley City Council adopted a Complete Streets Policy (Resolution 65,978-N.S.) in December 2012, to guide future street design and repair activities. “Complete Streets” describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, emergency vehicles, seniors, children, youth, and families.

City of Berkeley Bicycle Plan

The City of Berkeley Bicycle Plan, approved by Berkeley City Council in May 2017, contains the following policies and actions relevant to the proposed project:

Policy PL-1. Integrate bicycle network and facility needs into all City planning documents and capital improvement projects

Actions

- Follow a multi-disciplinary project scoping process that incorporates the needs of all modes and stakeholders, both internal and external; the design process should include the City divisions, departments, and staff responsible for emergency response, parking, law enforcement, maintenance, and other affected areas.
- Ensure that all traffic impact studies, analyses of proposed street changes, and development projects address impacts on bicycling and bicycling facilities. Specifically, the following should be considered:
  - Consistency with General Plan, Area Plan, and Bicycle Plan policies and recommendations;
  - Impact on the existing bikeway network;
  - Degree to which bicycle travel patterns are altered or restricted by the projects; and

- Safety of future bicycle operations (based on project conformity to Bicycle Plan design guidelines and City, State, and Federal design standards).

Policy PL-2. When considering transportation impacts under the California Environmental Quality Act, the City shall consider how a plan or project affects bicyclists per Berkeley General Plan Policy T-18.

Actions

- Integrate Vehicle Miles Traveled transportation impact analysis thresholds as a State-mandated alternative to Level of Service. Work with the Alameda County Transportation Commission and the Metropolitan Transportation Commission to ensure conformity with County and Regional travel models.
- Establish new City traffic analysis standards that consider all modes of transportation, including pedestrians, bicycles, and transit in addition to automobiles, consistent with a comprehensive, integrated transportation network for all users as described in the City of Berkeley Complete Streets Policy. Utilize Level of Traffic Stress to quantify bicycle transportation in this network-based Complete Streets Policy context.

City of Berkeley Pedestrian Plan

The City of Berkeley Pedestrian Master Plan, adopted in June 2010 and updated in 2020 is a critical component of the City's efforts to meet diverse travel needs and improve mobility for everyone who is walking and traveling with an assistive device in Berkeley. The goals of the Pedestrian Master Plan include the following:

- Increase safety and comfort for people walking.
- Increase equity and transportation choices for all.
- Improve public health and environmental sustainability.

These goals listed in the Berkeley Pedestrian Master Plan reiterate and emphasize the General Plan policies and actions pertaining to pedestrians. Policies relevant to the proposed project include General Plan Policies T-12 (Education and Enforcement), T-49 (Disabled Access), T-50 (Sidewalks), and T-51 (Pedestrian Priority), which are listed above.

City of Berkeley Municipal Code

The City of Berkeley Municipal Code (BMC) has the following applicable sections related to transportation:

- **BMC Chapter 23.334, Transportation Demand Management.** This chapter implements the City's goals reduce vehicle trips, encourage public transit use and promote bicycle and pedestrian safety by requiring a transportation demand management (TDM) program for residential projects with ten or more units, including residential portions of mixed-use projects.
- **BMC Section 23.322.090, Bicycle Parking.** This section sets standards for the provision of bicycle parking for residential and non-residential uses based on the zoning district for non-residential projects and number of dwelling units for residential projects.
- **BMC Section 23.304.100, Site Features in Residential Districts.** This section requires multi-family projects have an unobstructed walkway for pedestrian access from the public right-of-

way to the building and that the walkway be separated and physically protected from a driveway or off-street parking spaces with a minimum 2-foot wide landscaped strip.

4.14.3 Impact Analysis

a. Significance Criteria and Methodology

Consistent with the *CEQA Guidelines*, impacts related to transportation and circulation would be considered potentially significant if implementation of the project would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
2. Conflict or be inconsistent with *CEQA Guidelines* section 15064.3, subdivision (b);
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment); or
4. Result in inadequate emergency access.

As described in Section 4.14.2, *Regulatory Setting,* to implement SB 743, the *CEQA Guidelines* have been updated to change the criteria for determining what constitutes a significant traffic-related environmental impact to rely upon quantification of VMT instead of LOS. As of July 1, 2020, the VMT-based approach in Section 15064.3 of the *CEQA Guidelines* applies statewide for the purpose of assessing traffic-related impacts under CEQA. As a result, this analysis uses the metric of VMT to determine the project's traffic-related impact. Section 15064.3(b)(1) of the *CEQA Guidelines* states that land use "projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact." According to OPR's Technical Advisory on Evaluating Transportation Impacts, published by the Governor's Office of Planning and Research in December 2018, a 15 percent reduction in VMT per capita from existing development is "generally achievable" and supportive of State goals to reduce greenhouse gas emissions (OPR 2018). However, State guidance allows localities to set their own VMT standards based on substantial supporting evidence.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact TRA-1 THE PROPOSED HEU WOULD NOT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE, AND PEDESTRIAN FACILITIES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The EIR building assumptions include approximately 19,098 residential units at the EIR Sites Inventory, middle housing rezoning districts, and in the Southside area. Given the potential number of new residents and associated vehicle trips, it is expected these would contribute to an increase in traffic on arterials and local streets in Berkeley. However, as described in Section 4.14.2, Regulatory Setting, to implement SB 743, the CEQA Guidelines have been updated to change the criteria for determining what constitutes a significant traffic-related environmental impact to rely upon quantification of VMT instead of LOS. Therefore, traffic congestion is no longer considered an impact under CEQA.

Development under the proposed HEU would increase Berkeley's population, especially along transit corridors, in order to encourage alternative modes of transportation, which may result in an increase in transit ridership for AC Transit and BART. However, OPR's technical advisory states that because the criteria for determining the significance of transportation impacts must promote "the development of multimodal transportation networks," when evaluating impacts to multimodal transportation networks, lead agencies generally should not treat the addition of new transit users as an adverse impact. An infill development may add riders to transit systems and the additional boarding and alighting may slow transit vehicles, but it also adds destinations, improving accessibility and proximity. Such development is considered to improve the regional vehicle flow by adding less vehicle travel onto the regional network. Further, AC Transit and BART monitor and plan for anticipated changes in local and regional ridership levels and increased demand through their ongoing evaluation of routes, schedules, ridership, and capacity availability. AC Transit conducts periodic route restructuring and service frequency evaluations such as through their Short-Range Transit Plan (AC Transit 2019) and capital improvement project planning (AC Transit 2022b). BART also has a number of ongoing projects to improve facilities, modernize technology, add train cars, improve safety, and provide capacity relief (BART 2022). The proposed HEU would not conflict with these ongoing efforts.

With respect to pedestrian and bicycle access, as part of the City's entitlement process, future development is required to comply with existing regulations, including General Plan policies and Zoning regulations. Future development under the HEU would be reviewed in accordance with the City's Public Works Department Transportation Program standards, and the department would provide oversight engineering review to ensure that the project is constructed according to City standards. The project would be consistent with the City's 2017 *Bicycle Plan*. The proposed project does not include any modifications to the public right-of-way, and therefore, would not preclude the installation of the planned or proposed bicycle facilities on the streets in the city. Developments facilitated by the proposed project would provide long-term and short-term bicycle parking in accordance with BMC Section 23.322.090 requirements to accommodate the bicycle parking demand generated by the project residents and would also be required to meet applicable requirements for pedestrian access under BMC Section 23.304.100 or other requirements as applicable.

Because the proposed HEU does not include modifications to the existing transportation network and individual future developments would be designed consistent with applicable bicycle and pedestrian facility requirements, the proposed HEU would not conflict with the City's Bicycle Master Plan or the City's Pedestrian Plan. At a programmatic level, the proposed HEU would not conflict with applicable program plans or policies related to the circulation system including the General Plan, Bicycle Master Plan, Complete Streets Policy, or Pedestrian Plan. The proposed HEU would have a less than significant impact.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation measures are required.

Threshold 2:	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Impact TRA-2 THE PROPOSED HEU NOT CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES SECTION 15064.3, SUBDIVISION (B). THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The Housing Element Update would result in a significant transportation impact if it would conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)(1), which states for land use projects, "Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact." CEQA Guidelines § 15064.3, subdivision (b)(4) states, "A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence."

VMT can be presented as total VMT, or as efficiency metrics expressed in VMT per capita, VMT per employee, and VMT per service population on a typical day. Total VMT represents all VMT generated in the city, while VMT per resident, or employee is an efficiency metric that represents VMT generated on a typical day per person who lives and/or works in the City. VMT per capita is measured to evaluate residential projects, VMT per employee for employment projects, and VMT per service population a combination of land uses. For this housing element update, we generally use VMT per capita to assess impacts based on the proposed project.

The City of Berkeley has adopted thresholds to evaluate significant impacts for VMT. For residential uses, the City of Berkeley adopted the threshold of significance for VMT analysis according to the guidance from OPR that a residential project's VMT impact is considered less-than-significant if its household VMT per capita is at least 15 percent below the regional average household VMT per capita. Therefore, an increase in the VMT per capita under the horizon year with the proposed HEU compared to the respective threshold (15 percent below the regional average VMT per capita) would be considered a significant impact. VMT thresholds by land use type are shown in Table 4.14-3

Table 4.14-3 VMT Thresholds by Land Use Type for Projects

Land Use Type (Units)	Regional Baseline	Threshold
Residential (Household VMT Per Capita)	22.80	19.38

Source: Kittelson & Associates, Inc. 2022

VMT was calculated for the Berkeley Housing Element update by Kittelson & Associates in June 2022 (see Appendix G). Table 4.14-4 summarizes the VMT for 2020 baseline, the applicable threshold, and the future VMT with the proposed housing element update. As shown in the table, the proposed HEU would result in a decreased VMT per capita in comparison to the baseline condition. Residential VMT per capita would decrease by 3 percent, from 11.22 to 10.86, and is below the impact threshold of 19.38. These reductions indicate that the future residential development would provide more opportunities for Berkeley residents and employees to access jobs and services within the City and within shorter distances and by modes other than vehicle.

Table 4.14-4 VMT Results Summary

Units	Bay Area Region	Berkeley 2020	Berkeley 2031
Population	7,915,267	128,004	182,651
Residential VMT	180,468,151	1,436,244	1,983,715
Household VMT Per Capita	22.80	11.22	10.86

Source: Kittelson & Associates, Inc. 2022

In summary, implementation of the HEU would result in VMT per capita below applicable thresholds and therefore would result in a less than significant impact.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation measures are required.

Threshold 3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Impact TRA-3 THE PROPOSED HEU WOULD NOT SUBSTANTIALLY INCREASE HAZARDS BECAUSE OF A GEOMETRIC DESIGN FEATURE (E.G., SHARP CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G., FARM EQUIPMENT). THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Adoption of the proposed HEU analyzes the amount of new housing units the City will accommodate during the document's planning period and sets goals and policies for how this housing is implemented. It does not grant entitlements for any specific project or future development. Thus, the plan for new housing and the goals and policies needed to achieve that housing do not have a specific transportation safety impact or hazard. The proposed project would not include hazardous geometric design features or incompatible uses. Each housing application would be evaluated at the project specific level. Circulation components and geometric design features would be reviewed by the City Engineering division and would be in accordance with all applicable City standards and the building plan check process to minimize design hazards. Design review standards include standards for project access points, location, and design, sight lines, roadway modifications, provisions for bicycle and pedestrian transportation connections, and emergency access. As a result, impacts of the proposed project from design features or incompatible uses would be less than significant.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation measures are required.

Threshold 4: Would the project result in inadequate emergency access?

Impact TRA-4 THE PROPOSED HEU WOULD NOT HAVE THE POTENTIAL TO RESULT IN INADEQUATE EMERGENCY ACCESS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The HEU process included an analysis of the amount of new housing units the City will accommodate during the document's planning period, and the HEU sets goals and policies for how this housing is planned and built. It does not grant entitlements for any specific project or future development. Thus, the plan for new housing and the goals and policies needed to achieve that

housing do not have a specific emergency access impact. At the project specific level, future development under the proposed amendments would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code, under BMC Section 19.48. As described in Section 4.13, *Public Services and Recreation*, as a part of development review, representatives from several City departments and representatives, including the Building and Safety Division, the Transportation Division, and the Fire Department, review the entitlement plan set to ensure compliance with egress requirements and other fire safety features. Future projects would be required to incorporate all applicable design and safety requirements as set forth in the most current adopted building codes and fire and life safety standards. Compliance with these standards is ensured through the City review and building plan check process. Based on the preceding, impacts related to emergency access would be less than significant.

Mitigation Measures

This impact would be less than significant without mitigation. No mitigation measures are required.

c. Cumulative Impacts

CEQA Guidelines 15130(a) require that the cumulative effect of implementing a project be assessed to determine if the project's incremental effect - together with that of other- would be cumulatively considerable. For the purposes of this analysis, the cumulative setting for thresholds 1, 3, and 4 includes the City of Berkeley, as effects associated with those thresholds tend to occur more locally or citywide, while the cumulative setting for Threshold 2, VMT impacts, includes development associated with the proposed HEU and Plan Bay Area 2040, the Bay Area's RTP/SCS.

With respect to Threshold 2, the Housing Element Update envisions full buildout of the housing accommodated by the plan by 2031, with cumulative impacts being evaluated on full implementation. As discussed in Impact T-2, the proposed project would have a less than significant impact related to VMT. Based on technical guidance from the OPR, if a project has a less than significant impact on VMT using an efficiency-based threshold (e.g., VMT per worker), this implies that the project would not contribute to a cumulative VMT impact. Therefore, the project would not have a considerable contribution to a cumulative VMT impact.

For Threshold 1, development under the proposed HEU in conjunction with development under the University of California Berkeley's LRDP would also increase transit ridership for AC Transit and BART. However, as described above, based on OPR guidance, when evaluating impacts to multimodal transportation networks, lead agencies generally should not treat the addition to new transit users as an adverse impact. It is also assumed that planned development outside of the University campus would follow applicable standards for bicycle and pedestrian access and circulation and bicycle parking such that no cumulative impact with respect to bicycle and pedestrian plans or policies would occur.

For thresholds 3 and 4, it is also assumed that LRDP projects would follow applicable standards and regulations to ensure emergency access and avoid dangerous conditions. Generally, the University is proposing housing in projects outside of the main campus area, and these infill residential projects would not involve incompatible uses or dangerous design features. Overall, cumulative impacts would be less than significant.

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4.15 Tribal Cultural Resources

This section evaluates the impacts of the proposed HEU on tribal cultural resources. The analysis is based on Assembly Bill 52 consultation conducted by the City of Berkeley and consulting Tribes.

4.15.1 Regulatory Setting

This section includes a discussion of the applicable State and local laws, ordinances, regulations, and standards governing cultural resources, which must be adhered to before and during implementation of the proposed project.

a. Federal Regulations

No federal regulations are applicable to this resource area.

b. State Regulations

Assembly Bill 52 of 2014

AB 52 expanded CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.2). AB 52 further requires that, when feasible, the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" and that meet either of the following criteria:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k).
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments and with respect to the interests and roles of project proponents, it is the intent AB 52 to accomplish the following:

1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
2. Establish a new category of resources in CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3. Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.

4. Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated (because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources).
5. In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, early in the CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.
6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7. Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.
8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

The formal consultation process requires lead agencies to work with California tribes traditionally and culturally affiliated with the geographic area of the proposed project. This includes those that have previously requested notice and that are listed by the State as having expertise regarding potential resources and impacts. Consultation must be completed before a CEQA document can be certified or adopted.

Senate Bill 18 of 2004

California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

Codes Governing Human Remains

The disposition of human remains is governed by Section 7050.5 of the California Health and Safety Code and PRC Sections 5097.94 and 5097.98 and falls within the jurisdiction of the Native American Heritage Commission (NAHC). If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is

responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

c. Local Regulations

City of Berkeley General Plan

As part of the City of Berkeley's General Plan, the Urban Design and Preservation Element outlines guidance for future development and preservation. The General Plan does not explicitly outline any guidance for Tribal Resources. Policies related to cultural resources include the following:

Policies

Policy UD-1 Techniques. Use a wide variety of regulatory, incentive, and outreach techniques to suitably protect Berkeley's existing built environment and cultural heritage.

Policy UD-2 Regulation of Significant Properties. Increase the extent of regulatory protection that applies to structures, sites, and areas that are historically or culturally significant.

Policy UD-12 Range of Incentives. Seek to maintain and substantially expand the range and scale of incentives that the City and/or other entities make available in Berkeley for the preservation of historic and cultural resources.

Policy UD-20 Alterations. Alterations to a worthwhile building should be compatible with the buildings original architectural character.

Policy UD-21 Directing Development. Use City incentives and zoning provisions to direct new development toward locations where significant historic structures or structures contributing to the character of an area will not need to be removed.

Policy UD-36 Information on Heritage. Promote, and encourage others to promote, understanding of Berkeley's built and cultural heritage, the benefits of conserving it, and how to sensitively do that.

4.15.2 Setting

The proposed project lies in the San Francisco Bay Area archaeological region (Milliken et al. 2007, Moratto 1984). Milliken et al. (2007) generally divided the prehistoric chronology of the Bay Area into five periods: The Early Holocene (8,000-3,500 BCE [Before Common Era]), Early Period (3500-500 BCE), Lower Middle Period (500 BCE to 430 CE), the Upper Middle Period (430-1050 CE), and the Late Period (1050 CE-contact).

It is presumed that early Paleoindian groups lived in the area prior to 8,000 BCE; however, no evidence for that period has been discovered in the Bay Area to date (Milliken et al. 2007). Sites dating to this period may be submerged or deeply buried as a result of rising sea levels and widespread sediment deposition that has occurred since the Terminal Pleistocene (Byrd et al. 2017). For this reason, the Terminal Pleistocene Period (ca. 11,700-8,000 BCE) is not discussed here.

The earliest intensive study of archaeology of the San Francisco Bay Area began with N. C. Nelson of the University of California, Berkeley, between 1906 and 1908. He documented over 400 shell mounds throughout the area. Nelson was the first to identify the Bay Area as a discrete archaeological region (Moratto 1984).

a. Ethnography and Ethnohistory

The Huchiun people lived in Berkeley when Spanish soldiers and missionaries arrived in the Bay Area. Huchiun territory extended "along the East Bay shore from Temescal Creek…north to the lower San Pablo and Wildcat Creek drainages in the present area of Richmond" (Milliken 1995:243). The names of two Huchiun villages – Genau and Junchaque – are known from Mission records, but their exact location is unknown (Milliken 1995:243). Huchiun presence near Temescal Creek, approximately four miles to the southwest, in Oakland, is attested in its Mexican-era name, "Arroyo del Temescal o Los Juchiyunes."

The Huchiun were one of the groups of the Ohlone people who lived along the east, west, and south shores of San Francisco Bay and in the Santa Cruz Mountains, Salinas Valley, and Monterey Bay area. The Ohlone utilized a wide range of resources in a very favorable environment. Those populations living adjacent to the great bays of the region relied heavily on shellfish and aquatic animals for food. In the interior, plant foods like acorns were gathered and stored in great quantity. Large game like deer, elk, and antelope were hunted. Game birds, waterfowl, fish, and shellfish were other major food sources that thrived in the nearby sloughs and marshes of San Francisco Bay (Milliken 1995:16-18; Levy 1978).

Ohlone society was organized in local tribes of 200-400 people living in semi-permanent villages made up of round, domed, or conical thatch homes with frames and a center hearth. Tribelets controlled fixed territories averaging 10 to 12 miles in diameter (Kroeber 1925:219; Milliken *et al.* 2007). Hereditary village leaders, who could be male or female, played an important role in conflict resolution, receiving guests, directing ceremonies, organizing food-gathering expeditions, and leading war parties but did not otherwise exercise direct authority (Levy 1978:487). Despite their autonomy, intermarriage between tribelets appears to have been frequent (Milliken 1995:22-24).

The Huchiun spoke the Chochenyo dialect of the Ohlone language, which was spoken along the eastern shore of San Francisco Bay prior to 1770. Ohlone/Costanoan is a branch of the Yok-Utian subfamily of the Penutian languages, which are spoken along the Pacific Coast from Central California to southeast Alaska. Penutian speakers seem to have entered central California from the northern Great Basin around 4000-4500 years ago and arrived in the San Francisco Bay Area about 1500 years ago, displacing speakers of Hokan languages (Golla 2007:74).

b. Assembly Bill 52 Consultation

The City of Berkeley prepared and mailed AB 52 notification letters on November 18, 2021 to tribes listed by the Native American Heritage Commission. Under AB 52, tribes have 30 days to request consultation from receipt of the notification letters.

On November 24, 2021, the Confederated Villages of Lisjan responded to request consultation under AB 52. The City of Berkeley met with the Confederated Villages of Lisjan over teleconference on December 15, 2021, to discuss the project and proposed mitigation measures. The Confederated Villages of Lisjan requested additional information about the physical extent of the project area, and whether the proposed project could result in changes in areas of tribal concern, specifically the historic Berkeley waterfront/shoreline and Indian Rock. The Confederated Villages of Lisjan also requested drafts of the Cultural Resources and Tribal Cultural Resources sections of the EIR to allow their review of the sections' historical portrayal of tribal groups.

On February 10, 2022, the City of Berkeley communicated by email with the Confederated Villages of Lisjan and confirmed that the project area does not include any areas adjacent to the historic waterfront/shoreline.

On June 27, 2022, the City of Berkeley communicated by email with the Confederated Villages of Lisjan and shared drafts of the Cultural Resources and Tribal Cultural Resources sections of the EIR and requested comments. No comments were received.

The Confederated Villages of Lisjan requested mitigation measures to be included in the EIR, and included a suggested mitigation measure, in an email to the City of Berkeley on July 8, 2022. Mitigation Measure TCR-1, below, is based upon the proposed mitigation measure.

The City of Berkeley sent an email to the Confederate Villages of Lisjan on August 19, 2022 to conclude AB 52 consultation.

Correspondence related to AB 52 is included in Appendix H.

4.15.3 Impact Analysis

a. Methodology and Significance Thresholds

Consistent with the *CEQA Guidelines*, impacts related to tribal cultural resources would be considered potentially significant if implementation of the project would:

1. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or
    b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Impact TCR-1 DEVELOPMENT DURING THE PLANNING PERIOD OF THE PROPOSED HEU COULD ADVERSELY IMPACT TRIBAL CULTURAL RESOURCES DUE TO GROUND DISTURBING ACTIVITY DURING CONSTRUCTION. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

As part of its tribal cultural resource identification process under AB 52 and SB 18, the City sent letters to 12 Native American Tribal representatives based on a list provided from the NAHC to be informed through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the Tribes. To date, the City has received one response requesting additional consultation under AB 52 or SB 18.

This EIR analyzes potential impacts from implementation of a city-wide planning program and associated zoning changes. Based on the results of AB 52 and SB 18 consultation, tribal cultural resources may be present in areas near the waterfront and near Indian Rock. None of the EIR Inventory Sites or rezoning programs are within these areas. Therefore, tribal cultural resources in the Housing Element areas have not been identified.

Nonetheless, ground-disturbing activities associated with individual development projects during the planning period of the HEU could expose previously unidentified subsurface archaeological resources that may qualify as tribal cultural resources and could be adversely affected by construction. Further, a high potential for Native American cultural resources exists within the Berkeley city limits, according to the City's General Plan EIR.

Adherence to the requirements of AB 52 would require Tribal consultation with local California Native American Tribes prior to implementation of project activities subject to CEQA or SB 35. In compliance with AB 52, a determination of whether project-specific substantial adverse effects on tribal cultural resources would occur along with identification of appropriate project-specific avoidance, minimization, or mitigation measures would be required. Due to the programmatic nature of the proposed HEU it is not possible to fully determine impacts of specific projects on specific sites; however, no tribal cultural resources were identified during consultation. Future projects subject to CEQA and SB 35 would require project-specific tribal cultural resource identification and consultation, and the appropriate avoidance, minimization, or mitigation would be incorporated. As discussed in Section 4.4, *Cultural Resources,* the City has Standard Conditions of

Approval related to the protection of archaeological resources and human remains (including remains that are determined to be of Native American origin) that would apply to future development.

Project-specific tribal cultural resource consultation will occur when specific projects are implemented, and consultation conducted pursuant to the requirements of AB 52. Overall, this impact is potentially significant, and mitigation is required.

Mitigation Measures

The City's Standard Conditions of Approval related to archaeological resources and human remains discussed in Section 4.4, *Cultural Resources,* would apply. In addition, the following mitigation measure would apply to future projects that are determined through tribal consultation to potentially affect tribal cultural resources. Other mitigation may also be required for future projects as determined through the tribal consultation process.

TCR-1 Tribal Cultural Monitoring

For future projects that are determined through tribal consultation to potentially affect tribal cultural resources, in order to mitigate potential adverse impacts to Native American cultural objects and human remains discovered during construction, tribal cultural monitors will be retained to monitor work done in areas of Tribal concern, as determined through tribal consultation. If Native American cultural objects and/or human remains are discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by tribal cultural monitors and a qualified archaeologist meeting the Professional Qualifications Standards of the Secretary of the Interior (36 CFR Part 61). The archaeologist shall, in accordance with the appropriate Guidelines, identify and evaluate the significance of the discovery and develop recommendations for treatment in consultation with the affected Tribe to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in consultation with the affected Tribe consistent with the *CEQA Guidelines for Determining the Significance of and Impacts to Cultural Resource, Archaeological Historic and Tribal Cultural Resources*. Such mitigation may include, but is not limited to, additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that a TCR might be encountered.

Significance After Mitigation

Implementation of Mitigation Measures TCR-1 would reduce impacts related to tribal cultural resources, as actions would be taken to identify, avoid, and retain identified tribal cultural resources. Impacts would be less than significant with mitigation.

c. Cumulative Impacts

While there is the potential for significant cumulative impacts to tribal cultural resources, it is anticipated that potential impacts associated with individual development projects would be addressed on a case-by-case basis and would be subject to City policies and local and State regulations regarding the protection of such resources. With compliance with existing policies and regulations, future development in the city and region would be required to avoid or mitigate the loss of these resources. The proposed project's impacts can be reduced to below a level of significance with the implementation of Mitigation Measure TCR-1 and Standard Conditions of

Approval (including City policies and local and State regulations) described above. Therefore, significant cumulative impacts to tribal cultural resources would not occur.

4.16 Utilities and Service Systems

This section analyzes the effects of the proposed Housing Element Update on utilities and service systems. It considers potential impacts with respect to water supply and infrastructure, wastewater conveyance and treatment facilities, stormwater and drainage facilities, solid waste disposal, and electricity, natural gas, and telecommunications facilities.

4.16.1 Setting

a. Existing Setting

The following section describes the existing setting with respect to water suppliers, wastewater treatment providers, stormwater drainage facilities, solid waste facilities, electricity and natural gas providers, and telecommunications facilities serving Berkeley.

b. Water Supply

Water Service

Water service to Berkeley is provided by the East Bay Municipal Utility District (EBMUD), a publicly owned utility. EBMUD is responsible for service connections and water delivery to Alameda County and much of Contra Costa County. Approximately 1.4 million people are currently served by EBMUD's water system in a 332-square mile area extending from Crockett on the north, southward to San Lorenzo and portions of Hayward (encompassing the major cities of Oakland and Berkeley), eastward from San Francisco Bay to Walnut Creek, and south through the San Ramon Valley (including Alamo, Danville, and San Ramon).

Approximately 90 percent of the EBMUD water supply originates from the melting snowpack of the Sierra Nevada. The principal water source is the Mokelumne River watershed, a 575-square mile area located in Alpine, Amador, and Calaveras Counties. Water is stored in reservoirs in the Sierra foothills and is transported by aqueduct to filter plants and reservoirs in the East Bay Hills. The other 10 percent of the District's water comes from runoff on protected East Bay Area watershed lands (EBMUD 2020a). The water is treated at one of six water treatment plants (WTP) before delivery to customers.

EBMUD has water rights to 325 million gallons per day (MGD) from the Mokelumne River, subject to the availability of Mokelumne River runoff and numerous flow release obligations. EBMUD's Mokelumne River flow commitments are determined by hydrology, water right priorities, agreements with state and federal regulatory agencies, California State Water Resources Control Board (SWRCB) orders and decisions, federal directives, court decrees, and numerous agreements between EBMUD and other Mokelumne River users, both upstream and downstream of EBMUD's Mokelumne River facilities (EBMUD 2020a).

EBMUD's secondary water supply comes from local runoff from the East Bay area watersheds, which is stored in the terminal reservoirs within EBMUD's service area. Water from local runoff is dependent on hydrologic conditions and terminal reservoir storage availability. Local runoff supplies the East Bay, on average of 23 MGD during normal hydrologic years.

In addition to the EBMUD water supply, Berkeley is comprised of 10 watersheds wholly or partially within City limits (not including the Marina). These watersheds eventually drain into EBMUD

reservoirs, through storm drains to creeks, into homes and businesses, from sinks to sewers, and back out as wastewater, which EBMUD cleans and releases to the San Francisco Bay.

Demand Management and Water Conservation

Northern California's water resources, including EBMUD's supplies, have been stressed by periodic drought cycles. Historical multi-year droughts have significantly diminished the supplies of water available to EBMUD's customers. During the early stages of a drought and throughout a drought period, EBMUD imposes drought management programs to reduce customer demands, thereby saving water for the following year in case drought conditions continue. EBMUD has established a goal of reducing water use by 20 percent district-wide (EBMUD 2020a).

EBMUD completed development of a revised Water Supply Management Program (WSMP) 2040 in April of 2012, which is the District's plan for providing water to its customers through 2040. According to the WSMP, EBMUD's water supplies are estimated to be sufficient during the planning period (2010-2040) in normal and single dry years. The WSMP 2040 emphasizes maximum conservation and recycling, with a total of 50 mgd of future supply to be provided from those two strategies. EBMUD's Urban Water Management Plan 2015 (UWMP) (see Enclosure 2), which is required to be updated every five years, concludes that EBMUD has, and will have, adequate water supplies to serve existing and projected demand within the Ultimate Service Boundary during normal and wet years, but that deficits are projected for multi-year droughts. During multi-year droughts, EBMUD may require significant customer water use reductions and may also need to acquire supplemental supplies to meet customer demand. However, potential supplemental water supply projects that could be implemented to meet projected long-term water supplemental need during multi-year drought periods are also in the planning phases. Supplemental supply will also be needed to reduce the degree of rationing and to meet the need for water in drought years.

Water Distribution

EBMUD operates and maintains all treatment, storage, pumping, and distribution facilities within its service area and is responsible for all facilities up to the location of the water meter (EBMUD 2015). In the vicinity of the project sites, EBMUD's water distribution system provides potable water but is not presently equipped to distribute non-potable water. The pipeline system includes pipes of varying sizes, ranging from six to 16 inches in diameter. The majority of those pipes are eight inches in diameter, and to a lesser extent, 10 and 12 inches in diameter.

c. Wastewater

EBMUD operates the large diameter interceptor sewer and provides municipal wastewater treatment for Berkeley. The EBMUD wastewater system serves approximately 740,000 people in an 88-square-mile area of Alameda and Contra Costa counties along the Bay's east shore, extending from Richmond in the north, southward to San Leandro. EBMUD water customers include residential, industrial, commercial, institutional, and irrigation water users (EBMUD 2020a). EBMUD has set up different wastewater districts. Berkeley's wastewater service district (known as Special District No.1, or SD-1) was established as a separate wastewater district within EBMUD's water service area in 1944. SD-1 treats domestic, commercial, and industrial wastewater for cities of Alameda, Albany, Berkeley, Emeryville, Oakland, and Piedmont. SD-1 has a service capacity of 168 MGD.

The City of Berkeley owns and maintains its own sewage collection system. This system includes 254 miles of City-owned sanitary sewers, 7,200 manholes and other sewer structures, seven sewage

pump stations, and approximately 31,600 lower laterals serving an area of approximately 6,300 acres. Wastewater from East Bay communities to the wastewater treatment plant in Oakland near the entrance of the San Francisco Bay Bridge has a maximum flow of 168 million gallons per day. Primary treatment is provided for up to 320 MGD. On average about 63 million gallons of wastewater was treated every day in 2020.

The City is responsible for maintenance and repair of the lower service laterals (typically located within the public right-of-way) from the property line cleanout to the connection to the City's sewer main. The collection system serving the University of California at Berkeley (UCB) main campus, is owned and maintained by the University but discharges to the City's sewer system, as does the sewer system serving the Lawrence Berkeley National Laboratory (LBNL). Sewers range in age from 30 to 100 years with the average age of 60 years old.

The City of Berkeley also receives wastewater from small adjacent areas of the City of Albany, City of Oakland, and the Stege Sanitary District (Kensington). Wastewater generated in the City's collection system is conveyed to the EBMUD wastewater interceptor system and is treated at EBMUD's Main Wastewater Treatment Plant (MWWTP) located near the eastern terminus of the San Francisco-Oakland Bay Bridge. EBMUD also receives flows from six other "Satellite" collection system agencies: the cities of Alameda, Albany, Emeryville, Oakland, and Piedmont, and the Stege Sanitary District (City of Berkeley 2019).

During the 1980s, EBMUD and the seven Satellite agencies conducted studies to address the problem of overflows and bypasses of untreated wastewater that occurred during large wet weather events due to excessive infiltration and inflow (I/I) into the collection systems. These studies resulted in a long-term program of construction of collection system relief sewers and sewer rehabilitation (called the East Bay I/I Correction Program), and construction by EBMUD of improvements at the MWWTP as well as three new remote Wet Weather Facilities (WWFs) designed to store, provide primary-level treatment, and discharge flows that exceeded the capacity of its interceptor system during wet weather.

Through the I/I Correction Program, the City has rehabilitated or replaced over 227 miles of its gravity sewers and associated lower laterals over the past 30 years. Since 2006, the City has also implemented a private sewer lateral (PSL) certification program requiring the inspection and/or repair or replacement of private (upper) sewer laterals at the time of property transfer or major building remodel. Approximately 36 percent of private laterals have been certified for compliance under the program as of 2019 (City of Berkeley 2019).

The MWWTP has a primary treatment capacity of 320 mgd and a secondary treatment capacity of 168 mgd. Storage basins provide plant capacity for a short-term hydraulic peak of 415 mgd. The average annual daily flow into the MWWTP is approximately 60 mgd, representing 36 percent of the plant's secondary treatment capacity. Treated effluent is disinfected, dechlorinated, and discharged through a deepwater outfall one mile off the East Bay shoreline into San Francisco Bay.

In September of 2014, Berkeley agreed to a Consent Decree with EBMUD and the other six satellite collection system agencies. This decree required the City to do the following:

- Develop plans and programs to reduce inflow and infiltration.
- Reduce sanitary sewer overflows.
- Repair and replace aging sewer pipelines.

Under the final Consent Decree requirements, Berkeley agreed to replace an average of 4.2 miles of sewer pipeline annually over a 10-year timeframe; replace noncompliant manholes; perform regular condition assessment, spot repairs, and increase required maintenance activities. To date, approximately 36% of City private sewer laterals have been tested or replaced (Berkeley 2022). The City has constructed several relief trunk sewers, completed sewer rehabilitation to reduce infiltration and inflow entry to the system, and removed any wet weather bypasses that existed at the time. Over the past 25 years, these efforts have addressed capacity-related overflows in the system.

d. Stormwater

The City's storm drainage infrastructure consists of 93 miles of underground storm drain pipes and attendant appurtenances. Berkeley's storm drain pipe infrastructure is designed to intercept, collect, and convey stormwater runoff from the public right-of-way directly to the Bay or nearby watercourses that ultimately discharge into the Bay. This infrastructure accepts runoff from public and private facilities (such as buildings, parking lots, and driveways) while protecting them from chronic inundation associated with wet weather. Much of the storm drainpipe infrastructure is over 80 years old and well past its useful life expectancy. The pipes dimensions range from 6" to 108" in diameter (Berkeley 2011).

Due to the age of the City's drainage, Berkeley has adopted various Capital Improvement Projects. These improvements are broken into two distinct categories which are rehabilitation and capital improvement. Rehabilitation or rehab describes construction-related work to correct structural or physical defects to maintain proper functioning and extending the useful life of existing storm drain pipe infrastructure. This can include the following methods:

- Correction of specific problems in a certain section of pipe ("Point Repairs").
- Reinforcement of the inside of an existing pipe with a hardened membrane ("Slip-lining")
- Replacement of a pipe with another pipe with the same hydraulic capacity.

Capital Improvement is any construction project that increases the hydraulic capacity of the storm drain pipe infrastructure. This can include various methods and means such as:

- Construction of new storm drain pipe infrastructure.
- Construction of pump stations or retrofit pipes to operate under pressurized conditions to force more discharge through the same size pipes.
- Enlargement of storm drain pipes by replacing existing pipelines with larger pipelines ("Upsizing")
- Construction of detention facilities, such as Green Infrastructure/storage measures.

Rainwater management also includes bioswales, permeable paving, underground stormwater storage, rain gardens, and rainwater catchment.

Beyond the City's proactive activities to protect water quality and steward watershed resources, there are also water quality regulations and requirements with which the City must comply and/or enforce. The Municipal Regional Stormwater NPDES Permit (MRP) is the current National Pollutant Discharge Elimination System (NPDES) Permit under which the City discharges urban runoff. It covers municipal dischargers in Alameda (such as the City of Berkeley as a Permittee), Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo. The MRP establishes quality and monitoring requirements for discharging urban runoff. These requirements

include the use of best management practices for new and significant redevelopment projects, public education and outreach, industrial inspections, and guidance to the City's own Public Works staff to reduce or remove pollutant loads from urban runoff to the maximum extent practicable. The MRP requires that trash be reduced. Annual reports are submitted that evaluate the City's efforts in meeting the NPDES performance standards (Berkeley 2011).

e. Solid Waste

The City of Berkeley is one of the few cities in Northern California to operate its own refuse, dual stream recycling and green/food waste curbside collection system as well as material recovery/drop-off and buyback facilities. The City provides curbside recycling, green/food waste, and refuse collection services. The City's Solid Waste Management Division is a part of Public Works and contracts through private entities. Some of the programs offered by the City's Solid Waste Division includes recycling collection programs for businesses as well as residential and commercial refuse and organic waste collection. Solid waste, recyclable, and compostable materials collected by the City and its contracted companies are transported from the Berkeley Transfer Station, located at 1201 Second Street, for sorting or disposal at off-site facilities. The Berkeley Transfer Station currently has a maximum permitted throughout of 560 tons per day (CalRecycle 2019a). The public can also dispose of trash and recycle items such as electronics, mattresses, metals, carpet padding, construction materials, and compatible waste at the Transfer Station. City employs Urban Ore Inc., a local reuse company, to salvage reusable items discarded by Transfer Station customers.

Several private refuse and recycling companies do business in Berkeley. Four private refuse companies have non-exclusive franchises that allow them to collect dry rubbish from Berkeley businesses. These companies pay a franchise fee to the City and report their activities quarterly. Many other Berkeley businesses also have arrangements with private recycling companies that provide customized service.

One permitted landfill in Alameda County has the capacity to accommodate solid waste generated in Berkeley: the Altamont Landfill. The maximum permitted daily throughput at the Altamont Landfill is 11,150 cubic yards, and the maximum permitted capacity is 124.4 million cubic yards. The remaining capacity for solid waste at this landfill is approximately 65.4 million cubic yards (CalRecycle, Solid Waste Information System (SWIS), 2020a). The City of Berkeley has achieved a solid waste diversion rate of 69 percent of its solid waste from landfills through recycling and/or composting efforts (City of Berkeley 2021).

f. Telecommunications, Electricity, and Natural Gas

Telecommunications services in Berkeley are provided by private companies, including AT&T, Comcast Cable, and Sonic which provides internet, phone, and television.

East Bay Community Energy (EBCE) supplies electricity to Berkeley using transmission infrastructure operated and maintained by Pacific Gas & Electric (PG&E). PG&E also provides natural gas to the City. Natural gas and electricity are also addressed in Section 4.5, *Energy*. EBCE provides energy that is 100 percent carbon free.

4.16.2 Regulatory Setting

a. Water Supply

This regulatory setting discussion is specific to the assessment of water supply availability and reliability. Regulations and policies pertaining to water quality and potable drinking water standards are also discussed in Section 4.9, *Hydrology and Water Quality*.

Federal Regulations

Clean Water Act

The federal Clean Water Act (CWA), enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The CWA established the basic structure for regulating discharges of pollutants into the waters of the United States. The CWA gave the U.S. Environmental Protection Agency (USEPA) the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the CWA is administered by the USEPA and USACE. At the State and regional levels in California, the act is administered and enforced by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs).

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) regulates public water systems that supply drinking water (42 USC Section 300(f) et seq.; 40 CFR Section 141 et seq). The principle objective of the federal SDWA is to ensure that water from the tap is potable (safe and satisfactory for drinking, cooking, and hygiene). The main components of the federal SDWA are to:

- Ensure that water from the tap is potable
- Prevent contamination of groundwater aquifers that are the main source of drinking water for a community
- Regulate the discharge of wastes into underground injection wells pursuant to the Underground Injection Control program (see 40 CFR Section 144)
- Regulate distribution systems

State Regulations

Assembly Bill 1826

In October 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units (although multifamily dwellings are not required to have a food waste diversion program). Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that

is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply (CalRecycle, 2017b).

Senate Bill 610

Senate Bill 610 (SB 610) amended the California Water Code to require detailed analysis of water supply availability for certain types of development projects. The primary purpose of SB 610 is to improve the linkage between water and land use planning by encouraging greater communication between water providers and local planning agencies and ensuring that land use decisions for certain large development projects are fully informed as to whether sufficient water supplies are available to meet project demands. SB 610 requires the preparation of a Water Supply Assessment (WSA) for certain large development projects unless there is an urban water management plan ("UWMP") that accounts for the demand associated with the project. In the case of Berkeley, the EBMUD UWMP is used to project water demand with the proposed project.

California Safe Drinking Water Act

The California SDWA (Health & Safety Code Section 116270 et seq.; 22 Cal. Code Regs. Section 64400 et seq.) regulates drinking water more rigorously than the federal law. Like the federal SDWA, California requires that primary and secondary maximum contaminant levels (MCLs) be established for pollutants in drinking water; however, some California MCLs are more protective of health. The act also requires the SWRCB to issue domestic water supply permits to public water systems.

The SWRCB enforces the federal and State SDWAs and regulates more than 7,500 public water systems. (Implementation of the federal SDWA is delegated to California). The SWRCB's Division of Drinking Water oversees the State's comprehensive Drinking Water Program (DWP). The DWP is authorized to issue public water system permits.

Sustainable Groundwater Management Act

In September 2014, the governor signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act (SGMA) gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans to be developed for medium- and high-priority groundwater basins, as defined by the Department of Water Resources (DWR).

EBMUD's service area overlies a significant portion of the East Bay Plan Subbasin. The East Bay Plan Subbasin is a medium priority basin and is therefore required to prepare a groundwater sustainability plan pursuant to the requirements of SGMA. SGMA requires public notifications and hearings, as well active stakeholder communication and engagement in groundwater sustainability plans (East Bay Subbasin Sustainable Groundwater Management, 2018).

California Plumbing Code

The California Plumbing Code is codified in Title 24, California Code of Regulations, Part 5. The Plumbing Code contains regulations including, but not limited to, plumbing materials, fixtures, water heaters, water supply and distribution, ventilation, and drainage. More specifically, Part 5, Chapter 4, contains provisions requiring the installation of low flow fixtures and toilets. Existing development

will also be required to reduce its wastewater generation by retrofitting existing structures with water efficient fixtures (SB 407 [2009] Civil Code Sections 1101.1 et seq.).

The Water Conservation Act of 2009 (Senate Bill X7-7)

California adopted SB X7-7, or the Water Conservation Act of 2009, in November 2009. The legislation requires urban water retailers to set urban water use targets to achieve a 20 percent reduction in per capita urban water use by December 31, 2020. Additionally, the law requires agricultural water suppliers to prepare, adopt, and regularly update agricultural water management plans. Agricultural and urban water providers are ineligible for certain State grants and loans if they do not adhere to water conservation requirements outlined in the law.

Regional Water Management Plan Report

Adopted by the State legislature in 2002, the Regional Water Management Planning Act, or SB 1672, authorizes preparation of integrated regional water management plans. Such plans are developed by regional water management groups, defined as three or more local public agencies, at least two of which have statutory authority over water supply. Integrated regional water management plans address qualified programs and projects relating to water supply, water quality, flood protection, or other water-related topics undertaken by the participating public agencies. Qualified projects, as detailed in the legislation, include but are not limited to groundwater, urban, and agricultural water management planning efforts, levee or flood control infrastructure maintenance or construction, water recycling projects, and water conservation programs.

Local Regulations

City of Berkeley General Plan

The General Plan's Environmental Management Element includes the following goals and policies applicable to water:

- **EM-23 Water Quality in Creeks and San Francisco Bay.** Take action to improve water quality in creeks and San Francisco Bay.
- **EM-25 Groundwater.** Protect local groundwater by promoting enforcement of state water quality laws that ensure nondegradation and beneficial use of groundwater.
- **EM-26 Water Conservation.** Promote water conservation through City programs and requirements.
- **S-7 Emergency Water Supply.** Protect life and property in the event of an earthquake by evaluating alternate drinking water and firefighting water supply in the event of failure of the East Bay Municipal Utility District (EBMUD) water supply.

b. Wastewater

Federal

Federal Clean Water Act

The Federal Clean Water Act is described in Section 4.16.2, Water Supply.

State and Regional

Standards for wastewater treatment plant effluent are established using State and federal water quality regulations. After treatment, wastewater effluent is either disposed of or reused as recycled water. The RWQCBs set the specific requirements for community and individual wastewater treatment and disposal and reuse facilities through the issuance of Waste Discharge Requirements, required for wastewater treatment facilities under the California Water Code Section 13260.

The California Code of Regulations Title 22, Division 4, Chapter 3, Sections 60301 through 60355 are used to regulate recycled wastewater and are administered by the RWQCBs. Title 22 contains effluent requirements for four levels of wastewater treatment, from un-disinfected secondary recycled water to disinfected tertiary recycled water. Higher levels of treatment have higher effluent standards, allowing for a greater number of uses under Title 22, including irrigation of freeway landscaping, pasture for milk animals, parks and playgrounds, and vineyards and orchards for disinfected tertiary recycled water.

Local

City of Berkeley General Plan

The City of Berkeley's General Plan has the following policies as it relates to wastewater:

- **EM-24 Sewers and Storm Sewers.** Protect and improve water quality by improving the citywide sewer system.

City of Berkeley Municipal Code

Section 17.24.030 of the Berkeley Municipal Code (BMC) is the City's Private Sewer Lateral Ordinance and includes standards for maintenance of private sewer laterals. Property owners must verify that their private sewer lateral meets City standards before selling their building, performing major renovations, or if otherwise required by the City.

Section 17.06.020 of the Berkeley Municipal Code includes construction requirements for sanitary sewers and storm drains. All or any devices, inventions or piping systems which convey directly or indirectly stormwater, surface water, roof runoff, intercepted groundwater or subsurface drainage into sanitary sewers, are prohibited. They are only permitted if a special temporary permit has been obtained from the Director of Public Works. Permits will not be automatically issued and may be issued only when, in the opinion of the Director of Public Works, the denial of a permit would result in extreme hardship, in hazard to property, or in similar conditions.

The BMC also regulates allowable discharges to the City's sewer system and connection fees for the sewer collection system.

c. Stormwater

Federal, State, and local regulations pertaining to stormwater management, drainage, flooding, and water quality are discussed in Section 4.9, *Hydrology and Water Quality*.

d. Solid Waste

Federal

Title 40 of the Code of Federal Regulations

Title 40 of the CFR, Part 258 (Resource Conservation and Recovery Act, Subtitle D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the Federal landfill criteria.

State

California's Short-Lived Climate Pollutant Reduction Strategy (SB 1383)

Signed into law in September 2016, SB 1383 establishes methane emissions reduction targets for California in a statewide effort to reduce emissions of short-lived climate pollutants. The targets are to reduce organic waste disposal 50 percent by 2020 and 75 percent by 2025. The law also grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. Enforcement of these targets starts January 1, 2022.

California Integrated Waste Management Act

AB 939 (PRC 41780) requires cities and counties to prepare integrated waste management plans and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. AB 939 also requires cities and counties to prepare source reduction and recycling elements as part of the integrated waste management plans. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the purchase of recycled products.

MANDATORY COMMERCIAL ORGANICS RECYCLINGAB 1826 of 2014 (PRC Chapter 727, Statutes of 2014) requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, and that jurisdictions implement a recycling program to divert organic waste from businesses subject to the law. The jurisdictions must report to CalRecycle on their progress in implementing an organic waste recycling program. As of January 1, 2017, businesses that generate four cubic yards or more of organic waste per week shall arrange for organic waste recycling services.

PRC Chapter 343 (Senate Bill 1016)

SB 1016 of 2007 (PRC Chapter 343, Statutes of 2007) requires that the 50 percent solid waste diversion requirement established by AB 939 be expressed in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's integrated waste management plan. After an initial determination of diversion requirements in 2006 and establishing diversion rates for subsequent calendar years, the Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. Since January 1, 2018, the Board is required to review a jurisdiction's source reduction and recycling element and hazardous waste element once every two years.

CALGREEN BUILDING CODE

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code. Section 4.408, Construction Waste Reduction Disposal and Recycling, mandates that in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged. The Code requires the applicant to have a construction and waste demolition and diversion plan, for on-site sorting or construction debris, which is submitted to the City of Berkeley for approval.

Regional

COUNTYWIDE INTEGRATED WASTE MANAGEMENT PLAN

In compliance with AB 939, the Alameda County Waste Management Authority adopted the Countywide Integrated Waste Management Plan (CoIWMP) in 1997 and updated the plan in 2020. The CoIWMP provides a plan for reaching the State-mandated goal of 50 percent waste diversion and the county-mandated goal of 75 percent waste diversion. It also mandates that reduction and disposal facilities in Alameda County that require Solid Waste Facility Permits must conform with the CoIWMP's policies and siting criteria (Stop Waste 2018).

Local

Berkeley General Plan

The General Plan's Environmental Management Element includes the following goals and policies applicable to solid waste:

Policy EM-7: Reduced Wastes. Continue to reduce solid and hazardous wastes.

Policy EM-8: Building Reuse and Construction Waste. Encourage rehabilitation and reuse of buildings whenever appropriate and feasible in order to reduce waste, conserve resources and energy, and reduce construction costs.

Policy EM-9: Recycling and Waste Transfer Stations. Ensure convenient access for Berkeley citizens to transfer stations, recycling, composting, and collection of household hazardous waste products.

Policy EM-10: Materials Recovery and Remanufacturing. Support and encourage serial materials recovery and remanufacturing industries.

CITY OF BERKELEY GREEN BUILDING CHECKLIST

A Green Building Checklist to ensure compliance with the 2013 California Green Building Standard Code, also known as CALGreen, is listed on the City's website for both residential and commercial projects. As of January 1, 2014, new construction, additions, and alterations are subject to CALGreen requirements. The checklist must be submitted with and incorporated into the plan sets, and any items that are marked on the checklists must then be referenced and detailed in the plans.

e. Telecommunications, Electricity, and Natural Gas

The regulatory setting regarding energy is more extensively discussed in Section 4. 5 Energy.

4.16.3 Impact Analysis

a. Methodology and Significance Thresholds

The following thresholds are based on *CEQA Guidelines* Appendix G. For purposes of this EIR, impacts related to water supplies, wastewater, solid waste, or storm water conveyance are considered significant if implementation of the proposed project would:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects' projected demand in addition to the provider's existing commitments;
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
Threshold 3:	Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact UTIL-1 DEVELOPMENT UNDER THE PROPOSED HEU WOULD REQUIRE UTILITY SERVICE AND CONNECTIONS FOR WATER SUPPLY, WASTEWATER CONVEYANCE, AND STORMWATER CONVEYANCE, AS WELL AS TELECOMMUNICATIONS, ELECTRICITY, AND NATURAL GAS. EXISTING UTILITY SYSTEMS FOR WATER, WASTEWATER, STORMWATER, ELECTRIC POWER, NATURAL GAS, AND TELECOMMUNICATIONS FACILITIES IN BERKELEY HAVE SUFFICIENT CAPACITY TO SERVE THE PROJECT. RELOCATION OR CONSTRUCTION OF NEW OR EXPANDED FACILITIES RESULTING IN SIGNIFICANT ENVIRONMENTAL IMPACTS WOULD NOT OCCUR, AND ADEQUATE WASTEWATER CAPACITY EXISTS TO SERVE THE PROJECT'S PROJECTED DEMAND IN ADDITION TO THE PROVIDER'S EXISTING COMMITMENTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Water

Construction activities associated with development under the proposed HEU would require recycled water for dust suppression, concrete manufacturing, and such activities as washing wheels and equipment. Temporary construction recycled water would be trucked to active construction sites or produced from existing fire hydrants near the applicable site(s), with City approval. As such,

construction water demands would not require new connections or conveyance facilities, as existing or mobile facilities would be used.

New water supply connections and associated facilities would be required for future development accommodated under the proposed HEU to convey potable water supply. Such upgrades would occur within existing utility easements and would be located underground, primarily within existing roadways. Development under the proposed HEU would primarily be located on previously developed sites or infill sites within the city that are currently zoned for residential development. New water service connections would be consistent with utility expansion in urbanized areas, such that minimal areas of new disturbance would occur. Although all parcels in Berkeley have access to public utility infrastructure, in some cases the infrastructure is older and in need of replacement or insufficient to meet the needs of a particular project.

Developers are responsible for funding infrastructure improvements that are required to serve future projects and have not been previously identified as part of a capital improvement program covered by the development impact fees. Consistent with applicable State law, the City's development fees ensure that the developers pay the cost attributable to the increased demand for the affected public facilities reasonably related to the development project in order to refurbish the existing facilities to maintain the existing level of service and achieve an adopted level of service that is consistent with the City's General Plan (California Government Code Section 66001(g)).

Due to the existing built-up nature of the City, it is reasonably anticipated that future improvements for water supply and fire flow requirements would not disturb previously undisturbed areas and would be situated within existing utility rights-of-way, such as but not limited to within public roadways.

The availability and reliability of water supply for the proposed project is addressed below, under Impact UTIL-2. Potential impacts related to relocation or construction of water supply facilities would be less than significant.

Wastewater

Wastewater Treatment

EBMUD's Main Wastewater Treatment Plant (MWWTP) provides wastewater collection and treatment to Berkeley, currently treating an average daily flow of approximately 63 mgd. With a secondary treatment capacity of 168 mgd. Primary treatment can be provided for up to 320 mgd. The average dry weather flow from 2010 to 2019 was approximately 54 mgd (EBMUD 2021).

Table 4.16-1 shows the estimated wastewater generation for development under the proposed HEU. As shown, development under the proposed HEU is estimated to generate 765,688 gallons of wastewater per day. This would also be within the remaining capacity of the MWWTP. Therefore, the plant's existing wastewater treatment capacity would be sufficient to accommodate the anticipated residential development under the proposed HEU. Development facilitated by the proposed project would not result in the need to expand the capacity of the MWWTP or exceed the wastewater treatment requirements of the San Francisco RWQCB.

Table 4.16-1 Estimated Wastewater Generation for the Proposed HEU

Potential Buildout Development/ Land Use[1]	Wastewater Generation Factor[1]	Projected Number of Housing Units	Projected Wastewater Generation
Single-family residential	56 gpd/unit	113 units[2]	6,328 gpd
Multifamily residential	40 gpd/unit	18,984	759,360 gpd
Total			**765,688 gpd**

[1] Assumes wastewater generation is 80% of water use, see Table 4.16-4 for water use factors
gpd = gallons per day

Wastewater Conveyance

Future development under the proposed HEU will require new connections for wastewater conveyance and sufficient capacity for wastewater treatment. As described in Section 4.7.1(b) above, wastewater conveyance in Berkeley is provided by 254 miles of City-owned sanitary sewers, 7,200 manholes and other sewer structures, seven sewage pump stations, and approximately 31,600 service laterals. The City is responsible for maintenance and repair of the service laterals (located within the public right-of-way) from the property line cleanout to the connection to the City's sewer main. New development in Berkeley would generate wastewater to be conveyed by privately owned upper laterals, City-owned lower laterals and sewer mains, and EBMUD's interceptor lines. EBMUD projects that 61 mgd of wastewater will be collected and treated in the EBMUD Special District No.1 by 2040. As shown in Table 4.16-1, development under the proposed HEU would generate an estimated 765,688 gallons of wastewater per day, which would be approximately 1.3 percent of the wastewater collected and treated in in the district by 2040.

During wet-weather conditions, additional flow could potentially exceed pipeline capacities and create overflow. New development would be required to comply with the City's Private Sewer Lateral Ordinance, by eliminating wet-weather infiltration and inflow to private sewer laterals, which would regulate wet-weather contribution from the proposed project. However, the construction of new or expanded sewer mains may be necessary to accommodate additional wastewater flow. The precise sizing of new wastewater conveyance pipes would be determined at the time of installation and would be subject to the approval of the City to ensure that the system would be adequate. Construction of wastewater conveyance pipes would occur within developed areas, such as street corridors that already contain underground infrastructure for utilities, or on other streets adjacent or near to the project sites. Most improvements would be within developed areas and connections would be within existing right-of-way. The impacts of individual new sewer main construction projects would be less than significant due to their temporary nature, adherence to existing requirements, and the already developed nature of wastewater conveyance corridors. General impacts associated with construction of buildout and improvements associated with the proposed rezoning are discussed throughout this EIR.

The City of Berkeley also has regulations for reasonably foreseeable housing development. It must occur in compliance with the requirements of BMC Title 17 which establishes City standards related to wastewater discharge, peak flow, and sewer capacity. Every person, firm, corporation or entity desiring to construct a new connection to sewer services to the City's sanitary sewer system shall pay a connection fee in the amount as established by City Council resolution. The connection fee shall be determined by assistant City engineer based upon the volume of water discharging from such premises from any source flows into sanitary sewers computed on an equivalent basis for a single family residential unit (Berkeley 1994). To the extent that sewer pipeline upgrades may be

necessary as reasonably foreseeable development under the proposed Project occurs, all costs of operation, maintenance, rehabilitation and improvement of the City's sanitary sewers shall be paid by the users of the City's sanitary sewers. All sanitary sewer construction in the City must follow the following provisions:

- A permit for each connection shall be obtained from the Department of Public Works. At the time of the issuance of such permit, the permittee shall agree in writing to indemnify and hold harmless the City, its officers and employees from any and all claims or demands of whatsoever nature which arise or may arise from the sanitary sewer or storm drain construction covered by such permit.
- Sanitary sewer construction fees shall be as set forth in the public works master fee schedule, as adopted by resolution of the City Council.
- For any work performed, wholly or in part, without first having secured the permit required by the provisions of this section, the person, firm or corporation having performed such work shall pay a permit fee which shall be five times the permit fee provided by this section, and five times the inspection charge for any month, or any fraction thereof, that the work has been in progress without a permit.
- All work shall be done in strict compliance with standard detailed plans and specifications of the City and to the satisfaction of the Director of Public Works, and shall be inspected by a City inspector prior to backfilling the excavation.
- When a sanitary sewer is to be installed in the public right-of-way or other public easement, an amount as set forth in the public works master fee schedule, as adopted by resolution of the City Council, for each permit shall be deposited with the Public Works Department as a guaranty that all sanitary sewer work, including backfill, street paving and cleanup, will be done in a proper and workmanlike manner and in accordance with all City requirements and to the satisfaction of the Director of Public Works. In lieu of such deposit for each permit, a surety company faithful performance bond in the amount set forth in the public works master fee schedule, as adopted by resolution of the City Council, may be filed with the Public Works Department. Such bond shall be conditioned that all sanitary sewer work, including backfill, street paving and cleanup shall be done in a proper and workmanlike manner and in accordance with all City requirements and to the satisfaction of the Director of Public Works. Any such bond may be conditioned as a continuing bond and not be limited to any particular location in the City. The form of such bond shall be approved by the City Attorney. In the event that such work is not done in a proper and workmanlike manner, or not done in accordance with the requirements of this section or any other ordinance or requirement of the City, or not done to the satisfaction of the Director of Public Works, the City may perform or cause to have performed the necessary corrective or cleanup work and deduct the cost thereof to be paid by said surety company on its bond.
- For a period of two years after completion of the sanitary sewer construction (final paving of the sanitary sewer or storm drain trench), the permittee shall be responsible for the maintenance of the sanitary sewer construction and trench paving.

The City of Berkeley also employs a preventive maintenance approach to maintaining the sewer system designed to minimize the occurrences of repeat blockages and sanitary sewer overflows. System-wide preventive maintenance is scheduled each month using the City's computerized maintenance management system.

Additionally, future development associated with the proposed HEU would be required to adhere to Berkeley General Plan requirements related to wastewater infrastructure. Policy EM-24 in the Berkeley General Plan and Chapter 17.05 of the BMC requires that new development pay its fair share of improvements to the sewer system that would be necessary to accommodate increased flows. This policy and BMC requirements would ensure that new developments are not approved until it can be demonstrated that adequate wastewater collection capacity exists, or until a financial commitment to create such capacity has been secured. Therefore, with implementation of General Plan policy EM-24 and BMC Chapter 17.05, new development associated with the proposed rezoning would have adequate wastewater conveyance systems to serve future planned development on the project sites. Accordingly, impacts related to wastewater conveyance would be less than significant.

Therefore, the project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities. Impacts would be less than significant.

Stormwater

Impacts regarding stormwater drainage facilities are discussed in Section 4.9, *Hydrology and Water Quality*. As discussed in that section, with compliance with existing regulations, development under the proposed HEU would not require the relocation or construction of new or expanded storm water drainage, facilities, the construction or relocation of which could cause significant environmental effects.

Electricity and Natural Gas

The project would require connections to existing electrical transmission and distribution systems to serve development facilitated by the project. This service would be provided in accordance with the rules and regulations of EBCE, and PG&E on file with and approved by CPUC. Based on the availability of existing electrical infrastructure, it is not anticipated that the construction of new electrical transmission and distribution lines would be required, and all sites would be able to connect to existing infrastructure. Therefore, there would be adequate electrical facilities to serve development facilitated by the project and impacts related to electricity would be less than significant.

Development facilitated by the project would connect to existing natural gas infrastructure to meet the needs of site residents and tenants. Based on the availability of existing natural gas infrastructure, construction of new natural gas pipelines would not be required, and all sites would be able to connect to existing infrastructure. Therefore, there would be adequate natural gas facilities to serve the development facilitated by the project and impacts related to natural gas would be less than significant.

Telecommunications

Project implementation would require connections to existing adjacent utility infrastructure to meet the needs of site residents and tenants. Based on the availability of existing telecommunications infrastructure, construction of new telephone and cable lines would not be required, and all sites would be able to connect to existing infrastructure. Development facilitated by the project would be required to adhere to applicable laws and regulations related to the connection to existing telecommunication infrastructure. Therefore, there would be adequate telecommunications facilities to serve the development facilitated by the project and impacts related to telecommunications would be less than significant.

Mitigation Measures

Impacts would be less than significant without mitigation. No mitigation measures are required.

Threshold 2:	Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact UTIL-2 DEVELOPMENT UNDER THE PROPOSED HEU WOULD RESULT IN AN INCREASE IN WATER DEMAND. HOWEVER, THIS INCREASE IN DEMAND CAN BE SERVED BY THE EAST BAY MUNICIPAL UTILITY DISTRICT (EBMUD) WITH DEMAND MANAGEMENT MEASURES REQUIRED BY EBMUD. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The City of Berkeley is served by existing EBMUD, potable water facilities. EBMUD performs a comprehensive demand projection study every ten years; the most recent update, the 2050 Demand Study, was completed in 2020. The 2050 Demand Study is an update of EBMUD's water demand forecasts using a land use based approach that incorporates forecasts of dwelling units and employment from land use agencies into a newly developed water demand model. It is based on projections incorporated from the U.S Census Bureau and the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC). EBMUD has found that while the number of accounts for their service has increased steadily since 1970, the average daily water demand has not increased; outside of droughts, demand remains relatively stable.

Table 4.16-2 indicates the average annual demand of water through 2050 based on land use. The projections indicate that the planning level of demand of MGD, which is the adjusted demand for applying water conservation and cumulative recycled water savings achieved since the 1994 Water Conservation Master Plan was implemented, would be less than the forecasted water demand.

Table 4.16-2 Average Annual Demand Projections by Customer Use Category (MGD)

Land Use	2020	2025	2030	2035	2040	2045	2050
Single-Family Residential	115	117	119	121	125	126	129
Multi-Family Residential	40	44	48	52	59	63	67
Institutional	17	18	20	21	22	24	26
Industrial	33	35	35	36	36	37	37
Commercial	16	18	19	21	22	24	25
Irrigation	13	13	13	13	13	13	13
Forecasted Water Demand	234	245	254	264	277	287	297
Water Conservation	-48	-53	-58	-61	-63	-65	-66
Non-Potable Water	-5	-6	-6	-9	-13	-13	-13
Planning Level of Demand	181	186	190	194	201	209	218

N/A = not available

Source: EBMUD 2020a

[1] Flowrate factors are based on reference material provided by EBMUD: 50 gpd/person for high-rise apartments; 0.216 gpd/sf for commercial retail space

[2] Total net (or new) commercial buildout of 65,000 sf assumes ground floor commercial space that is a mix of retail or small-scale office space. Because it is not possible to predict the exact mix of retail versus office space, retail space water demand was assumed in order to be conservative with respect to water demand. gpd = gallons per day

EBMUD also evaluated several different scenarios to assess its need for water under potential drought conditions. These different scenarios capture the uncertainty in long-term planning. Uncertainty is inherent in any future-oriented planning effort and is a driving factor in long-term water resources planning. Water supplies are constantly subject to uncertainties that directly affect the amount and timing availability of the sources of water. In order to address these inherent uncertainties, and as required by Section 10632 of the California Water Code, EBMUD maintains a current Water Shortage Contingency Plan (WSCP), which is published as part of the UWMP, and subject to 5-year updates with the UWMP. The WSCP provides the framework to address water shortages, and identifies actions to manage supply and demand before and during a water shortage to ensure a reliable water supply (EBMUD 2020b).

In order to identify appropriate water shortage response actions for the purposes of the WSCP, EBMUD defines a Base Condition, as well as a High Water Demand Condition and Extreme Drought Condition, which reflect actual demand rates from a recent drought planning sequence and are used for comparison purposes (EBMUD 2020b). The annual water demand under different scenarios for the EBMUD service area is laid out in Table 4.16-3, which also reflects water supplies that EBMUD received under its water service contract with the United States Bureau of Reclamation (USBR) to receive Central Valley Project (CVP) water through the Freeport Regional Water Project; this is a supply option that EBMUD uses during dry year conditions, as needed. A Normal Water Year is a year that EBMUD does not need to implement any Drought Management Program (DMP) measures. A Single Dry Water Year is determined to be a year that EBMUD would implement DMP elements, which includes obtaining Central Valley Project (CVP) water deliveries and setting voluntary rationing goal between 0 to 10 percent. Year 2 would involve the second consecutive dry year is determined as a year that EBMUD would implement DMP elements, which includes continuing to obtain CVP water deliveries and setting a mandatory rationing between 10 – 15 percent. Year 3 includes the third consecutive dry year is determined as a year that EBMUD would implement DMP elements which includes obtaining CVP water deliveries and implementing mandatory rationing of 15 percent.

Based on this table EBMUD anticipates having an adequate water supply to meet demand in its service area, except during the third year of a multi-year drought starting around 2025 or later. During multi-year drought, EBMUD may require substantial reductions in water use by customers and as discussed below, may also need to acquire supplemental supplies to meet demand. New development under the proposed HEU would be subject to the same drought restrictions that apply to all EBMUD customers.

Table 4.16-3 Preliminary EBMUD Baseline Supply and Demand Analysis

	2020	2025	2030	2035	2040	2045	2050
Normal Year							
Mokelumne System (MGD)	>181	>186	>190	>194	>201	>209	>218
EBMUD Planning Level of Demand (MGD)	181	186	190	194	201	209	218
Need For Water	0	0	0	0	0	0	0
Single Dry Year or First Year of Multi-Year Drought							
Mokelumne System	121	126	129	132	138	144	151
CVP Supplies[2]	60	60	60	60	60	60	60
Total Supplies (MGD)	181	186	189	192	198	204	211

	2020	2025	2030	2035	2040	2045	2050
Voluntary Rationing (%)	0	0	1%	1%	2%	2%	3%
Need for Water (TAF) [5]	0	0	0	0	0	0	0
Second Year of Multi-Year Drought							
Mokelumne System	82	86	89	92	98	104	111
CVP Supplies[2]	74	74	74	74	74	74	74
Supply Totals	156	161	164	167	172	178	185
Mandatory Rationing (%)	13%	13%	13%	14%	14%	14%	15%
Need for Water (TAF) [5]	0	0	0	0	0	0	0
Third Year of Multi-Year Drought							
Mokelumne System (MGD)	141	145	146	145	132	118	105
CVP Supplies[2]	12	12	12	12	12	12	12
Supply Totals	153	157	158	157	144	130	117
Mandatory Rationing[4]	15%	15%	15%	15%	15%	15%	15%
Need For Water (TAF) [5]	0	0	0	0	28	52	75

MGD = million gallons per day, TAF = thousand acre-feet

[1] Planning Level Demand accounts for projected savings from water recycling and conservation programs as discussed in the 2020 UWMP, Chapters 3. Customer demand values are based on the Water Supply Availability and Deficiency received by EBMUD, 2020

[2] Projected available CVP supplies are taken according to the Drought Management Program Guidelines discussed in Chapter 3.

[3] Rationing reduction goals are determined according to projected system storage levels in the Drought Management Program Guidelines discussed in the 2020 UWMP, Chapter 3.

[5] Need for Water includes unmet customer demand as well as shortages on the Lower Mokelumne River.

Source: EBMUD 2020a

Table 4.16-3 shows that sufficient water supplies are projected to be available to meet existing and projected demands during normal water year (non-drought) conditions, as well as during a single dry year, and during the first two years of a multi-year drought condition. During the third year of a multi-year drought condition, it is projected that water supply shortages would occur starting in year 2040, in the amount of 28,000 AFY, increasing to 52,000 AFY in 2045, and 75,000 AFY in 2050. As discussed above this table, the WSCP which EBMUD maintains with its UWMP identifies actions to manage supply and demand before and during a water shortage, including but not limited to the use of CVP water received from USBR through the Freeport Regional Water Project. The current (2020) WSCP described that drought conditions occurred during 2014-2016, which resulted in EBMUD relying on the Freeport Regional Water Project, with the following findings:

- Take delivery of the supply as early as possible in the drought sequence to maximize delivery of the lower-cost drought supply,
- Maximize production at the West of Hills water treatment plants, and
- Manage the terminal reservoirs to maximize available space for storage (EBMUD 2020a).

These lessons from the 2014-2016 drought were incorporated into EBMUD's DMP and operational decision-making processes moving forward. Specifically, EBMUD's CVP allocation was reduced by 50 percent in the contract year 2014 and by 75 percent in contract year 2015, as the CVP was faced with increasing demands and reduced supplies as the drought continued; EBMUD made up for the reduced allocation by purchasing transfer water in 2015 and by securing options to purchase

transfer water for 2016 (EBMUD 2020a). The transfer water was more expensive than the CVP water, and should comparable future drought scenarios occur, EBMUD will maximize delivery of lower-cost drought supply at the start of the drought conditions.

The EIR buildout assumes 19,098 housing units. Based on assumptions in the VMT analysis, this includes an estimated 18,985 multifamily housing units and 113 single family housing units. The additional water use for these units is indicated in Table 4.16-4. Overall, the project could increase demand in the City by an estimated 0.96 MGD, or approximately an approximately 0.5 percent increase from the 2030 EBMUD service area demand estimate of 190 MGD as shown on Table 4.16-3.

Table 4.16-4 Estimated Water Use for the Proposed HEU

Potential Buildout Development/Land Use[1]	Water Generation Factor	Projected Number of Housing Units	Projected Water Demand in 2031 (gpd)	Projected Water Demand in 2031 (MGD)
Single-family residential	70 gpd/unit	113 units[2]	7,910 gpd	0.008 MGD
Multifamily residential	50 gpd/unit	18,985	949,250 gpd	0.95 MGD
Total			**957,160 gpd**	**0.96 MGD**

[1] Based on water use factors provided by EBMUD, 70 gpd/unit for a typical home and 50 gpd/unit for a high-rise apartment.

[2] Assumed 113 single-family residences and the rest multi-family consistent with the assumptions in the VMT analysis (Kitteson & Associates 2022)

gpd =gallons per day. MGD = million gallons per day

Regardless of implementation of the proposed Housing Element, current water supplies could potentially be insufficient to meet demand from the project. According to the EBMUD UWMP, the EBMUD service area has a water reduction goal of 153 gallons per capita per day (GPCD) by 2020, and in 2020 the MPWD reported its GPCD was 121 GPCD which met the target. Based on the increase of approximately 0.5 percent from the projected 2030 water demand in EMBUD's UWMP, estimated GPCD with implementation of the project would be 127 GPCD which would still be well below the targeted 153 GPCD.

Further, compliance with the water conservation regulations and policies would help to maintain sufficient supplies. The California Code of Regulations (CCR) Title 24, Part 11 (CALGreen) requires a 20 percent reduction in residential indoor water use that would lower potential water demand. New development would be subject to the CCR concerning water-efficient landscapes (Division 2, Title 23, CCR, Chapter 2.7, Sections 490 through 495). Implementation of the WELO would encourage water conservation for new development and in landscaped areas. The WELO, which reinforces landscape irrigation and water conservation best practices currently required by EBMUD's Section 31 Regulations, also would encourage the use of drought-tolerant landscaping and low-flow irrigation systems. Furthermore, new development would be subject to other green building and water conservation requirements described in the Water Supply Regulatory Setting. In that event that EBMUD customers would be subject to a Demand Management Plan and other water conservation requirements that will address any shortage in supply.

In summary, compliance with regulatory requirements, proactive management of available supplies, and drought response and conservation efforts conducted by EBMUD collectively support the continued reliability of water supplies currently used in the City of Berkeley. As discussed above with respect to EBMUD's response to the 2014-2016 drought conditions, EBMUD's DMP and

operational decision-making processes reflect multi-faceted response to drought conditions, when they occur, and include the purchase of transfer water when available, for use as drought supply when needed. Although Table 4.16-3 projects water supply shortages during the third year of multi-year drought conditions, EBMUD's existing operational protocols provide for responses to such conditions, which would be initiated during the first and section years of multi-year drought conditions. Such responses are not reflected in the projections shown, because the specific actions taken will depend upon dynamic conditions during the first two years of the multi-year drought. As noted, sufficient supplies are anticipated to be available during normal water year conditions and single-drought-year conditions, as well as during the first two years of multi-drought-year conditions. Therefore, sufficient water supplies are available to serve reasonably foreseeable development under the proposed HEU, and appropriate systems are in place to address potential drought-related water supply shortages, such that potential impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant without mitigation. No mitigation measures are required.

Threshold 4:	Would the generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
Threshold 5:	Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact UTIL-3 DEVELOPMENT FACILITATED BY THE PROJECT WOULD NOT GENERATE SOLID WASTE IN EXCESS OF STATE OR LOCAL STANDARDS, OR IN EXCESS OF THE CAPACITY OF LOCAL INFRASTRUCTURE. THE PROJECT WOULD NOT IMPAIR THE ATTAINMENT OF SOLID WASTE REDUCTION GOALS AND WOULD COMPLY WITH FEDERAL, STATE, AND LOCAL STATUTES AND REGULATIONS RELATED TO SOLID WASTE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The EIR buildout assumption includes 19,098 additional units through 2031. CalRecycle estimates that multi-family residential uses generate an average of four pounds of solid waste per unit per day (CalRecycle 2019b). As shown in Table 4.16-5, prior to implementation of State-mandated diversion requirements, development associated with the proposed HEU would generate an estimated 76,338 net pounds per day of solid waste, which equates to 38 tons or 76 cubic yards per day. In accordance with California's Integrated Waste Management Act of 1989, cities and counties are required to divert 50 percent of all solid wastes from landfills. The City of Berkeley has achieved a diversion rate of 69 percent, which substantially exceeds this State requirement. Assuming that this diversion rate continues to apply to new development on the project sites, implementation of the project would generate an additional 2.4 tons per day of solid waste for disposal at landfills.

Table 4.16-5 Estimated Solid Waste Generation for the Proposed HEU

Potential Buildout Development/ Land Use	Quantity	Units	Generation Rate	Solid Waste (pounds per day)	Solid Waste (tons per day)	Solid Waste (cubic yards per day)[2]
Residential	19,098	dwelling units	4 pounds/ unit/day	76,392	38.2	76.3
Total Assuming 69% Diversion Rate				**23,682**	**11.8**	**23.7**

[1] This analysis makes the conservative assumption that all commercial development consists of retail commercial space, which generates more solid waste per square foot than typical generation rates for commercial offices.

[2] Based on the conversion factor described under Table 4.10-1, County-Service Landfill Capacity for "landfill density" Municipal Solid Waste, of approximately 750 to 1,250 pounds per cubic yard, or an average of 1,000 pounds per cubic yard.

Source: CalRecycle 2020b

As discussed in the Solid Waste Setting, the Altamont Landfill is an active landfill that can accommodate solid waste from Berkeley. This landfill has a combined remaining capacity of approximately 65.4 million cubic yards. With development facilitated by the proposed rezoning, it is estimated that the project sites would generate an additional 23.7cubic yards per day of solid waste for disposal at landfills. This amount would equate to approximately 8,651 cubic yards per year. This represents 0.013 percent of the current total remaining landfill capacity.

Continued compliance with applicable regulations and Berkeley General Plan policies listed in the Solid Waste Regulatory Setting would ensure that development facilitated by the project complies with federal, state, and local statutes and regulations related to solid waste and would lead to increased recycling and waste diversion. Development facilitated by the project would be required to comply with these policies, including paying a fair share for solid waste services and achieving greater diversion rates than required by AB 939. AB 939 requires the City to divert 50 percent of solid waste from landfills. Local infrastructure would have the capacity to accommodate solid waste generated by the project. Development facilitated by the project would also be required to demonstrate compliance with all applicable regulations. Therefore, anticipated rates of solid waste disposal from the proposed HEU would have a less than significant impact related to solid waste disposal facilities.

Mitigation Measures

Impacts would be less than significant without mitigation. No mitigation measures are required.

c. Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3].).

Water

The analysis provided under Impact UTL-2 is cumulative in nature and considers water demand associated with development within EBMUD's service area. EBMUD's average of annual demand by customer use for different land uses contained in Table 4.16-2 indicate that some water use conservation restrictions may be implemented under varying conditions. The UMWP also includes guidelines that future development would be subject to EBMUD's regulations aimed at encouraging

efficient water use, such as Sections 29 and 31 of EBMUD's Regulations Governing Water Service. Section 29, "Prohibiting Wasteful Use of Water," promotes efficient water use by EBMUD customers and includes additional restrictions on wasteful uses of potable water. Section 31, "Water Efficiency Requirements," identifies the types of water efficiency requirements (i.e., maximum flow rates for flow control devices) for water service. Therefore, the cumulative impact related to water supply would be less than significant, and the proposed project would not considerably contribute to a significant impact.

Wastewater

Cumulative development in Berkeley will continue to increase demands on the existing wastewater treatment and conveyance facilities. The MWWTP current capacity is sufficient to serve the anticipated growth in Berkeley. New wastewater conveyance isn't necessary to serve cumulative development at this time. However, individual improvements to the sewer system would occur in existing utility corridors in already developed areas. Therefore, the cumulative impact related to wastewater infrastructure would be less than significant, and the development facilitated by proposed project would not considerably contribute to significant cumulative impact.

Stormwater

Cumulative Impacts regarding stormwater drainage facilities are discussed in Section 4.9, *Hydrology and Water Quality*.

Solid Waste

Cumulative development in Alameda County will continue to increase solid waste generation for disposal at landfills that serve the County. State-mandated solid waste diversion rates (for recycling) would continue to minimize the quantity of waste directed to area landfills, and compliance applicable regulations and with General Plan goals, policies, and actions would maintain or improve upon existing solid waste diversion rates. It is assumed the City of Berkeley will continue to divert at least 65 percent of solid waste from landfills due to its recycling and green waste programs. As discussed in Impact UTL-3, development facilitated by the proposed project would generate a limited amount of solid waste, representing 0.0011 percent of the remaining capacity of existing landfills serving Alameda County. This incremental increase in solid waste would not considerably contribute to a significant impact related to solid waste disposal.

Telecommunications, Electricity, and Natural Gas

The geographic extent of cumulative analysis for telecommunications, electricity, and natural gas includes the entire service territories of the providers for each of these utilities.

Telecommunications

Telecommunication services in Berkeley are provided by private companies, including AT&T, Comcast Cable, and Sonic which provides internet, phone, and are available throughout the City. Connections for new telecommunications services are implemented on an as needed basis, and the service provider used is generally at the discretion of the customer. Cumulative projects will establish telecommunications service connections in the same manner as residential developments under the proposed Project. There are no anticipated limitations to the availability of telecommunications service. Potential cumulative impacts associated with telecommunications would be less than significant.

Electricity and Natural Gas

Berkeley residents rely on East Bay Community Energy (EBCE) and Pacific as the electricity provider while PG&E is also the natural gas provider for the City. They are responsible for transmitting electricity and natural gas to all land uses within its service area, including the Draft Housing Opportunity Sites. Development considered part of the cumulative analysis includes buildout of local General Plans.

PG&E is subject to the requirements set forth and/or enforced by the CPUC. The need for electric and natural gas infrastructure would be addressed on a case-by-case basis for each cumulative project, and would be subject to CPUC requirements, similar to those applicable to the project. Therefore, cumulative impacts related to electric power and natural gas transmission facilities would be less than significant. Therefore, the proposed project would not have a cumulatively considerable contribution to a cumulative impact regarding electricity and natural gas.

4.17 Wildfire

This section evaluates potential wildfire impacts that could arise from implementation of the proposed HEU. The wildfire analysis consists of a summary of the existing conditions in Berkeley, the regulatory framework, a discussion of the potential wildfire impacts from development during the planning period of the HEU, and mitigation measures to lessen or avoid the potential impacts.

4.17.1 Setting

Wildfire Fundamentals

A wildfire is an uncontrolled fire in an area of extensive combustible fuel, including vegetation and structures. Wildfires differ from other fires in that they take place outdoors in areas of grassland, woodlands, brushland, scrubland, peatland, and other wooded areas that act as a source of fuel or combustible material. In addition, buildings may become involved if a wildfire spreads to adjacent communities. The primary factors that increase an area's susceptibility to wildfire include slope and topography, vegetation type and condition, and weather and atmospheric conditions.

The Governor's Office of Planning and Research (OPR) has recognized that although high-density structure-to-structure loss can occur, structures in areas with low- to intermediate-density housing were most likely to burn, potentially due to intermingling with wildland vegetation or difficulty of firefighter access. In general, increasing density decreases risk of wildfire. The risk of loss of human life, property, natural resources, or economic assets from wildfire is highest at the Wildland-Urban Interface (WUI), which are areas of urban development located adjacent to or even within wildland areas. Additionally, with high winds and low humidity, a wildfire beginning in the WUI area can quickly spread outside of the WUI, as was seen in historical fires in Berkeley. Regions of dense, dry vegetation, particularly in canyon areas and hillsides, pose the most significant potential for wildfire risks.

Approximately one-third of houses in California are currently within a WUI area (OPR 2020). It is important to note that there are varying definitions of what constitutes a WUI, and some local or regional agencies consider some areas to be WUI that are not defined as Wildland Interface or Intermix zones under the Wildland-Urban Interface Building Standards in Title 24, Part 2 of the California Code of Regulations (CCR); these standards are discussed under *Regulatory Setting* below.

The indirect effects of wildland fires can be catastrophic. In addition to stripping the land of vegetation and destroying forest resources, large, intense fires can harm the soil, waterways, and the land itself. Soil exposed to extreme heat may lose its capacity to absorb moisture and support life.

Wildfire has three basic elements: how and where its ignition occurred; how and why it moves across a landscape from its point of origin; and the fire's nature upon arrival at a location important to the City. In general, a fire's nature is defined by eight characteristics:

1. Direction of the advance of the fire front
2. Speed of the advance of the fire front (rate of spread)
3. Mechanism causing the advance
4. Duration at any one location
5. Structure-related consumption of fuels

6. Flame length
7. Intensity
8. Gaining control

A fire front's direction of travel is primarily determined by the direction of prevailing winds, geographic aspect, and condition of the fuels in the advanced direction. The speed of a fire front's advance results from conditions at the site of the currently burning material and of lands in the advance direction of the fire. As a fire advances, the overriding influences determining its speed are prevailing wind speed, terrain slope gradient, dominant fuel size classes, and fuel continuity.

Wildfires advance by two principal mechanisms, combustion resulting from radiant heating and remote ignition resulting from ember production. Fire stays at one location primarily due to the size and class of the material being consumed. Grass formations are dominated by low volumes of very "fine" fuels and, depending on the level of dryness, can be consumed, with the fire advancing, in a matter of minutes. On the other hand, tree-dominated formations have significantly greater volumes of available fuel and many larger-sized pieces. Fires can remain at these locations for days, often weeks, and sometimes months (on heavily wooded conifer sites).

Fires burn where fuels are available, which can include vegetation and structures. For example, fires in grasslands burn at one level set by the height of the grass, while fires in brushlands can burn surface fuels and typically consume the stems and leafy crowns to the full height of the plants. Fires in tree formations have a much more complex pattern of movement-based primarily on the continuity (or "connectedness") of the fuels.

Flame lengths are generally determined by the volume of fuels burning, the amount of time to total consumption, and the height of the species in the composition. Grassland produces flame lengths typically ranging from one to three feet as they are composed of low volumes of fine materials that are consumed quickly. Flame lengths are at their maximum when the material is dry. Brush formations can produce flame lengths from 4 to 10 feet. Native oak-dominated hardwood formations can generate 20- to 40-foot flame lengths and stands of exotics, such as *Eucalyptus globulus* or *E. cinerea,* or dense conifer stands, over 100 feet. Flame length is important as it sets the distance over which radiant heating-related combustion can occur.

The temperature achieved in a wildfire is directly related to the amount of cellulosic material available for consumption. Grasslands have very low amounts and attain lower temperatures but woodland, characterized by large amounts of highly concentrated cellulosic material, can attain temperatures on the order of 1,800 degrees Fahrenheit.

Gaining control over a wildfire's behavioral character is the objective of response efforts. Grassland fires, burning in low fuel volume, rapid consumption, and at a single level are the easiest to bring under control. On the other end, fires that are burning in high fuel volumes, full spectrum size classes, and entire stand structure involvement, can require days, weeks, even months, to bring under complete control.

Slope and Aspect

According to CAL FIRE, sloping land increases susceptibility to wildfire because fire typically burns faster up steep slopes, and they may hinder firefighting efforts (CAL FIRE 2007b). Following severe wildfires, sloping land is also more susceptible to landslide or flooding from increased runoff during substantial precipitation events. Aspect is the direction that a slope faces, and it determines how much radiated heat the slope will receive from the sun. Slopes facing south to southwest will

receive the most solar radiation and are warmer and drier than slopes facing a northerly to northeasterly direction, increasing the potential for wildfire ignition and spread (University of California 2018).

Vegetation

Vegetation is fuel to a wildfire, and it changes over time with seasonal growth and die-back. The relationship between vegetation and wildfire is complex, but generally some vegetation is naturally fire resistant, while other vegetation is extremely flammable. Some plant types in California landscapes are fire resistant, while others are fire-dependent for their seed germination cycles.

Wildfire behavior depends on the type of fuels present, such as ladder fuels, surface fuels, and aerial fuels. Surface fuels include grasses, logs, and stumps low to the ground. Ladder fuels, such as tall shrubs, young trees, and the lowest branches of mature trees, provide a path for fire to climb upward into the crowns of trees. Aerial fuels include upper limbs, foliage, and branches not in contact with the ground. Ample spacing in between tree crowns and trimming of lower branches close to the ground is effective at preventing fire from either igniting the crown of a tree or spreading from an ignited tree to adjacent trees; conversely, closely packed trees with low branches are especially susceptible to crown ignition and spread (CAL FIRE 2020a). Weather and climate conditions, including drought cycles, can lead to dry vegetation with low moisture content, increasing its flammability.

Weather and Atmospheric Conditions

Wind, temperature, and relative humidity are the most influential weather elements in fire behavior and susceptibility (CAL FIRE 2020a). Fire moves faster under hot, dry, and windy conditions. Wind may also blow embers ahead of a fire, causing its spread. Drought conditions lead to extended periods of excessively dry vegetation, increasing the fuel load and ignition potential.

According to data collected by the East Bay Municipal Utility District (EBMUD), most precipitation falls between November and May and very little falls between late spring and early fall with an average annual rainfall of 25inches (EBMUD 2020). May through September is the driest time of the year and coincides with what has traditionally been considered the fire season in California. However, increasingly persistent drought and climatic changes in California have resulted in drier winters, and fires during the autumn, winter, and spring months are becoming more common. Prevailing winds in Berkeley called Diablo Wind are generally hot, dry wind from the northeast. A catastrophic fire in Berkeley is most likely to occur under these Diablo Wind conditions. Historically, these winds were associated with the 1991 East Bay Hills fire and the 1923 Berkeley Fire, which burned from Wildcat Canyon to Shattuck Avenue in central Berkeley.

Citywide Conditions

Berkeley faces an ongoing threat from urban and wildland fire. Berkeley's dense development pattern, characterized by older structures including high-rise buildings, multi-storied residential units, and various warehouse, manufacturing, and commercial properties, makes Berkeley susceptible to fire. Berkeley also faces a significant wildland fire danger from its hillsides where the wildland and residential areas interface.

The fire threat is most common during the dry months of May through October and can become extreme when the warm, dry Diablo winds blow out of the northeast. The Diablo winds can be strong and make fires challenging to control. In addition, these wildfires can move with breathtaking

speed, down from the ridge in 30 minutes, expanding to one square mile in one hour, and then consuming hundreds of residences in one day. There have been 14 wildland fires from 1923 – 1991. This includes the Tunnel Fire in 1991 which destroyed more than 3,354 dwellings in Berkeley and Oakland and claimed 25 lives (Berkeley 2019).

Very High Fire Hazard Severity Zone

In California, State and local agencies share responsibility for wildfire prevention and suppression and federal agencies take part as well. Federal agencies are responsible for federal lands in Federal Responsibility Areas (FRA). The State of California has determined that some non-federal lands in unincorporated areas with watershed value are of statewide interest and have classified those lands as State Responsibility Areas (SRA). CAL FIRE manages SRAs. All incorporated areas and unincorporated lands not in FRAs or SRAs are classified as Local Responsibility Areas (LRA).

While nearly all of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (Public Resources Code 4201-4204, California Government Code 51175-89). As described above, the primary factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE maps fire hazards based on zones, referred to as Fire Hazard Severity Zones (FHSZ). There are three levels of severity: 1) moderate FHSZs; 2) high FHSZs; and 3) Very High Fire Hazard Severity Zones (VHFHSZ). Only the VHFHSZs are mapped for LRAs. Each of the zones influence how people construct buildings and protect property to reduce risk associated with wildland fires. However, none of the fire zones specifically prohibit development or construction. To reduce fire risk under State regulations, development within VHFHSZs must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life in those areas.

CAL FIRE develops initial boundaries for VHFHSZs throughout California, but the final boundaries of a VHFHSZ are adopted by each jurisdiction. The VHFHSZ formally adopted by the City is larger than originally proposed by CAL FIRE, and includes City of Berkeley Fire Zones 2 and 3, as well as approximately 36 individual parcels located near or adjacent to the VHFHSZ. The Wildfire Urban Interface area in Berkeley is the same as the VHFHSZ.

As shown in Figure 4.17-1, much of the Berkeley Hills in the eastern portion of Berkeley lies in a VHFHSZ. Berkeley is also within an LRA and the areas adjacent to the east of Berkeley are within an SRA. Figure 4.17-2, shows the 82 EIR sites inventory locations and the VHFHSZ. Most of the residential areas in this part of Berkeley are also zoned R-1, R-2, and R-2A, districts where density increases are also proposed in the HEU.

Figure 4.17-1 Berkeley Fire Zones

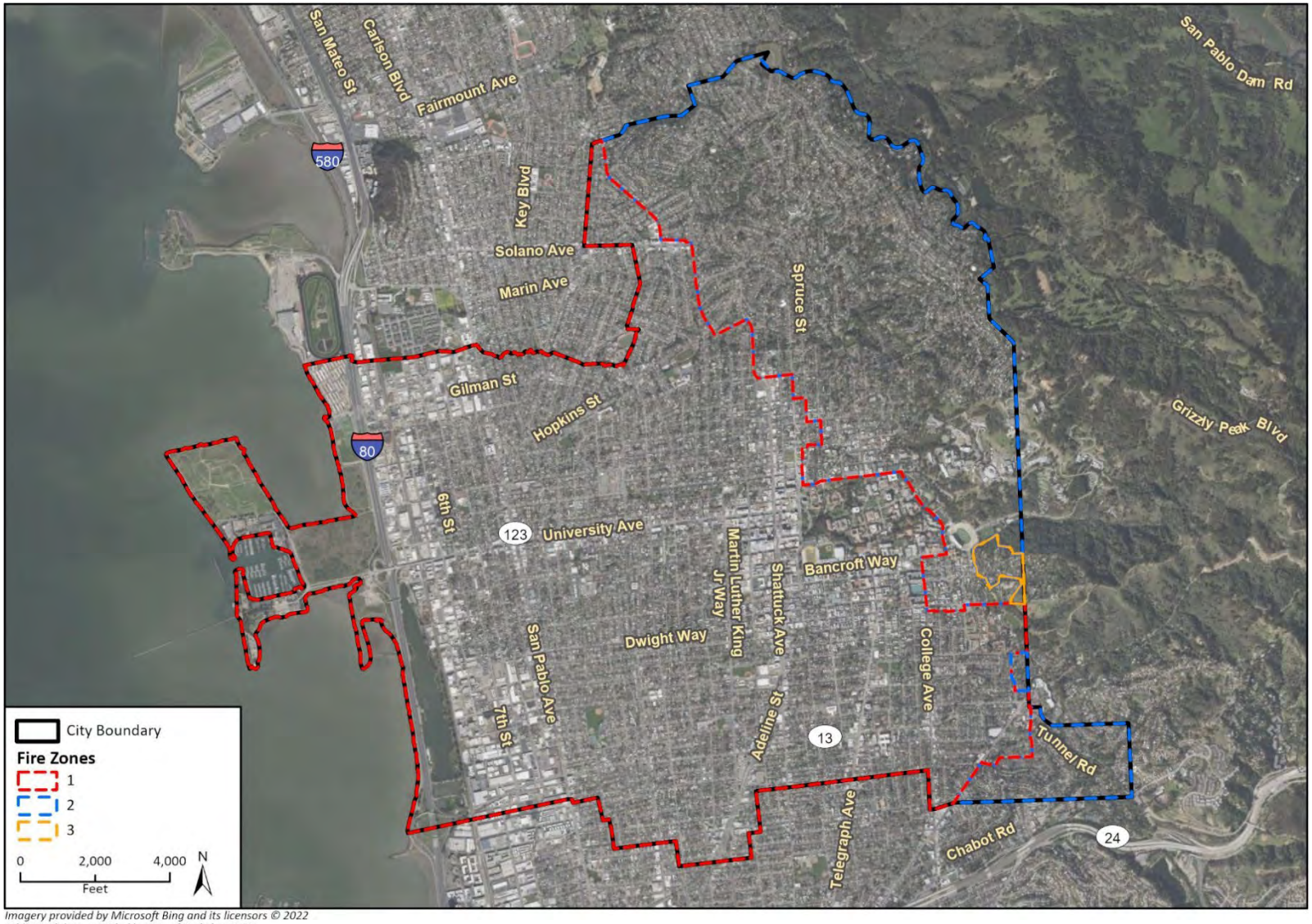
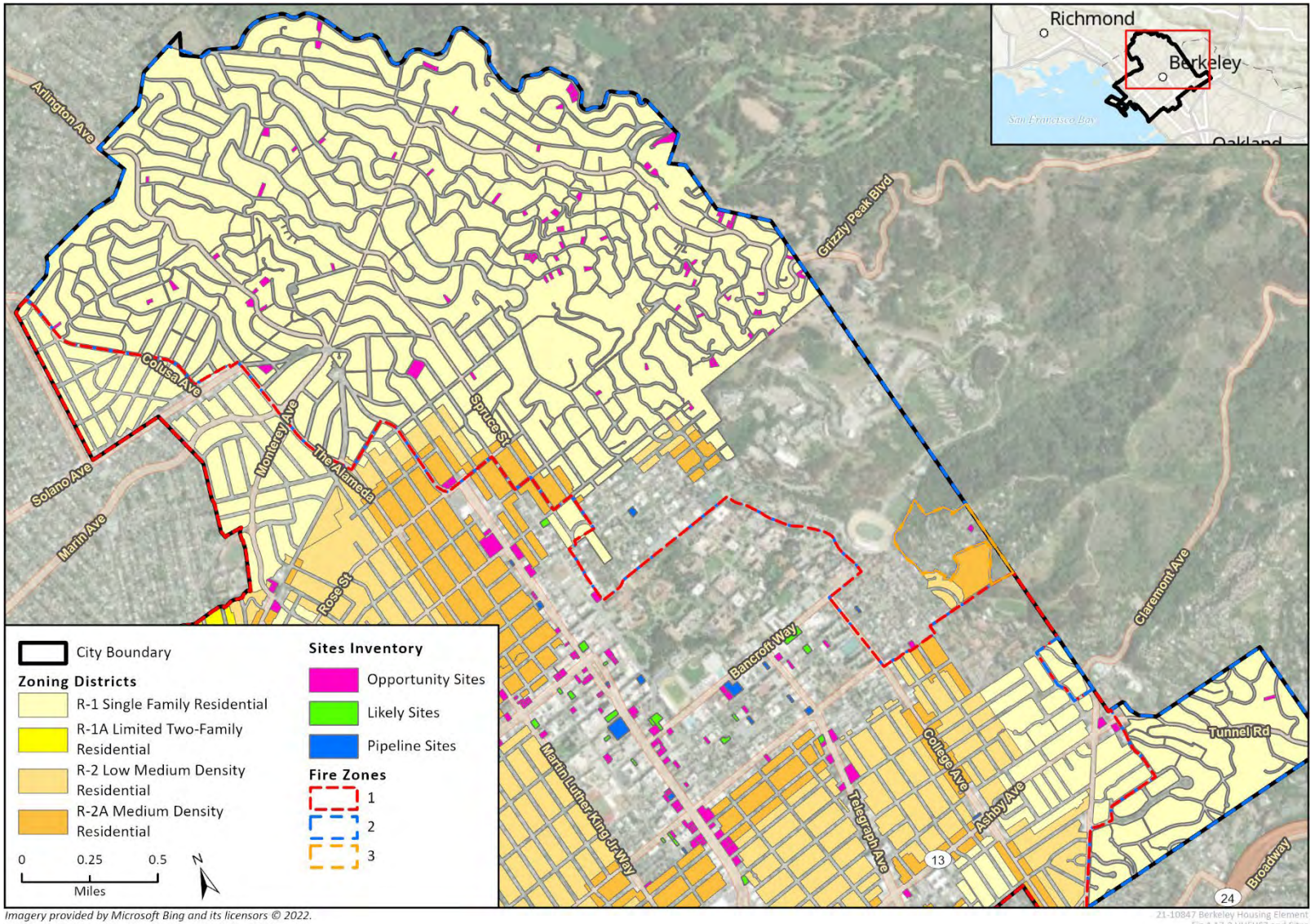


Figure 4.17-2 Housing Inventory Sites and the Very High Fire Hazard Severity Zone



Berkeley Fire Zones

Since the early 20th century, the City of Berkeley has established and adjusted fire zones in Berkeley. While the zones were initially established to address urban fire issues, they have evolved to designate the City's WUI fire hazard. Currently, the Berkeley Fire Department currently has divided the city into Fire Zones 1, 2, and 3, designated in order of ascending fire risk.

Fire Zone 3 is the Panoramic Hill area; Fire Zone 2 covers the remainder of the city's eastern hills; Fire Zone 1, covers the rest of the City west of the hills. Fire Zones 2 and 3 currently include about 8,300 properties. These zones have the strictest fire prevention standards in the City for issues such as building materials for new structures. The City also enforces vegetation management measures in these areas.

4.17.2 Regulatory Setting

a. Federal Laws, Regulations, and Policies

The Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 requires a state-level mitigation plan as a condition of disaster assistance and provides funding to communities developing their own mitigation plans through the Pre-Disaster Mitigation Grant Program. There are two different levels of state disaster plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act also established new requirements for local mitigation plans. The City of Berkeley's 2019 Local Hazard Mitigation Plan, adopted as an Appendix to the Disaster Preparedness and Safety Element of the General Plan, meets requirements of the Disaster Mitigation Act of 2000.

National Fire Plan

The National Fire Plan was developed in August 2000, following a historic wildfire season. Its intent is to establish plans for active response to severe wildfires and their impacts to communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

b. State Laws, Regulations, and Policies

California Board of Forestry

The Board of Forestry maintains fire safe road regulations, as part of CCR Title 14. This includes requirements for road width, surface treatments, grade, radius, turnarounds, turnouts, structures, driveways, and gate entrances. These regulations are intended to ensure safe access for emergency wildland fire equipment and civilian evacuation.

California Fire and Building Codes (2019)

The California Fire Code is Chapter 9 of CCR Title 24. It establishes the minimum requirements consistent with nationally recognized good practices to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structure, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. It is the primary means for authorizing and enforcing

procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The California Fire Code regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The California Fire Code and the California Building Code (CBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines and specialized equipment. To ensure that these safety measures are met, the California Fire Code employs a permit system based on hazard classification. The provisions of this Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout California.

More specifically, the Fire Code is included in CCR Title 24. Title 24, part 9, Chapter 7 addresses fire-resistances-rated construction; CBC (Part 2), Chapter 7A addresses materials and construction methods for exterior wildfire exposure; Fire Code Chapter 8 addresses fire related Interior finishes; Fire Code Chapter 9 addresses fire protection systems; and Fire Code Chapter 10 addresses fire related means of egress, including fire apparatus access road width requirements. Fire Code Section 4906 also contains existing regulations for vegetation and fuel management to maintain clearances around structures. These requirements establish minimum standards to protect buildings located in FHSZs within SRAs and WUI Fire Areas. This code includes provisions for ignition-resistant construction standards for new buildings.

Wildland-Urban Interface Building Standards

On September 20, 2007, the Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the CCR Title 24, Part 2, known as the 2007 CBC. These codes include provisions for ignition-resistant construction standards in the WUI.

Interface zones are areas with dense housing adjacent to vegetation that can burn and meeting the following criteria:

1. Housing density class 2 (one house per 20 acres to one house per 5 acres), class 3 (more than one house per 5 acres to one house per acre), or class 4 (more than one house per acre)
2. In Moderate, High, or Very High Fire Hazard Severity Zone
3. Not dominated by wildland vegetation (i.e., lifeform not herbaceous, hardwood, conifer, or shrub)
4. Spatially contiguous groups of 30-meter cells[1] that are 10 acres and larger

Intermix zones are housing development interspersed in an area dominated by wildland vegetation and must meet the following criteria:

1. Not interface
2. Housing density class 2
3. Housing density class 3 or 4, dominated by wildland vegetation
4. In Moderate, High, or Very High Fire Hazard Severity Zone
5. Improved parcels only
6. Spatially contiguous groups of 30-meter cells 25 acres and larger

[1] Note that "30-meter cells" refers to satellite mapping or Geographic Information Systems (GIS) data, and indicates data is presented as 30-meter by 30-meter squares in the source maps used to determine zone types.

Influence zones have wildfire-susceptible vegetation up to 1.5 miles from an interface zone or intermix zone (CAL FIRE 2019b). While the 2007 CBC creates WUI definitions for interface, intermix and influence zones in order to apply required construction standards, many local and regional entities use their own definitions of WUI areas for other purposes, ranging from simple resident awareness and public outreach to further municipal-level standards. Berkeley is most vulnerable to wind-driven fire incident originating in an area adjacent to Berkeley's eastern border, in land owned by UC Berkeley, the Lawrence Berkeley Laboratory, the East Bay Regional Park District, within the City of Oakland or within Contra Costa County. The wildfire risk is worsened by the area's mountainous topography, limited water supply, and minimal access and egress routes.

The California Fire Plan

The Strategic Fire Plan for California is the State's road map for reducing the risk of wildfire. The most recent version of the plan was finalized in January 2019 and directs each CAL FIRE Unit to address and meet incremental requirements to achieve four specific goals by 2023, including improving core capabilities, enhancing internal operations, ensuring health and safety, and building an engaged workforce (CAL FIRE 2019). A core element of the plan is increasing staffing levels from 2.67 employees per position to 3.11 employees per position to ensure adequate staffing during times of increased mobilization.

California Office of Emergency Services

The California Office of Emergency Services (CalOES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks and includes a vulnerability analysis and a hazard mitigation strategy. The SHMP is federally required under the Disaster Mitigation Act of 2000 for the State to receive Federal funding. The Disaster Mitigation Act of 2000 requires a state mitigation plan as a condition of disaster assistance.

Fire Risk Reduction Communities

Assembly Bill (AB) 1823 (2019) amended PRC Section 4290.1 to require that, on or before July 1, 2022, the State Board must develop criteria for and maintain a list of local agencies considered to be a "Fire Risk Reduction Community" located in the SRA or VHFHSZ, identified pursuant to GC § 51178, that meet best practices for local fire planning. Criteria that must be used to develop the Fire Risk Reduction Community list include recently developed or updated CWPPs, adoption of the board's recommendations to improve the Safety Element, participation in Fire Adapted Communities and Firewise USA programs, and compliance with the Board's minimum fire safety standards.

In 2022, the City of Berkeley applied for and was accepted onto the inaugural Fire Risk Reduction Communities List.

State Emergency Plan

The foundation of California's emergency planning and response is a statewide mutual aid system which is designed to ensure that adequate resources, facilities, and other support are provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation.

The California Disaster and Civil Defense Master Mutual Aid Agreement (California Government Code Sections 8555–8561) requires signatories to the agreement to prepare operational plans to use within their jurisdiction, and outside their area. These plans include fire and non-fire

emergencies related to natural, technological, and war contingencies. The State of California, all State agencies, all political subdivisions, and all fire districts signed this agreement in 1950.

Section 8568 of the California Government Code, the "California Emergency Services Act," states that "the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof." The Act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager. The provisions of the Act are reflected and expanded on by appropriate local emergency ordinances. The Act further describes the function and operations of government at all levels during extraordinary emergencies, including war.

All local emergency plans are extensions of the State of California Emergency Plan. The State Emergency Plan conforms to the requirements of California's Standardized Emergency Management System (SEMS), which is the system required by Government Code 8607(a) for managing emergencies involving multiple jurisdictions and agencies (CalOES 2020). SEMS incorporates the functions and principles of the Incident Command System (ICS), the Master Mutual Aid Agreement, existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination. Local governments must use SEMS to be eligible for funding of their response-related personnel costs under state disaster assistance programs. The SEMS consists of five organizational levels that are activated as necessary, including: field response, local government, operational area, regional, and state. CalOES divides the state into several mutual aid regions. The County of Alameda is located in Mutual Aid Region II, which includes Del Norte, Humboldt, Mendocino, Sonoma, Lake, Napa, Marin, Solano, Contra Costa, San Francisco, San Mateo, Alameda, Santa Clara, Santa Cruz, San Benito, and Monterey Counties (CalOES 2021). The City of Berkeley's 2016 Emergency Operations Plan is aligned with the State Emergency Plan and comports with all SEMS requirements.

Government Code Sections 65302 and 65302.5, Senate Bill 1241 (Kehoe) of 2012

Senate Bill (SB) 1241 requires cities and counties to address fire risk in SRAs and VHFHSZs in the safety element of their general plans. On July 29, 2019, the Board of Forestry and Fire Protection completed its review of Berkeley's Disaster Preparedness and Safety Element; the City accepted the Board's recommendations.

The bill also amended CEQA to direct amendments to the *CEQA Guidelines* Appendix G environmental checklist to include questions related to fire hazard impacts for projects located in or near lands classified as SRAs and VHFHSZs. In adopting these Guidelines, the Governor's Office of Planning and Research recognized that generally, low-density, leapfrog development may create higher wildfire risks than high-density, infill development.[2] In general, the Draft Housing Opportunity Sites would not be considered leapfrog development sites as they are located near and amongst existing development.

California Public Utilities Commission General Order 166

General Order 166 Standard 1.E requires that investor-owned utilities (IOU) develop a Fire Prevention Plan which describes measures that the electric utility will implement to mitigate the threat of power-line fires generally. Additionally, this standard requires that IOUs outline a plan to

[2] "Leapfrog development" describes the construction of new development at a distance from existing developed areas, with undeveloped land between the existing and new development.

mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning in a high fire threat area. Fire Prevention Plans created by IOUs are required to identify specific parts of the utility's service territory where the conditions described above may occur simultaneously. Standard 11 requires that utilities report annually to the California Public Utilities Commission (CPUC) regarding compliance with General Order 166 (CPUC 2017). Pacific Gas and Electric Company (PG&E) provides the electrical utility infrastructure for the City of Berkeley. The most recently available report for PG&E that discuses a Wildfire Mitigation Plan is dated February 5, 2021 (PG&E 2021). PG&E has developed an interim fire threat map that shows high fire threat districts according to CPUC. Berkeley is graded in both High Fire District Tier 2 and Tier 3.

California Government Code 51182 and Assembly Bill 3074

California Government Code 51182 sets the requirements for creation of defensible space zones around residential units built in WUI areas. Currently the law requires two zones of vegetation management reaching to 30 feet and 100 feet from the residence. In 2020 the legislature passed Assembly Bill 3074, which requires the Board of Forestry to develop regulations for a third zone within 0 to 5 feet of the home by January 1, 2023. Local and regional fire districts are tasked with regulation and inspection of defensible spaces. As of July 1, 2021, documentation of a compliant Defensible Space Inspection by the jurisdictional fire district is a condition of the sale or transfer of any residential property located in a high FHSZ or VHFHSZ.

Evacuation Route Requirements

In 2019, two separate bills (AB 747 and SB 99) were signed into law that added new requirements for disclosing residential development without at least two points of ingress and egress and addressing the presence and adequacy of evacuation routes in the general plan safety element.

SB 99 (2019) amended GC § 65302(g) to require that, upon the next revision of the housing element on or after January 1, 2020, the safety element must be updated to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes (i.e., points of ingress and egress) (GC § 65302(g)(5)).

AB 747 (2019) added GC § 65302.15, which requires that, upon the next revision of a Local Hazard Mitigation Plan (LHMP) on or after January 1, 2022, or beginning on or before January 1, 2022, if a local jurisdiction has not adopted a LHMP, the safety element must be reviewed and updated as necessary to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. If a LHMP, emergency operations plan, or other document that fulfills commensurate goals and objectives, a local agency may use that information in the safety element to comply with this requirement by summarizing and incorporating by reference such a plan or other document into the safety element. The 2019 Local Hazard Mitigation Plan maps Berkeley's Designated Emergency Access and Evacuation Routes.

These new requirements apply to all types of hazards in the safety element and are not unique to fire.

c. Local Laws, Regulations, and Policies

City of Berkeley General Plan

The Disaster Preparedness and Safety Element of the City's General Plan includes the following policies related to wildfires:

Policy S-1: Response Planning. Ensure that the City's emergency response plans are current and incorporate the latest information on hazards, vulnerability, and resources.

Policy S-2: Neighborhood Preparation and Education. Continue to provide education, emergency preparedness training and supplies to the community at the neighborhood level to support neighborhood- and community-based disaster response planning.

Policy S-3: Public Information. Publicize disaster preparedness efforts (such as CERT) and expand public awareness of specific hazards and risks by making available all relevant information including mapping and reports on various hazards, information on vulnerability and risk reduction techniques, evacuation routes, and emergency services, and information on financial and technical assistance resources.

Policy S-4: Special Needs Communities. Continue to work with the social service community to ensure the safety of special needs populations.

Policy S-5: The City's Role in Leadership and Coordination. Ensure that the City provides leadership and coordination of the private sector, public institutions, and other public bodies in emergency preparedness.

Policy S-6: Damage Assessment. Establish and maintain a rapid damage assessment capability.

Policy S-7: Emergency Water Supply. Protect life and property in the event of an earthquake by evaluating alternate drinking water and firefighting water supply in the event of failure of the East Bay Municipal Utility District (EBMUD) water supply.

Policy S-8: Continuity of Operations. Provide for the continuation of City government and services following a major disaster.

Policy S-9: Pre-Event Planning. Establish pre-event planning for post-disaster recovery as an integral element of the emergency preparedness programs of the City Council and each of the City departments.

Policy S-10: Sustaining Mitigation Initiatives. Improve public awareness and establish new public/private partnerships to implement mitigation initiatives in the community and region through programs such as Project Impact.

Policy S-21: Fire Preventive Design Standards. Develop and enforce construction and design standards that ensure new structures incorporate appropriate fire prevention features and meet current fire safety standards.

Policy S-22: Fire Fighting Infrastructure. Reduce fire hazard risks in existing developed areas.

Policy S-23: Property Maintenance. Reduce fire hazard risks in existing developed areas by ensuring that private property is maintained to minimize vulnerability to fire hazards.

Policy S-24: Mutual Aid. Continue to fulfill legal obligations and support mutual aid efforts to coordinate fire suppression within Alameda and Contra Costa Counties, Oakland, the East Bay Regional Park District, and the State of California to prevent and suppress major wildland and urban fire destruction.

Policy S-25: Fire Safety Education. Use Fire Department personnel to plan and conduct effective fire safety and prevention programs.

City of Berkeley 2019 Local Hazard Mitigation Plan

The City of Berkeley's 2019 LHMP is an appendix to the Disaster Preparedness and Safety Element of the City of Berkeley's General Plan. It contains the following mitigation actions to lessen the severity of wildfire:

- Reduce fire risk in existing development through fire code updates and enforcement.
- Reduce fire risk in existing development through vegetation management
- Explore possibility of a program to inspect vacant lots throughout the City
- Manage and promote pedestrian evacuation routes in Fire Zones 2 and 3.
- Improve responder access and community evacuation in Fire Zones 2 and 3 through roadway maintenance and appropriate parking restrictions.
- Explore other strategies for reducing the potential threats of overhead utility wires.
- Complete the Phase 3 undergrounding study spearheaded by the Undergrounding Subcommittee in collaboration with Public Works Department, Fire Department, and Public Works Commission. This is a citywide study to underground overhead wires on arterial and collector streets as a component of maintaining ingress and egress on roads during a major disaster.
- Work with EBMUD to ensure an adequate water supply during emergencies and disaster recovery.
- Define clean air standards for buildings during poor air quality events and use those standards to assess facilities for the Berkeley community.
- Implement energy assurance strategies at critical City facilities.
- Work with partners to identify additional non-City critical facilities and develop strategies to provide clean backup power at these sites.

City of Berkeley Fire Wildfire Evacuation Risk Mitigation Ordinance

The primary purpose of Berkeley Municipal Code (BMC) Chapter 12.99, Wildfire Hazard Evacuation Risk Mitigation Ordinance, is to permit and promote the construction of accessory dwelling units and junior accessory dwelling units while reducing potential impacts of new development in Fire Zones 2 and 3 as designated in the BMC Chapter 19.48 and the Hillside Overlay District. These areas have unique conditions and hazards that require additional restrictions on accessory dwelling units and junior accessory dwelling units (ADUs and JADUs) because of impacts of traffic flow and public safety consistent with Government Code 65852.2. Government Code 65852.2, subdivision (a)(1)(a), allows local agencies to regulate ADUs based on adequacy of water and sewer service, and the impacts of traffic flow and public safety. The Hillside Overlay District (as defined in BMC 23.306.020) includes all lots within Berkeley's designated Very High Fire Hazard Severity Zone that are zoned R-1H (Single-Family Residential—Hillside Overlay), R-2H (Restricted Two-Family Residential— Hillside Overlay), R-2AH (Restricted Multiple-Family Residential—Hillside Overlay), or ES-R (Environmental

Safety-Residential). The Hillside Overlay District contains narrow, steep, and winding streets with substandard widths, steep slopes, sharp curves, and hairpin turns, which make vehicle navigation in this area difficult. Residents in the path of a major fire will attempt to leave via private vehicles with personal belongings. When there is another major hills area fire or an earthquake, emergency access and egress on substandard roadways will be constrained, leading to traffic backups and people needing to abandon vehicles and evacuate on foot. Evacuees will conflict with responders as they try to fight the fire and reach others who need help to leave.

These challenges are especially prevalent in Fire Zone 3, the Panoramic Hill area. Panoramic Way is the only paved road into and out of this neighborhood. It forms a single loop, 12-18' wide, that begins and ends just south of Memorial Stadium. The street's narrow width and hairpin turns make it barely accessible to fire apparatus, which are required to perform three-point-turns to ascend the Hill. Panoramic Way's narrow width also means that at many points the road is not wide enough to allow vehicles to pass one another. Under normal conditions, vehicles responding to medical emergencies have been impeded by commercial vehicles, trash collection trucks, and illegally-parked personal vehicles.

Further intensifying the neighborhood's vulnerability, the Hayward Fault runs under Panoramic Way, just before it crosses the parking lot and bisects the Memorial Stadium. In a catastrophic Hayward Fault earthquake, the Panoramic Hill area will likely be isolated from the City's emergency services, all of which lie on the other side of the fault to the west (with the exception of Fire Station 7, which lies north of the UC Berkeley campus).

Berkeley Fire Code

BMC Chapter 19.48 adopts the California Fire Code and also includes additional provisions known as the Berkeley Fire Code. Berkeley requires that buildings in Fire Zones 2 and 3 (as described above under "Wildland-Urban Interface Building Standards"), which include the hillside areas, utilize ignition resistive construction materials, employ preventative construction methods, and create defensible space in order to make them resistant to wildfire. Specific projects must file a Fire Protection Plan, or Vegetation Management Plan, which is a document prepared for a Wildland-Urban Interface Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure. The Fire Protection Plan shall be prepared in accordance with the latest standards of the Berkeley Fire Department. The Fire Protection Plan must be submitted to, reviewed and approved by the Berkeley Fire Department and must be enforced and maintained by the responsible party or their designated agent. The Berkeley Fire Department may charge an appropriate fee for the review, approval and processing of the Fire Protection Plan in accordance with the hourly rate established by City Council resolution.

Berkeley Emergency Operations Plan

The City's 2016 Emergency Operations Plan (EOP) establishes procedures to implement Berkeley's Multi-Agency Coordination (MAC) System. The MAC system is the element of Berkeley's Emergency Management Program focused on response to and short-term recovery from emergencies, disasters, incidents and events. Berkeley's MAC System is made up of the facilities, equipment, personnel, communications and procedures that City government and external partners use to respond. This EOP Base Plan establishes the authorities, structures and responsibilities of the Policy Level, departments and the Emergency Operations Center (EOC). It describes the City's coordination with County, regional, State and federal entities, as well as external Berkeley partners.

d. Local Guidance and Resources

Extreme Fire Weather

The National Weather Service declares a "Red Flag Warning" when low humidity and high winds combine for elevated fire risk. The Berkeley Fire Department declares "Extreme Fire Weather"—a Berkeley-specific designation—when forecasted wind speeds and humidity levels during a Red Flag Warning would produce especially risky conditions in Berkeley.

The Berkeley Fire Department recommends that residents make plans to leave Fire Zones 2 and 3 during periods of Extreme Fire Weather. Extreme Fire Weather is more rare than Red Flag Warnings. In 2020, Berkeley had 25 days of Red Flag Warnings and only two days of Extreme Fire Weather. This narrow range of weather conditions is when the most destructive fires occur.

Berkeley Ready Household Fire Weather Planning Tool

The City of Berkeley's Household Fire Warning Tool assists residents in making important decisions on how keep their household safe during fire weather. This tool is a step-by-step guide to making a fire weather plan for a resident's household ahead of time to address unpredictable and rapidly changing fire conditions individual awareness, family preparedness, and self-sufficiency for potential catastrophes or emergencies. The guide helps residents identify the following:

- Identify the trigger for a resident leaving the hills
- Decide where to go
- Identify evacuation routes

Berkeley Ready Wildfire Evacuation Checklist

The City of Berkeley has developed a Wildfire Evacuation Checklist for residents. This checklist provides guidance on what to include in a Go-Bag, how to prepare your home of a wildfire, guidance on checking on others, and other extra items to bring. The Berkeley Ready Wildfire Evacuation Checklist also provides information on how to set up emergency alerts and locate evacuation zones.

4.17.3 Impact Analysis

a. Methodology and Significance Thresholds

Impacts related to wildfire hazards and risks were evaluated using FHSZ mapping for the City of Berkeley, aerial imagery, and topographic mapping. Impacts of development anticipated during the planning period of the HEU would be considered significant if the proposed project would exacerbate existing conditions.

According to Appendix G of the CEQA Guidelines, development may have a significant adverse impact if the project is in or near SRAs or VHFHSZs and would do any of the following:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan;
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;

3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or what may result in temporary or ongoing impacts to the environment; or,
4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

As shown on Figure 4.17-1, Berkeley is not an SRA and the City is locally responsible for any sites located within its boundary. However, as shown on Figure 4.17-2, the EIR sites inventory includes 282 inventory sites located Zone 1, 81 inventory sites in Zone 2, and 1 inventory site in Zone 3. These opportunity sites are currently vacant and/or underutilized sites and are not associated with actual development proposals. In addition, the proposed HEU would encourage additional housing and a mix of housing types in the middle housing rezoning districts (R-1, R-1A, R-2, R-2A, and MU-R). These districts are shown on Figure 2-5 in Section 2, *Project Description.* Most of the area within the VHFHSZ is within the R-1, R-2, and R-2A districts so some of the additional infill middle housing could be in the VHFHSZ.

b. Project Impacts and Mitigation Measures

Threshold 1:	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact W-1 DEVELOPMENT DURING THE PLANNING PERIOD OF THE PROPOSED HEU WOULD OCCUR IN HILLSIDE AREAS LOCATED NEAR A STATE RESPONSIBILITY AREA AND IN A VERY HIGH FIRE HAZARD SEVERITY ZONE. THE CITY EMPLOYS MULTIPLE STRATEGIES TO REDUCE THE IMPAIRMENT THE HEU WOULD HAVE ON EMERGENCY RESPONSE AND EVACUATION. NONETHELESS, THIS IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE.

As discussed in Section 2, *Project Description,* the project identifies housing sites that will accommodate the RHNA plus an additional buffer; up to a total of 19,098 units. For the purposes of the EIR analysis, 82 are in inventory sites located in Fire Zones 2 and 3, which are considered the VHFHSZ, as shown on Figure 4.17-2. These sites are currently vacant and/or underutilized and are not associated with actual development proposals. Further, the proposed HEU would facilitate increased residential development in the R-1, R-2, and R-2A districts which includes portions within the VHFHSZ.

The City of Berkeley's Emergency Operations Plan (EOP) employs multi-agency coordination to establish proper disaster prevention or mitigate the impacts brought forth by an unexpected emergency event. With coordination set up between County, regional, State, and federal entities, the plan implements an all-hazards approach to prepare the City for a wide range of events of varying magnitudes and intensities.

The City also provides multiple evacuation preparedness strategies. This includes public communication strategies including real-time evacuation mapping using the Zonehaven system, as well as mass notification methods such AC Alert messages that are sent to phones and emails and the 1610 AM radio system that can broadcast instructions and warnings to the public. Further, Measure FF, which was approved by Berkeley voters in November 2020, is funding additional evacuation management efforts including a network of emergency warning sirens that will alert residents to evacuate or shelter in place by broadcasting spoken, hyperlocal messages.

While increasing residential density in the Berkeley Hills would not necessarily increase the risk of wildfire, as discussed below under Impact W-2, construction of individual housing developments in VHFHSZs could interfere with adopted emergency response or evacuation plans as a result of temporary construction activities within rights-of-way. However, temporary construction barricades or other construction-related obstructions used for project development that could impede emergency access would be subject to the City's Standard Conditions of Approval, which include the following condition to prepare a Transportation Construction Plan subject to City review and approval:

> Transportation Construction Plan. The applicant and all persons associated with the project are hereby notified that a Transportation Construction Plan (TCP) is required for all phases of construction, particularly for the following activities:
>
> - Alterations, closures, or blockages to sidewalks, pedestrian paths or vehicle travel lanes (including bicycle lanes);
> - Storage of building materials, dumpsters, debris anywhere in the public ROW;
> - Provision of exclusive contractor parking on-street; or
> - Significant truck activity.
>
> The applicant shall secure the City Traffic Engineer's approval of a TCP. Please contact the Office of Transportation at 981-7010, or 1947 Center Street, and ask to speak to a traffic engineer. In addition to other requirements of the Traffic Engineer, this plan shall include the locations of material and equipment storage, trailers, worker parking, a schedule of site operations that may block traffic, and provisions for traffic control. The TCP shall be consistent with any other requirements of the construction phase.
>
> Contact the Permit Service Center (PSC) at 1947 Center Street or 981-7500 for details on obtaining Construction/No Parking Permits (and associated signs and accompanying dashboard permits). Please note that the Zoning Officer and/or Traffic Engineer may limit off-site parking of construction-related vehicles if necessary to protect the health, safety or convenience of the surrounding neighborhood. A current copy of this Plan shall be available at all times at the construction site for review by City Staff.

Implementation of a TCP would limit the extent to which development during the planning period of the HEU would impair or physically interfere with adopted emergency response or evacuation procedures.

As discussed above and in the regulatory setting, established regulations and safety procedures have been implemented to prevent the impairment of emergency response plans and emergency evacuation plans, including through Fire Department review and approval of construction plans to ensure compliance with the Fire Code. Additional fire evacuation improvements are included within the Wildfire Hazard Evacuation Risk Mitigation Ordinance, giving local agencies the capability to regulate ADU's in accordance to how they would impact traffic flow and water services. Also included in the ordinance is BMC 23.306.020B, which places restrictions on ADU's and JADU's located within the Hillside Overlay District, as they can lead to impacts on traffic flow and public safety if left unmanaged.

Based on all of the above, the City's existing regulations and project review procedures would help to ensure that additional impacts related to impairment of adopted emergency response plan or emergency evacuation plan would be avoided. However, based on this being a plan level analysis

and the potential for unusual site-specific conditions, project specific or road specific conditions, and the general ongoing fire risk in the Berkeley Hills, future development under the proposed HEU may result in impacts. An impact to emergency operations and evacuations could occur from construction of future projects if they were to result in temporary road closures, therefore potentially reducing available emergency evacuation routes. Construction of new development could involve temporary lane closures or otherwise block traffic that could impede the ability of emergency vehicles to access the area. This would be limited to the duration of the construction period and only affect streets adjacent to the construction site.

The additional residents in the area associated with new residential development could further inhibit safe evacuation by putting more residents in the area that would require evacuation on narrow hillside roadways. Additional residents in the hills could also make wildfire risk more acute because more people will need to use evacuation routes at the same time. As such, impacts related to emergency response plan or emergency evacuation plan would be potentially significant.

Mitigation Measures

The City of Berkeley requires a Transportation Construction Plan as a Standard Condition of Approval and would evaluate emergency access and consistency with the Fire Code and other development requirements as part of the development review process. Further, the City is undertaking emergency evacuation planning as part of citywide efforts described above. No other mitigation measures are feasible to address potential site-specific impacts.

Significance After Mitigation

Implementation of the City's Standard Conditions of Approval for a Transportation Construction Plan requires applicants to prepare a TCP which has the effect of ensuring that emergency evacuation routes are not obstructed or hindered in the event of a wildfire. This would reduce the potential for development under the proposed HEU to hinder or impair emergency access and evacuation during construction. Future development would also be required to comply with applicable development standards including the Berkeley Fire Code. No additional mitigation measures beyond adherence to existing procedures are required or are feasible. Nonetheless, for some development projects, impacts may result from the potential for unusual site-specific or road conditions, project characteristics, and the general ongoing fire risk in the Berkeley Hills. Based on this, impacts would be significant and unavoidable.

Threshold 2:	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact W-2 IMPLEMENTATION OF THE PROPOSED HEU WOULD ENCOURAGE DEVELOPMENT IN THE HILLSIDE AREAS LOCATED NEAR A STATE RESPONSIBILITY AREA AND IN A VERY HIGH FIRE HAZARD SEVERITY ZONE. NEW DEVELOPMENT WOULD BE REQUIRED TO COMPLY WITH EXTENSIVE REGULATIONS AND FIRE SAFETY PROVISIONS IN THE BERKELEY MUNICIPAL CODE, INCLUDING THE FIRE CODE. BASED ON THE EXISTING REGULATORY FRAMEWORK AND PROJECT REVIEW PROCESS WITH BERKELEY FIRE DEPARTMENT, IMPACTS WOULD BE GENERALLY AVOIDED. HOWEVER, IT REMAINS POSSIBLE THAT EVEN WITH EXISTING REGULATIONS, CONSTRUCTION OR OTHER HUMAN ACTIVITIES RELATED TO DEVELOPMENT IN OR NEAR AN SRA OR IN A VHFHSZ COULD EXACERBATE WILDFIRE RISK AND EXPOSE EXISTING AND NEW RESIDENTS TO POLLUTANT CONCENTRATIONS AND UNCONTROLLED SPREAD OF A WILDFIRE. ADDITIONALLY, BY INCREASING THE POPULATION OF THE WUI AREA, MORE PEOPLE WILL BE DIRECTLY THREATENED WHEN A WILDLAND FIRE OCCURS. THEREFORE, THIS IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE.

The proposed HEU would encourage development in the R-1, R-2, and R-2A districts in a VHFHSZ. New housing in the VHFSHZ would not be likely to increase the likelihood of fire ignition or speed of spread. It is not expected that build out of the proposed HEU would increase fire risk because it would not create additional wildland spaces and therefore would not increase the extent of the wildland-urban interface. As documented by Keeley and Syphard in the International Journal of Wildland Fire (2018), in recent decades (since circa 1980), human-caused fires have been negatively correlated with population density, meaning more developed areas are less likely to be affected by wildfires throughout the State (Keeley and Syphard 2018) and suggesting that additional development would not necessarily lead to more wildfires.

Additionally, development would be required to comply with State and Local regulations. On a statewide level, the California Fire Code includes safety measures to minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves, and vents to prevent intrusion by flame or embers. Under the California Building Standards Code, construction would also be required to adhere to an assortment of building standards, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. The Board of Forestry and Fire Protection, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures or life by reducing wildfire hazards.

On a local level, the Berkeley Fire Code (Section 4907.1 of the City Code) states that buildings and structures within the VHFHSZ must maintain defensible space as outlined in Government Code 51175-51189 and Section 4908 of Berkeley's Municipal Code. Section 16.20.020(G) of the Subdivision Ordinance (Title 16) outlines that the landowner or developer must install water mains, fire hydrants, and fire appurtenances to supply water for fire suppression conformance with district standards. As outlined within the Berkeley Fire Code Section 4902.1, projects within the Wildland Urban Interface must provide a Fire Protection Plan (FPP), which prescribes actions taken to reduce the potential for wildfire exposure through mitigation measures and risk minimization. These actions include utilizing ignition-resistive construction materials, employing preventative construction methods, and creating defensible space. The City requires that the responsible party formulates the FPP based on the Berkeley Fire Department's latest standards. The plan is then sent to the Berkeley Fire Department for review and approval. The Fire Department ensures that the

plan is properly executed by the responsible party or their designated agent. During Red Flag Warnings, the City also imposes limitations on spark-producing construction activities. Government Code 65852.2 subdivision (a)(1)(A) allows agencies to regulate ADUs with consideration to how they will impact water and sewer services as well as the flow of traffic and public safety. With exclusive focus on the VHFHSZ, BMC 23.306.020B places restrictions on ADUs and JADUs as they have impacts on the flow of traffic as well as public safety.

Increasing development in the VHFHSZ directly increases the number of residents exposed to a wildland-urban interface fire. Additionally, increased density in this area will further complicate evacuation for existing and new residents. Based on documented experiences from the 1991 East Bay Hills Fire, the City expects evacuation during a Diablo-wind-driven fire to be a challenge, requiring many to abandon vehicles and continue on foot. The evacuation challenges in the area are present due to the existing population density, roadway network, and hilly topography, and development in the area will further complicate these efforts. Acknowledging the intractable challenge posed by the VHFHSZ's density, roadways, and topography, the City has evolved its recommendations for fire evacuation. The City encourages residents of the VHFHSZ to understand fire weather and preemptively relocate out of the Berkeley hills during Extreme Fire Weather events. This is to facilitate evacuation in advance of any wildfire event, should one occur. Tools and resources are provided on the City of Berkeley's website to better equip the public to plan for this early departure, as well as for wildfire evacuation response, including a detailed map of the City's emergency access and evacuation routes.

Based on all of the above, the City's extensive regulations and project review scheme would ensure that impacts related to future development under the proposed HEU in the VHFSHZ areas exacerbating wildfire risks and resulting in risks to people and structures from pollutants would be avoided. However, based on the potential for site-specific conditions or hazards; project characteristics that are unique; and the general risk of fire in the Berkeley Hills, impacts may occur. Additionally, by increasing the population of the VHFHSZ, more people will be directly threatened and evacuation and firefighting efforts will be further challenged when a fire occurs. Therefore, impacts are potentially significant.

Mitigation Measures

The City of Berkeley requires various wildfire risk mitigation actions of development projects in the VHFHSZ as part of the Berkeley's Municipal Code, Berkeley Fire Code, and Berkeley Fire Wildfire Evacuation Risk Mitigation Ordinance. Additionally, a Fire Protection Plan is required to reduce the potential for loss due to wildfire exposure through mitigation measure and risk minimization, in accordance with the Berkeley Fire Department's latest standards. No other mitigation measures are feasible.

Significance After Mitigation

Compliance with existing City regulations and the implementation of the City's requirement for a Fire Protection Plan to be prepared for development of housing projects in the Wildland-Urban Interface Fire Area would reduce the potential to exacerbate wildfire risk during construction and after projects are constructed. This would reduce the severity of potential impacts related to exposure to pollutant concentrations from a wildfire or the likelihood of wildfire ignition. No additional mitigation measures beyond adherence to existing procedures are required or are feasible. Nonetheless, for some development projects, even with implementation of these wildfire prevention measures, impacts may result from the potential for unusual site-specific or road

conditions, project characteristics, and the general ongoing fire risk in Berkeley Hills. Additionally, by increasing the population of the VHFHSZ, more people will be directly threatened and evacuation and firefighting efforts will be further challenged when a fire occurs. Based on this, impacts would be significant and unavoidable.

Threshold 3:	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact W-3 IMPLEMENTATION OF THE PROPOSED HEU WOULD ENCOURAGE DEVELOPMENT OF HOUSING ON INVENTORY SITES AND IN THE HILLSIDE OVERLAY DISTRICT LOCATED NEAR A STATE RESPONSIBILITY AREA AND IN A VERY HIGH FIRE HAZARD SEVERITY ZONE. THE PROPOSED HEU COULD EXPOSE PEOPLE AND STRUCTURES TO RISK DUE TO THE TERRAIN AND SLOPE IN THE BERKELEY HILLS. THIS COULD RESULT IN POTENTIAL RISKS SUCH AS LANDSLIDES. THIS IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE.

Berkeley faces an ongoing threat from a wildland fire along its hillsides, where wildland and residential areas intermix. This includes proposed housing in in the VHFHSZ under the proposed HEU. If a severe wildfire were to occur in the hillside area of Berkeley, structures downslope would be at risk of landslides.

Berkeley's LHMP provides information on the landslide risk in the hills area. As described in the LHMP, Berkeley's WUI fires can increase the area's risk of landslides. When all supporting vegetation is burned away, hillsides become destabilized and prone to erosion. The charred surface of the earth is hard and absorbs less water. When winter rains come, this leads to increased runoff, erosion, and landslides in hilly areas.

Erosion and land slippage after fires can also lead to temporary or permanent displacement and property damage or loss. In addition, the increase in housing in a VHFHSZ could increase the exposure and vulnerability of people living downslope in these areas.

Development that could occur during the HEU period, such as increased development as a result of rezoning, could expose people and structures to landslides by encouraging development in the hillsides in a VHFHSZ where landslides could occur and could be exacerbated after a wildfire. The City requires a Geotechnical and Seismic Hazard Investigation for all development projects located in a State-designated Seismic Hazard Zone for liquefaction, landslide, or earthquake fault rupture, as defined by the California Seismic Hazards Mapping Act and shown on the "Environmental Constraints Map," sites in the VHFHSZ would be required to prepare a site-specific geotechnical investigation. This would involve identifying the degree of potential hazards, providing design parameters for the project based on the hazard, and describing appropriate design measures to address hazards. Future development would be required to adhere to such recommendations to mitigated landslide hazards. Nonetheless, because of the hillside slopes, landslide susceptibility, and wildfire susceptibility, development under the proposed HEU potentially exposes people and structures to significant risks, including landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, this impact is potentially significant.

Mitigation Measures

The City of Berkeley requires Geotechnical and Seismic Hazard Investigation for development projects located in a State-designated Seismic Hazard Zone and requires numerous wildfire risk reduction measures for projects in the VHFHSZ as part of the Berkeley Municipal Code, Berkeley Fire

Code, and Berkeley Fire Wildfire Evacuation Risk Mitigation Ordinance. No other mitigation measures are feasible.

Significance After Mitigation

BMC requirement of site-specific geotechnical investigations would reduce potential impacts related to landslides for individual future development projects. These requirements would reduce potential impacts such as landslides due to runoff, post-fire slope instability, or drainage changes following a potential wildfire. However, based on the potential for unusual site-specific conditions or project characteristics, and the general ongoing fire risk in the Berkeley Hills, impacts of a housing development project under the HEU may still occur. Therefore, impacts would be significant and unavoidable.

Threshold 4:	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact W-4 IMPLEMENTATION OF THE PROPOSED HEU WOULD ENCOURAGE DEVELOPMENT OF HOUSING ON INVENTORY SITES AND IN THE R-1, R-2, AND R-2A DISTRICTS LOCATED NEAR A STATE RESPONSIBILITY AREA AND IN A VERY HIGH FIRE HAZARD SEVERITY ZONE. HOWEVER, THE AREA IS ALREADY DEVELOPED AND SERVED BY EXISTING INFRASTRUCTURE AND IT IS NOT ANTICIPATED THAT INSTALLATION OF NEW INFRASTRUCTURE OR A SUBSTANTIAL INCREASE IN THE MAINTENANCE OF EXISTING INFRASTRUCTURE WOULD OCCUR. SHOULD ADDITIONAL MAINTENANCE OR CONSTRUCTION OF SUCH INFRASTRUCTURE OCCUR, IMPLEMENTATION OF MITIGATION MEASURE W-1 WOULD REDUCE THE RISK OF FIRE DURING CONSTRUCTION. OVERALL, THIS IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE.

The proposed HEU would encourage development in a VHFHSZ, but this area is already zoned for residential development and is developed with residences. The project would not place development in new areas such that new or extended roadways, power lines, or other utilities would be required. Therefore, it is not anticipated that the project would require the installation of new infrastructure because the area is already serviced by such infrastructure. As discussed in Section 4.16, *Utilities and Service Systems,* it is not anticipated that new water utility infrastructure would be required. The Berkeley Fire Code authorizes the Fire Chief to specify water supply and road design standards (such as the number of roads required for access to the site, the road width, and weight capacity). New development could require the installation and maintenance of new or improved roads, emergency water sources, power lines or other utilities, the construction and operation of which could introduce potential sources of wildfire ignition, such as the sparking of an overhead power line or construction equipment or the operation of resident vehicles. Compliance with existing State and local fire safety measures would substantially reduce the risk of wildfire. Nonetheless, although ignition sources have declined markedly in recent decades, one notable exception is powerline ignitions (Keeley and Syphard 2018). Wildfire ignitions due to infrastructure (particularly aboveground power lines) may exacerbate fire risk or may result in temporary or ongoing impacts to the environment. Because new development under the HEU would occur as infill development in previously developed areas of Berkeley situated in the VHFHSZ, increased risk associated with new development would most likely be limited to the installation period of new associated infrastructure. Although impacts are unlikely based upon existing regulations, impacts may occur should new development require the installation and maintenance of new or improved

roads, emergency water sources, power lines or other utilities, or if there are unusual site-specific conditions or aspects of the infrastructure project that would increase the general ongoing fire risk in the Berkeley Hills. Impacts are determined to be potentially significant.

Mitigation Measures

The following mitigation measure is required.

W-1 Undergrounding of Power Drops in the VHFHSZs

The City shall require that new or upgraded power drops located in the very high fire hazard severity zone be installed underground. Prior to the issuance of a building permit, the applicant shall submit plans for undergrounding of power drops.

Significance After Mitigation

Implementation of Mitigation Measure W-1, would reduce the potential for impacts under this threshold by placing power lines underground in areas subject to wildfire risk. However, it may not be feasible to impose this requirement on all projects. Additionally, potentially unusual site-specific conditions or aspects of the infrastructure project, including power line installation, may result in wildfire impacts from the installation or maintenance of infrastructure required by build out under the HEU. This impact would therefore remain significant and unavoidable.

c. Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative wildfire impacts is Berkeley and its immediate surroundings. This geographic scope is appropriate for wildfire, because wildfires can cause impacts to large areas. As described in Section 3, *Environmental Setting,* Development that is considered part of the cumulative analysis includes buildout under the propose HEU and buildout under the University of California, Berkeley's Long Range Development Plan (LRDP) and Housing Projects #1 and #2.

In and near Berkeley, the VHFHSZs are located largely along the WUI borders with the hilly northwestern areas, such as those shown in Figure 4.17-1. Within the geographic scope for this cumulative analysis, wildfire-related impacts could be significant if development is in or near Berkeley's VHFHSZ. The proposed LRDP update would involve improvements and development in Campus Park, the Hill Campus West, the Hill Campus East, the Clark Kerr Campus, and the City Environs Properties, portions of which fall within the VHFHSZ. Development within the VHFHSZ could exacerbate wildfire risks. Like development under the proposed HEU, new development under the LRDP would be subject to statewide standards for fire safety in the California Fire Code. Nonetheless, because the proposed HEU could exacerbate wildfire risk in Berkeley's VHFHSZ and development under the proposed LRDP update could also exacerbate such risks, a cumulative impact would occur and the proposed projects' contribution would be cumulatively considerable.

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5 Other CEQA Required Discussions

This section discusses the potential significant environmental effects that cannot be avoided, growth-inducing impacts, and irreversible environmental impacts associated with the implementation of the proposed HEU.

5.1 Significant Environmental Effects that Cannot be Avoided

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. Implementation of the proposed HEU could result in significant and unavoidable impacts related to historical resources (see Section 4.4, *Cultural Resources*), construction noise (see Section 4.11, *Noise*), and wildfire (see Section 4.17, *Wildfire*).

5.2 Growth Inducement

Section 15126(d) of the CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

5.2.1 Population Growth

As discussed in Section 4.12, *Population and Housing*, the development facilitated by the proposed HEU would accommodate regional and local population growth that generates the need for additional housing, including in Berkeley. The proposed project would address the Regional Housing Needs Allocation (RHNA) assigned by ABAG of 8,934 units, of which 3,854 units must be for lower income households and could provide a buffer of an estimated 10,164 units. To meet the objectives of the RHNA and provide sufficient capacity for housing development, the Housing Element identifies sites suited for residential development, and identifies implementation programs and zoning policies to encourage additional housing for all segments of the population. This includes the already-accomplished rezoning for the North Berkeley and Ashby BART stations, programs to encourage additional residential development in the R-1, R-1A, R-2, R-2A, and MU-R districts, and zoning map and height amendments in the Southside area for additional student housing development. Therefore, the Housing Element Update would align with ABAG's RHNA determination and the State's statutory requirements, which are established based on anticipated growth within the city and region.

Overall, full buildout could facilitate an estimated population growth of approximately 47,443 new residents by 2031 based on the maximum facilitated buildout of 19,098 housing units. However, actual development will depend on many factors not reflected in the inventory, including the pace of construction and absorption of new units according to economic cycles, land availability, capital

and financing, construction material and labor costs and availability, and so on. Growth anticipated under the proposed HEU is intended to meet regional housing needs over the longer term. Given that the State is currently in an ongoing housing crisis due to an insufficient housing supply and mismatched incomes and housing costs, the additional units and affordability programs would further assist in addressing the existing crisis and meeting housing needs. Therefore, the project would not result in substantial unplanned population growth, either directly or indirectly.

As discussed in Section 4.2, *Air Quality*, and Section 4.7, *Greenhouse Gas Emissions*, anticipated development under the proposed HEU would not generate air quality or GHG emissions that would result in an unavoidably significant impact. The project would facilitate development of housing on vacant and/or underutilized sites within Berkeley's urban footprint and mostly near transit corridors, BART stations, and Priority Development Areas such as the Southside area, which would reduce the usage of single-occupancy vehicles and vehicle miles traveled (VMT). Furthermore, since the proposed housing inventory sites would be in areas with existing services and infrastructure, and the HEU itself does not propose new roads or infrastructure extensions, the HEU would not induce substantial unplanned growth in Berkeley.

Therefore, any population growth associated with the project would not result in significant long-term physical environmental effects.

5.2.2 Economic Growth

The proposed project would involve new residential development and would not directly result in new commercial or other uses that would generate employment opportunities. Development facilitated by the project would generate temporary employment opportunities during construction. Because construction workers would be expected to be drawn from the existing regional work force, project construction would not be growth-inducing from an employment standpoint. The proposed project would not induce substantial economic expansion to the extent that direct physical environmental effects would result.

5.2.3 Removal of Obstacles to Growth

Berkeley is primarily urbanized with existing infrastructure, including roads, water supply, sewers, storm drains and gas and electric power. The city's existing roadway network would accommodate reasonably foreseeable development under the HEU. In the event that roadway upgrades are required to serve specific future development, such upgrades would likely be minor (e.g., lane reconfiguration or restriping) and are not anticipated to include the construction of new roads. Although new residential development under the HEU may require minor utility upgrades or expansion (e.g., water line connections, site drainage design) on a project-by-project basis, such upgrades would be intended to accommodate the growth planned under the HEU within the City and would not induce growth outside of the city. As discussed in Section 4.16, *Utilities and Service Systems*, such upgrades would likely occur within existing utility easements and would not result in new areas of disturbance. Furthermore, EBMUD's Municipal Wastewater Treatment Plant (MWWTP) serving the City has adequate capacity to treat project-generated sewage, and sufficient water supplies are available to serve reasonably foreseeable development under the HEU; therefore, the project would not necessitate construction of a new wastewater treatment facility or a new potable water facility. Generally, the HEU is specifically intended to concentrate new housing development in areas that are already served by infrastructure in order to ensure that infrastructure is utilized efficiently and in a manner that reduces the environmental impacts of development.

Concentrating development in the urbanized areas near transportation corridors and Priority Development Areas would generally avoid impacts to sensitive environmental conditions, such as agricultural, biological, and mineral resources, and minimize impacts since new development built to current standards would generally improve some existing conditions, such storm water runoff, surface water quality, and reduce the potential for substantial seismic damage. The HEU would not result in unplanned growth, but rather would upzone sites in R-1, R-1A, R-2, R-2A, and MU-R districts as well as increase housing density in the Southside to ensure that projected growth is accommodated. The HEU is aimed to satisfy the anticipated population growth in the region in an efficient manner consistent with State, regional, and City policies. Therefore, the HEU would efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality.

5.3 Significant and Irreversible Environmental Changes

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Specifically, Section 15126.2(c) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irreversible commitments of resources should be evaluated to assure that such current consumption is justified.

Construction activities related to reasonably foreseeable development under the Housing Element Update would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobile and construction equipment, and energy used in manufacturing construction materials. However, as discussed in Section 4.5, *Energy*, use of such resources not be unusual as compared to common construction projects and would not substantially affect the availability of such resources.

Resources that would be consumed as a result of operation of reasonably foreseeable development under the proposed HEU include water. However, as discussed in Section 4.16, *Utilities and Service Systems*, the amount and rate of water consumption would not result in significant environmental impacts related to the unnecessary, inefficient, or wasteful use of resources.

The proposed project would also irreversibly increase local demand for non-renewable energy resources such as petroleum products and natural gas. However, increasingly efficient building design would offset this demand to some degree by reducing energy demands. As described in Section 4.5, *Energy*, development facilitated by the project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated residential buildings, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. In addition, new construction would be required to be all electric pursuant to the requirements of BMC Section 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. Consequently, development facilitated by the project would not use unusual amounts of energy or construction

materials and impacts related to consumption of non-renewable and renewable resources would be less than significant. Consumption of these resources would occur with any development in the region and is not unique to the proposed project.

The proposed HEU demonstrates that the city can accommodate the RHNA for Berkeley without rezoning and also includes implementation programs that would facilitate infill residential development on vacant, undeveloped, and underdeveloped sites in the City of Berkeley as well as locations where such development is encouraged by adopted plans due to their proximity to transit and transportation corridors. Construction and operation of the development facilitated by the project would involve an irreversible commitment of construction materials and non-renewable energy resources. Development would involve the use of buildings and associated infrastructure and landscaping. Consumption of these resources would occur with any development in the region and are not unique to the proposed project. While consumption of natural resources in the City would increase with implementation of the Housing Element Update due to development and associated population increases, it is also likely that in response to greenhouse gas reduction mandates, new technologies or systems will emerge, or will become more cost-effective or user-friendly, that will further reduce the City's reliance upon nonrenewable natural resources. Therefore, the Housing Element Update would not result in the wasteful or inefficient use of natural resources.

6 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives (stated in Section 2, *Project Description,* of this EIR) but would avoid or substantially lessen the significant adverse impacts.

As discussed in Section 2, *Project Description*, the objectives for the proposed project are as follows:

1. Adopt policies and programs that meet the City's RHNA with the required buffer, provide additional housing opportunities consistent with other City priorities, remove governmental constraints to the maintenance, improvement and development of housing, and ensure ongoing compliance with State Housing Element law and the No Net Loss provisions of State law through the eight-year cycle.
2. Adopt policies and programs to encourage the development of affordable housing at a range of income levels consistent with RHNA, including at least 2,450 units for Very Low-Income households, at least 1,400 units for Low Income households, and at least 1,400 units for Moderate Income households.
3. Encourage the development of housing with access to transit, jobs, services, and community benefits in a manner that distributes affordable and special needs housing in high resource neighborhoods and affirmatively furthers fair housing.
4. Identify housing policies and programs that will conserve and rehabilitate existing units, provide services to increase housing opportunities for all residents of Berkeley, and increase the energy efficiency of both current and future housing units.

Included in this analysis are three alternatives, including the CEQA-required "no project" alternative, that involve changes to the project that may reduce the project-related environmental impacts as identified in this EIR. Alternatives have been developed to provide a reasonable range of feasible options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed project.

The following alternatives are evaluated in this EIR:

- Alternative 1: No Project
- Alternative 2: No Rezoning in Hillside Overlay
- Alternative 3: No Middle Housing Rezoning

6.1 Alternative 1: No Project Alternative

6.1.1 Description

The "No Project" Alternative involves continued implementation of the existing 2015-2023 Housing Element as well as the City's existing plans and policies that would accommodate development in accordance with the existing land use designations. Table 6-1 outlines an estimation of housing units that would be potentially developed under the No Project Alternative. As shown in the table, this alternative assumes development of 12,450 units, or approximately 6,648 fewer units than the assumed development under the proposed HEU of 19,098 units.

Table 6-1 Housing Units under No Project Alternative

Type of Project	Number of Units
Entitled Projects	2,685
Pipeline Projects	2,415
North Berkeley and Ashby BART Station Projects	2,400
Accessory Dwelling Units	800
Additional 50% Anticipated Development[1]	4,150
Total	**12,450**

[1] Accounts for housing units within Area Plans (Adeline Corridor Plan, Downtown Area Plan, Southside Plan)

As stated in Section 2, *Project Description,* the City has determined based on the sites inventory that rezoning is not needed to meet the RHNA. However, recent development activity suggests current zoning alone does not deliver the level of deed-restricted affordable housing and economic diversity that the HEU aims to achieve. Therefore, while the No Project Alternative would partially meet Objective 1 by satisfying RHNA, it would not provide the same buffer as the proposed HEU. Further, the No Project Alternative would potentially not meet objectives 2, 3, and 4 to the same extent as with the policies and programs under the proposed HEU.

6.1.2 Impact Analysis

a. Aesthetics

There would be less overall development in the city under the No Project Alternative than there would be under the proposed HEU. Still, as with development under the proposed HEU, most development would occur in Transit Priority Areas and no significant aesthetic impacts would occur. Since less development would occur, there would be fewer possibilities for development to adversely affect scenic vistas. Impacts to scenic vistas would be less than significant, the same as under the proposed HEU and slightly reduced in comparison. Similar to the proposed project, development under the No Project Alternative would be required to comply with the City's development standards and requirements under the BMC that govern aesthetics, as well as policies within the City's Urban Design and Preservation Element. Overall, aesthetics impacts under the No Project Alternative would be less than significant, the same as under the proposed HEU, and slightly reduced in comparison.

b. Air Quality

The No Project Alternative would involve reduced buildout in the City compared to the proposed HEU, resulting in incrementally fewer vehicle trips and mobile emissions than would the proposed HEU. Nonetheless, development under existing plans and regulations would not conflict with the Bay Area Air Quality Management District's (BAAQMD) 2017 Clean Air Plan to reduce greenhouse gas (GHG) emissions or regional planning efforts to reduce vehicle miles traveled (VMT) and meet air quality standards. Therefore, this alternative would have a less than significant impact related to consistency with air quality plans, the same as under the proposed HEU.

Because of the reduced overall buildout, this alternative could involve less construction activity in the city and less overall emissions of criteria air pollutants during construction. Future discretionary projects in Berkeley, when proposed, would be required to undergo CEQA analysis to the extent they are not otherwise exempt, including an analysis of air quality impacts. Similar to the proposed

HEU, mitigation may be required to ensure compliance with the BAAQMD's current recommended basic control measures and the use of Tier 4 Final engines in construction equipment. The impact from construction emissions would remain less than significant with mitigation incorporated. The assumed reduction in buildout under this alternative would result in fewer vehicle trips and associated mobile emissions relative to the proposed HEU. Therefore, similar to the proposed HEU, operational emissions would not exceed the BAAQMD's significance thresholds. This impact would remain less than significant

Due to the reduction in construction emissions, this alternative also would result in lower overall emissions of toxic air contaminants (TACs) during construction. Future discretionary projects in Berkeley, when proposed, would be required to undergo CEQA analysis to the extent they are not otherwise exempt, including an analysis of air quality impacts. Similar to the proposed HEU, mitigation may be required to ensure TAC emissions do not substantially affect sensitive populations.

Similar to the proposed HEU, this alternative would not include uses that generate substantial odorous emissions. Therefore, the impacts related to odors would remain less than significant.

c. Biological Resources

There would be less overall development in the city under the No Project Alternative than there would be under the proposed HEU. As with development under the proposed HEU, development would occur within the city which is largely urbanized and lacking significant biological resources. Overall, biological resources impacts under the No Project Alternative would be slightly reduced compared to those than those under the proposed HEU and would remain less than significant.

d. Cultural Resources

As described in Section 4.4, *Cultural Resources*, there are various buildings within the city that may qualify as historic structures. Under the No Project Alternative there would be less overall development than under the proposed HEU; however, it is still possible that historic structures could be impacted by this development. Therefore, impacts to historical resources would be slightly reduced compared to the proposed project but would remain significant and unavoidable.

Development under this alternative could disturb unrecorded archaeological resources, human remains, and tribal cultural resources, similar to the proposed HEU. However, with adherence to existing regulations regarding the discovery of human remains and compliance with City of Berkeley standard conditions of approval, these impacts would remain less than significant, the same as under the proposed HEU, and would be slightly reduced.

e. Energy

Under the No Project Alternative, fewer total residential units would be developed, which would result in an incremental reduction in energy usage compared to the proposed project. Fewer residential units would decrease electricity and natural gas consumption compared to the proposed HEU, and fewer residents would decrease consumption of gasoline and diesel fuel compared to proposed HEU. Overall, energy impacts under the No Project Alternative would be reduced compared to those under the proposed HEU and impacts would remain less than significant.

f. Geology and Soils

Although the No Project Alternative would result in a reduced buildout compared to the proposed HEU, development could still potentially be subject to seismically-induced ground shaking and other seismic hazards, including liquefaction, landslides, unstable soils, soil erosion, and expansive soils. However, development under the No Project Alternative would be required to comply with policies and requirements within the California Building Code, the BMC, Berkeley General Plan, and the NPDES permit. Impacts would remain less than significant.

While the No Project Alternative would result in less development than the proposed HEU, ground disturbing construction activities in geologic units assigned a high or undetermined paleontological sensitivity could have the potential to significantly impact paleontological resources, similar to the proposed HEU. Therefore, mitigation measures may still be required for discretionary projects to reduce impacts to a less than significant level. However, it is likely that due to the reduced development under this alternative that fewer unidentified paleontological resources would be impacted than under the proposed HEU, making the potential impact less severe than the proposed HEU.

g. Greenhouse Gas Emissions

Under the No Project Alternative, fewer total residential units would be developed, which would result in a smaller anticipated population increase and less construction-related and operational emissions in comparison to buildout under the proposed HEU. This alternative would result in lower GHG emissions than the proposed HEU as it would result in less development. However, this alternative would also not increase the number of residential units within Priority Development Areas (such as in the Southside) and along transit corridors to the same extent as under the proposed HEU, and therefore would not reduce driving distances or encourage the use of transit as much as development under the proposed HEU. Nonetheless, this alternative would not conflict with plans or policies to reduce GHG emissions impacts and therefore those impacts would be less than significant, the same as under the proposed HEU.

h. Hazards and Hazardous Materials

The No Project Alternative would result in less development than the proposed HEU; however, the development allowed under this alternative could still occur within 0.25 mile of a school and could result in the release of hazardous materials. Just as with the proposed HEU, compliance with regional and federal regulations and compliance with policies within the Berkeley General Plan Safety Element and Environmental Management Element, as well as the Hazardous Materials Business Plan and the Local Hazard Mitigation Plan laid out by Berkeley and Alameda County would minimize the risk of releases and exposure to these materials. Impacts would be slightly reduced and would remain less than significant.

As discussed in Section 4.8, *Hazards and Hazardous Materials,* there are multiple locations within Berkeley that are designated as hazardous materials sites. While the No Project Alternative would result in less development overall, it could still occur on these sites. Future development would be subject to the City's Standard Conditions of Approval and the City's Toxics Management Division would evaluate projects to determine if Phase I/Phase II Environmental Site Assessments are required to characterize potential contamination and develop a soil and groundwater management plan to address hazards during construction and operation. Therefore, impacts would be slightly

reduced compared to the proposed HEU since there would be reduced development under this Alternative and impacts would remain less than significant.

i. Hydrology and Water Quality

There would be less overall development in the city under the No Project Alternative than there would be under the proposed HEU, resulting in less construction activities that could release materials and degrade water quality and less discharge to storm drains that could contaminate and affect downstream waters. Similar to the proposed HEU, development under the No Project Alternative would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge and would not substantially alter the drainage pattern on sites and increase surface runoff. Development would be required to comply with the NPDES Construction General Permit, NPDES MS4 General Permit, Provision C.3 of the Municipal Regional Stormwater Permit, the BMC, and the City's General Plan policies, which would reduce impacts to a less than significant level. Impacts under this alternative would be less than those of the proposed HEU due to reduced development and would remain less than significant.

j. Land Use and Planning

The No Project Alternative would involve continuing a pattern of development consistent with existing land use controls and area plans. The No Project Alternative would not physically divide an established community and would not conflict with Plan Bay Area 2050, the Berkeley General Plan, or the BMC. Impacts would be less than significant and the same as those of the proposed HEU.

k. Noise

The No Project Alternative would result in less development than the proposed HEU; however, this alternative would still generate construction and operational noise. Although development would be required to comply with daytime construction hours as set forth in the BMC and implement the City's Standard Conditions of Approval for construction noise, the type of construction equipment, proximity of sensitive receptors to the site, and overall duration of construction are still unknown. Therefore, as with the proposed HEU, construction noise impacts would remain significant and unavoidable, although slightly reduced in comparison with the proposed HEU.

Although operational noise associated with the No Project Alternative would still be regulated by respective standards in the BMC, such noise sources would occur to a lesser degree than under the proposed HEU. Nonetheless, on-site operational noise would remain typical of the urban environment and off-site traffic noise associated with development would not result in a perceptible increase in noise levels. Furthermore, while the No Project Alternative would subject less development to overhead flight patterns from airport, all development would be required to comply with State and local standards to reduce interior noise to acceptable levels. Impacts would remain less than significant.

Development under the No Project Alternative could generate vibration exceeding thresholds for building damage, particularly during construction, similar to the proposed HEU. Future discretionary projects in Berkeley, when proposed, would be required to undergo CEQA analysis to the extent they are not otherwise exempt, including an analysis of noise and vibration impacts. Similar to the proposed HEU, future discretionary projects in Berkeley, when proposed, would be required to implement the City's Standard Condition of Approval to control vibration such that vibration levels would not exceed the vibration criteria for building damage. Furthermore, as with the proposed HEU, it is not anticipated that operation of development under the No Project Alternative would

involve activities that would result in substantial vibration levels, such as use of heavy equipment and impacts would remain less than significant.

Overall noise impacts under the No Project Alternative would be slightly reduced compared to the proposed HEU.

l. Population and Housing

The No Project Alternative would result in a smaller number of residential units and therefore would result in a smaller population increase than the proposed HEU. Assuming 2.5 persons per unit, the reduction of 6,648 fewer units than under the proposed HEU would reduce population growth by 16,620 people compared to the proposed HEU. Overall population growth would be approximately 30,823, bringing the city's population to 155,386. Similar to the proposed HEU, this would be consistent with State requirements for the RHNA and would be within the growth forecasts for Northwest Alameda County in Plan Bay Area 2050. The No Project Alternative would not involve the extension of roads or other infrastructure that could indirectly lead to population growth. Impacts would be less than significant and generally the same as under the proposed HEU.

m. Public Services and Recreation

The No Project Alternative would result in fewer residential units than the proposed HEU. Therefore, the increase in demand on public services, including police protection, fire protection, schools, and parks would be less than that of the proposed HEU. As with the proposed project, services would be adequate to service future demand; impacts would be slightly reduced compared to the proposed HEU and would remain less than significant.

n. Transportation

VMT under the No Project Alternative would be higher than under the proposed HEU, since it would not increase the number of residential units within Priority Development Areas (such as in the Southside) and along transit corridors to the same extent as under the proposed HEU, and therefore would not reduce driving distances or encourage the use of transit as much as development under the proposed HEU. Therefore, impacts to transportation would be greater than those of the proposed HEU. Nonetheless, it is anticipated that impacts would remain less than significant.

o. Tribal Cultural Resources

Under the No Project Alternative, fewer residential units would be constructed, which would result in a reduced likelihood of impacting tribal cultural resources. Future development would be required to comply with requirements of AB 52 and SB 18, as well as City regulations governing protection of tribal cultural resources and archaeological resources. As a result of consultation under required state laws, mitigation may be required if tribal cultural resources are present. Therefore, impacts to tribal cultural resources would be slightly reduced compared to those of the proposed HEU.

p. Utilities and Service Systems

Under the No Project Alternative, fewer residential units would be constructed and therefore the demand on utilities would be reduced compared to the proposed HEU. This includes a reduction in water supply requirements, wastewater generation, electricity use, solid waste generation, and

telecommunications. Impacts would be less than significant and reduced compared to those of the proposed HEU.

q. Wildfire

The No Project Alternative may result in fewer residential units being constructed in the City's Very High Fire Hazard Severity Zones (VHFHSZ). Therefore, impacts related to wildfire could be reduced when compared to the HEU. Nonetheless, with SB 9 (see explanation below under Alternative 2), development could still occur in the hillside areas such that the unavoidably significant wildfire impacts would not be avoided.

6.2 Alternative 2: No Rezoning in the Hillside Overlay

6.2.1 Description

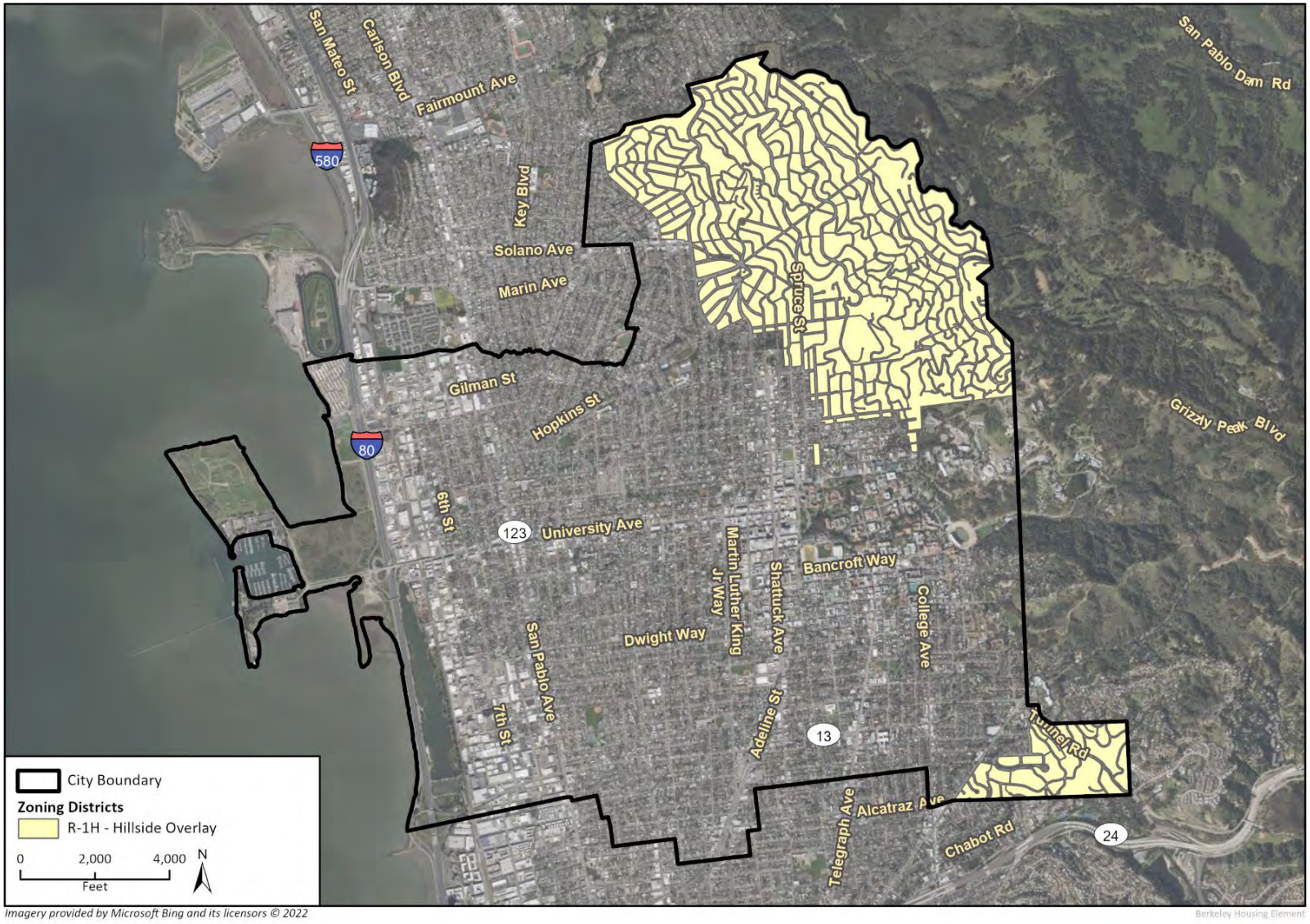
One of the implementation programs of the proposed HEU is to increase density in the R-1 District. The program would specifically allow increases in the total number of units allowed on a lot, increase the total achievable floor area on a lot, and encourage a mix of unit sizes and densities, adjusting the level of discretion to allow approval of such projects with a Zoning Certificate. Under Alternative 2, this program would not apply to portions of the R-1 district within the Hillside Overlay (R-1H district), which is shown in Figure 6-1.

Without the rezoning in the R-1H district, approximately 150 units in the hillside area would not be built compared to buildout under the proposed HEU. However, if the R-1H district remains single family residential, SB 9 would apply there. SB 9, signed into law in 2021 and codified as Government Code sections 65852.21, 66411.7, and 66452.6, requires agencies to ministerially approve to up to two residential units on a parcel within a single-family residential zone if the development meets specific objective criteria. SB 9 also allows splitting one lot into two lots within a single-family residential zone and permitting up to two units on each parcel (four total dwelling units on what was formerly a single-unit lot) if the development complies with specific objective criteria. Based on SB 9 trends, it is anticipated that overall this alternative would not decrease development in the hillside overlay zone compared to buildout assumed under the proposed HEU. This alternative would meet the project objectives.

6.2.2 Impact Analysis

Because this alternative would involve the same buildout assumptions as under the proposed HEU, overall impacts with respect to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems would be the same under this alternative. The same mitigation measures would be required and the significant and unavoidable impacts related to historical resources and construction noise would not be avoided. With respect to wildfire, this alternative would not involve rezoning to increase allowed density in the VHFHSZ. Nonetheless, because development could still occur in the hillside areas in the VHFHSZ, the unavoidably significant wildfire impacts would not be avoided.

Figure 6-1 Hillside Overlay District



6.3 Alternative 3: No Middle Housing Rezoning

6.3.1 Description

As discussed in Section 2, *Project Description*, the Middle Housing Rezoning program of the proposed HEU is intended to increase density in the R-1, R-1A, R-2, R-2A and MU-R districts. These districts are shown on Figure 2-5 in Section 2. The program would include Zoning Ordinance amendments that would allow increases in the total number of units allowed on a lot, increase the total achievable floor area on a lot, encourage a mix of unit sizes and densities, and adjust the level of discretion to approve such projects with a Zoning Certificate. For the purposes of this EIR, the Middle Housing Rezoning program was projected to result in 1,745 units over the Housing Element period.

Under Alternative 3, the Middle Housing Rezoning program would not be included in the Housing Element Update. Without Middle Housing Rezoning as part of the proposed project, approximately 975 units fewer units would be constructed compared to buildout under the proposed HEU, which constitute the effect of not rezoning the R-1A, R-2, R-2A and MU-R districts. As noted above in Alternative 2, the number of additional units in the R-1 district remains the same (770), whether as a result of rezoning or through utilization of SB 9 in a case where no rezoning would occur. Accordingly, the 770 units attributed to the R-1 district are not removed in the analysis of this Alternative. This alternative would meet all of the project objectives, but to a lesser degree than the proposed project, as it includes fewer units.

6.3.2 Impact Analysis

a. Aesthetics

There would be less overall development in the city under Alternative 3 than there would be under the proposed HEU. Still, as with development under the proposed HEU, most development would occur in Transit Priority Areas and no significant aesthetic impacts would occur. Since less development would occur, there would be fewer possibilities for development to adversely affect scenic vistas. Impacts to scenic vistas would be less than significant, the same as under the proposed HEU and slightly reduced in comparison. Similar to the proposed project, development under the Alternative 3 would be required to comply with the City's development standards and requirements under the BMC that govern aesthetics, as well as policies within the City's Urban Design and Preservation Element. Overall, aesthetics impacts under the Alternative 3 would be less than significant, the same as under the proposed HEU, and slightly reduced in comparison.

b. Air Quality

Alternative 3 would involve reduced buildout in the City compared to the proposed HEU, resulting in incrementally fewer vehicle trips and mobile emissions than would the proposed HEU. Nonetheless, development under existing plans and regulations would not conflict with the BAAQMD 2017 Clean Air Plan to reduce GHG emissions or regional planning efforts to reduce VMT and meet air quality standards. Therefore, this alternative would have a less than significant impact related to consistency with air quality plans, the same as under the proposed HEU.

Because of the reduced overall buildout, this alternative could involve less construction activity in the city and less overall emissions of criteria air pollutants during construction. Nonetheless, future development under this alternative would be required to adhere to the City's standard condition of approval to reduce construction emissions and comply with BAAQMD's construction BMPs in accordance with Mitigation Measure AQ-1. Impacts associated with construction would be slightly increased compared to those under the proposed project but would remain less than significant with mitigation incorporated.

The assumed reduction in buildout under this alternative would result in fewer vehicle trips and associated mobile emissions relative to the proposed HEU. Therefore, similar to the proposed HEU, operational emissions would not exceed the BAAQMD's significance thresholds. This impact would remain less than significant.

Due to the reduction in construction emissions, this alternative also would result in lower overall emissions of toxic air contaminants (TACs) during construction. Nonetheless, construction of individual projects lasting longer than two months or placed within 1,000 feet of sensitive receptors could potentially expose nearby sensitive receptors to substantial pollutant concentrations. Therefore, construction impacts from TAC emissions would be potentially significant and Mitigation Measure AQ-2 would be required to reduce construction related impacts to a less than significant level. Like the proposed HEU, impacts would be less than significant with mitigation. Similar to the proposed HEU, this alternative would not include uses that generate substantial odorous emissions. Therefore, the impacts related to odors would remain less than significant.

c. Biological Resources

There would be less overall development in the city under Alternative 3 than there would be under the proposed HEU. As with development under the proposed HEU, development would occur within the city which is largely urbanized and lacking significant biological resources. Overall, biological resources impacts under Alternative 3 would be slightly reduced compared to those than those under the proposed HEU and would remain less than significant.

d. Cultural Resources

As described in Section 4.4, *Cultural Resources*, there are various buildings within the city that may qualify as historic structures. Under Alternative 3, there would be less overall development than under the proposed HEU; however, it is still possible that historic structures could be impacted by this development. Therefore, impacts to historical resources would be slightly reduced compared to the proposed project and mitigation measures CR-1 and CR-2 to reduce impacts would be required. Nonetheless, impacts would remain significant and unavoidable.

Development under this alternative could disturb unrecorded archaeological resources, human remains, and tribal cultural resources, similar to the proposed HEU. However, with adherence to existing regulations regarding the discovery of human remains and compliance with City of Berkeley standard conditions of approval, these impacts would remain less than significant, the same as under the proposed HEU, and would be slightly reduced.

e. Energy

Under Alternative 3, fewer total residential units would be developed, which would result in an incremental reduction in energy usage compared to the proposed project. Fewer residential units would decrease electricity and natural gas consumption compared to the proposed HEU, and fewer

residents would decrease consumption of gasoline and diesel fuel compared to proposed HEU. Overall, energy impacts under Alternative 3 would be reduced compared to those under the proposed HEU and impacts would remain less than significant.

f. Geology and Soils

Although Alternative 3 would result in a reduced buildout compared to the proposed HEU, development could still potentially be subject to seismically-induced ground shaking and other seismic hazards, including liquefaction, landslides, unstable soils, soil erosion, and expansive soils. However, development under Alternative 3 would be required to comply with policies and requirements within the California Building Code, the BMC, Berkeley General Plan, and the NPDES permit. Impacts would remain less than significant.

While the Alternative 3 would result in less development than the proposed HEU, ground disturbing construction activities in geologic units assigned a high or undetermined paleontological sensitivity could have the potential to significantly impact paleontological resources, similar to the proposed HEU. Therefore, Mitigation Measure GEO-1 would still be required to reduce impacts to a less than significant level. However, it is likely that due to the reduced development under this alternative that fewer unidentified paleontological resources would be impacted than under the proposed HEU, making the potential impact less severe than the proposed HEU.

g. Greenhouse Gas Emissions

Under Alternative 3, fewer total residential units would be developed, which would result in a smaller anticipated population increase and less construction-related and operational emissions in comparison to buildout under the proposed HEU. This alternative would result in lower GHG emissions than the proposed HEU as it would result in less development. However, this alternative would also not increase the number of residential units in Priority Development Areas or along transit corridors to the same extent as under the proposed HEU, and therefore would not reduce driving distances or encourage the use of transit as much as development under the proposed HEU. Nonetheless, this alternative would not conflict with plans or policies to reduce GHG emissions impacts and therefore those impacts would be less than significant, the same as under the proposed HEU.

h. Hazards and Hazardous Materials

Alternative 3 would result in less development than the proposed HEU; however, the development allowed under this alternative could still occur within 0.25 mile of a school and could result in the release of hazardous materials. Just as with the proposed HEU, compliance with regional and federal regulations and compliance with policies within the Berkeley General Plan Safety Element and Environmental Management Element, as well as the Hazardous Materials Business Plan and the Local Hazard Mitigation Plan laid out by Berkeley and Alameda County would minimize the risk of releases and exposure to these materials. Impacts would be slightly reduced and would remain less than significant.

As discussed in Section 4.8, *Hazards and Hazardous Materials,* there are multiple locations within Berkeley that are designated as hazardous materials sites. While Alternative 3 would result in less development in certain areas, it could still occur on these sites. Future development would be subject to the City's Standard Conditions of Approval and the City's Toxics Management Division would evaluate projects to determine if Phase I/Phase II Environmental Site Assessments are required to characterize potential contamination and develop a soil and groundwater management

plan to address hazards during construction and operation. Therefore, impacts would be slightly reduced compared to the proposed HEU since there would be reduced development under this Alternative and impacts would remain less than significant.

i. Hydrology and Water Quality

There would be less overall development in the city under Alternative 3 than there would be under the proposed HEU, resulting in less construction activities that could release materials and degrade water quality and less discharge to storm drains that could contaminate and affect downstream waters. Similar to the proposed HEU, development under Alternative 3 would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge and would not substantially alter the drainage pattern on sites and increase surface runoff. Development would be required to comply with the NPDES Construction General Permit, NPDES MS4 General Permit, Provision C.3 of the Municipal Regional Stormwater Permit, the BMC, and the City's General Plan policies, which would reduce impacts to a less than significant level. Impacts under this alternative would be less than those of the proposed HEU due to reduced development and would remain less than significant.

j. Land Use and Planning

Alternative 3 would involve continuing a pattern of development consistent with existing land use controls and area plans. Alternative 3 would not physically divide an established community and would not conflict with Plan Bay Area 2050, the Berkeley General Plan, or the BMC. Impacts would be less than significant and the same as those of the proposed HEU.

k. Noise

Alternative 3 would result in less development than the proposed HEU; however, this alternative would still generate construction and operational noise. Although development would be required to comply with daytime construction hours as set forth in the BMC and implement the City's Standard Conditions of Approval for construction noise, the type of construction equipment, proximity of sensitive receptors to the site, and overall duration of construction are still unknown. Therefore, as with the proposed HEU, construction noise impacts would remain significant and unavoidable, although slightly reduced in comparison with the proposed HEU.

Although operational noise associated with Alternative 3 would still be regulated by respective standards in the BMC, such noise sources would occur to a lesser degree than under the proposed HEU. Nonetheless, on-site operational noise would remain typical of the urban environment and off-site traffic noise associated with development would not result in a perceptible increase in noise levels. Furthermore, while Alternative 3 would subject less development to overhead flight patterns from airport, all development would be required to comply with State and local standards to reduce interior noise to acceptable levels. Impacts would remain less than significant.

Development under Alternative 3 could generate vibration exceeding thresholds for building damage, particularly during construction, similar to the proposed HEU. Future discretionary projects in Berkeley, when proposed, would be required to implement the City's Standard Condition of Approval to control vibration. With implementation of Standard Conditions of Approval, significant vibration impacts would not occur. Furthermore, as with the proposed HEU, it is not anticipated that operation of development under Alternative 3 would involve activities that would result in substantial vibration levels, such as use of heavy equipment and impacts would remain less than significant.

l. Population and Housing

Alternative 3 would result approximately 975 fewer residential units and therefore would result in a smaller population increase than the proposed HEU. Assuming 2.5 persons per unit, the reduction of 975 fewer units than under the proposed HEU would reduce population growth by 2,438 people compared to the proposed HEU. Overall population growth would be approximately 45,005 bringing the city's population to 169,568. Similar to the proposed HEU, this would be consistent with State requirements for the RHNA and would be within the growth forecasts for Northwest Alameda County in Plan Bay Area 2050. Alternative 3 would not involve the extension of roads or other infrastructure that could indirectly lead to population growth. Impacts would be less than significant and would remain less than significant.

m. Public Services and Recreation

Alternative 3 would result in fewer residential units than the proposed HEU. Therefore, the increase in demand on public services, including police protection, fire protection, schools, and parks would be less than that of the proposed HEU. As with the proposed project, services would be adequate to service future demand; impacts would be slightly reduced compared to the proposed HEU and would remain less than significant.

n. Transportation

VMT per capita under Alternative 3 would be higher than under the proposed HEU, since it would not increase the number of residential units and along the San Pablo Avenue transit corridor to the same extent as under the proposed HEU, and therefore would not reduce driving distances or encourage the use of transit as much as development under the proposed HEU. Therefore, impacts to transportation would be greater than those of the proposed HEU. Nonetheless, it is anticipated that impacts would remain less than significant.

o. Tribal Cultural Resources

Under Alternative 3, fewer residential units would be constructed, which would result in a reduced likelihood of impacting tribal cultural resources. Future development would be required to comply with requirements of AB 52 and SB 18, as well as City regulations governing protection of tribal cultural resources and archaeological resources, and Mitigation Measure TCR-1. Therefore, impacts to tribal cultural resources would be slightly reduced compared to those of the proposed HEU, and impacts would remain less than significant with mitigation incorporated.

p. Utilities and Service Systems

Under Alternative 3, fewer residential units would be constructed and therefore the demand on utilities would be reduced compared to the proposed HEU. This includes a reduction in water supply requirements, wastewater generation, electricity use, solid waste generation, and telecommunications. Impacts would be less than significant and reduced compared to those of the proposed HEU.

q. Wildfire

Alternative 3 may result in fewer residential units being constructed in the City's Very High Fire Hazard Severity Zones (VHFHSZ). Therefore, impacts related to wildfire would be reduced when compared to the HEU. Nonetheless, with SB 9 (see explanation below under Alternative 2),

development could still occur in the hillside areas such that the unavoidably significant wildfire impacts would not be avoided.

6.4 Environmentally Superior Alternative

Table 6-2 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed HEU for each of the issue areas studied.

Alternative 1 (*No Project)* assumes continued implementation of the existing 2015-2023 Housing Element. Alternative 1 also assumes that the City's existing plan and policies would continue to accommodate development in accordance with existing land use designations. This alternative would result in less impacts to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and recreation, tribal cultural resources, utilities and service systems, and wildfire due to the decrease in residential units developed. However, impacts relating to transportation would be greater than under the Project as this alternative would not prioritize development in Priority Development Areas or near transit corridors, and therefore would not decrease VMT since fewer residents would be in proximity to transit, jobs, and services. In addition, this alternative would not eliminate the unavoidably significant impacts related to historical resources, construction noise, and wildfire. Furthermore, Alternative 1 would not fulfill Project Objective 1 because the continued implementation of the existing 2015-2023 Housing Element would result in the development of fewer residential units and therefore, would not accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2031 to the same extent as under the proposed HEU. In addition, Alternative 1 would not fulfill Project Objectives 2 and 3 because continued implementation of the existing 2015-2023 Housing Element would not address the need for additional affordable housing options throughout Berkeley in a manner that affirmatively furthers fair housing.

Alternative 2 (*No Rezone in the Hillside Overlay)* would include the same development as the proposed HEU; therefore, impacts would be equal to that of the proposed HEU. Alternative 2 would continue to fulfill Project Objectives as it would be able to accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2031; increase affordable housing options throughout the city; and place housing in proximity to transit, jobs, services, and community benefits.

Alternative 3, No Middle Housing Rezoning, includes approximately 975 fewer units than the buildout included in the analysis of the proposed project. This alternative would result in less impacts to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and recreation, tribal cultural resources, utilities and service systems and wildfire due to the decrease in residential units developed. However, impacts relating to transportation would be greater than under the proposed HEU as this alternative would not prioritize development near in Transit Priority Areas or major transit corridors, and therefore would not decrease VMT since fewer residents would be in proximity to transit, jobs, and services. Also, as the alternative makes no changes to the proposed project within the City's Very High Fire Hazard Severity Zones (VHFHSZ), wildfire impacts would be the same as under the proposed project. In addition, this alternative would not eliminate the unavoidably significant impacts related to historical resources, construction noise, and wildfire.

Nevertheless, as Alternative 3 slightly reduces the severity of impacts resulting from the proposed project, it is the environmentally superior alternative.

Table 6-2 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project	Alternative 2: No Rezone in Hillside Overlay	Alternative 3 No Middle Housing Rezone
Aesthetics	Less than significant	+	=	+
Air Quality	Less than significant with mitigation incorporated	+	=	+
Biological Resources	Less than significant	+	=	+
Cultural Resources	Significant and unavoidable	+	=	=
Energy	Less than significant	+	=	+
Geology and Soils	Less than significant with mitigation incorporated	+	=	+
Greenhouse Gas Emissions	Less than significant	+	=	+
Hazards and Hazardous Materials	Less than significant	+	=	+
Hydrology and Water Quality	Less than significant	+	=	+
Land Use and Planning	Less than significant	=	=	=
Noise	Significant and unavoidable	+	=	=
Population and Housing	Less than significant	+	=	+
Public Services and Recreation	Less than significant	+	=	+
Transportation	Less than significant	-	=	-
Tribal Cultural Resources	Less than significant with mitigation incorporated	+	=	+
Utilities and Service Systems	Less than significant	+	=	+
Wildfire	Significant and unavoidable	=	=	=

+ Superior to the proposed Project (reduced level of impact)

- Inferior to the proposed Project (increased level of impact)

= Similar level of impact to the proposed Project

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Section 5, Other CEQA Related Discussions

None.

7.2 List of Preparers

This EIR was prepared by the City of Berkeley, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

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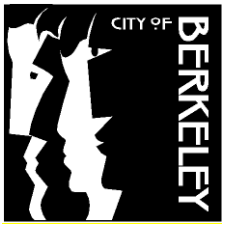
Appendix A

Notice of Preparation (NOP) and NOP Comments



Planning and Development Department
Land Use Planning Division

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED CITY OF BERKELEY HOUSING ELEMENT UPDATE

Notice is hereby given that the City of Berkeley is preparing a Draft Environmental Impact Report (EIR) for the City's Housing Element Update ("the project") and is requesting comments on the scope and content of the Draft EIR. The EIR is being prepared by the City of Berkeley, which is the Lead Agency for the project, in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and local CEQA guidelines.

In accordance with CEQA Guidelines section 15082, this Notice of Preparation (NOP) is being sent to the California State Clearinghouse, Alameda County Clerk, responsible agencies, trustee agencies, adjacent cities, and members of the public including individuals and organizations in order to solicit comments on the scope and content of the analysis in the EIR.

WRITTEN COMMENTS: Responses to this NOP and any questions or comments should be directed in writing to: *Grace Wu, Senior Planner, Land Use Planning Division, 1947 Center Street, 2nd Floor, Berkeley, CA 94704; or* GWu@cityofberkeley.info. Comments on the NOP must be received **on or before 5pm on Monday, February 21, 2022.** In addition, comments may be provided at the EIR Scoping Meeting (see details below). Comments should focus on significant environmental issues, reasonable alternatives, and mitigation measures.

EIR PUBLIC SCOPING MEETING: The City of Berkeley will conduct a public scoping session on **Wednesday, February 9, 2022** as part of a scheduled Planning Commission meeting to receive comments on the scope and contents of the EIR. The meeting will start at **7:00 PM** and be held via video and teleconference. Interested parties should check the Planning Commission website for information on how to join the meeting and to confirm the meeting date, time, and agenda: https://www.cityofberkeley.info/Clerk/Commissions/Commissions__Planning_Commission_Homepage.aspx The agenda will be posted by 5pm on Friday, February 4, 2022.

PROJECT TITLE: City of Berkeley 2023-2031 Housing Element Update

PROJECT LOCATION: The project, which is an update to the Housing Element of the General Plan, is applicable to the entire City of Berkeley (citywide). The City of Berkeley is located in the East Bay of the San Francisco Bay Area in northern Alameda County. Berkeley is bordered by the cities of Oakland and Emeryville to the south and the city of Albany and the unincorporated community of Kensington to the north, the Berkeley Hills (Contra Costa County) to the east, and the San Francisco Bay to the west. The city

encompasses approximately 17.2 square miles (approximately 7.2 of which is underwater in the San Francisco Bay) with a population of approximately 122,580 residents and 51,500 housing units. The city contains a combination of residential, commercial, and industrial development.

Interstate 580/880, San Pablo Avenue (SR-123), Sacramento Street, Martin Luther King Jr. Way, and Shattuck Avenue provide the major north-south routes through the city, as does Bay Area Rapid Transit (BART). Major east-west routes include Marin Avenue, University Avenue, and Ashby Avenue.

The regional setting and existing city limits are depicted on Figure 1.

PROJECT SPONSOR: City of Berkeley

PROPOSED PROJECT DESCRIPTION and BACKGROUND: The proposed project consists of a comprehensive update to the Housing Element and related edits to the City's General Plan Land Use Element and Berkeley Municipal Code.

The Housing Element is one of the seven state-mandated elements of the local General Plan and is required to be updated every eight years. The City of Berkeley is preparing the 2023-2031 Housing Element Update to comply with the legal mandate that requires each local government to identify adequate sites for housing to meet the existing and projected housing needs for varying income-levels in the community. It is intended to provide the city with a comprehensive strategy for promoting the production of safe, decent and affordable housing, and affirmatively furthering fair housing during the housing cycle. The Housing Element Update establishes goals, policies, and actions to address the existing and projected housing needs in Berkeley.

The goals, policies, and actions in the Housing Element are required to meet Berkeley's Regional Housing Needs Assessment (RHNA) allocation. Berkeley's latest RHNA allocation calls for 8,934 new housing units, including 3,854 new units for residents in the low- and very low-income categories. The City must demonstrate to the State Department of Housing and Community Development (HCD) that the City's Housing Element has adequate land capacity and implementing policies to accommodate its RHNA allocation. In addition, HCD recommends that cities identify a "buffer" of 15% to 30% above RHNA for lower- and moderate-income categories. Thus, overall, the City's zoning and other land use regulations must accommodate between approximately 9,750 and 10,500 new units.

To identify the housing sites to be included in the Housing Element, the City will identify suitable and available housing sites and their capacity, screen for vacant and underutilized parcels, evaluate and analyze sites, and calculate potential buildout.

In conjunction with the Housing Element Update, the City anticipates amendments to the General Plan including revising the Land Use Element to maintain consistency with the updated Housing Element. The Land Use Element revisions are to ensure consistency among all General Plan Elements upon implementation of the updated Housing Element.

More information about the proposed project can be found on the City's website:

https://www.cityofberkeley.info/housingelement/

PROBABLE ENVIRONMENTAL EFFECTS: Approval of the proposed Housing Element Update would not approve any physical development (e.g., construction of housing or infrastructure). However, the EIR will assume that such actions are reasonably foreseeable future outcomes of the Housing Element Update. As such, the EIR will evaluate the potential physical environmental impacts that could result from future actions for implementing the policies proposed under the Housing Element Update at a programmatic level, in accordance with CEQA Guidelines Section 15168.

The topical areas that will be addressed in the EIR are: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Land Use and Planning, Population and Housing, Public Services and Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

The Draft EIR will also examine a reasonable range of alternatives to the proposed project, including the CEQA-mandated No Project Alternative and other potential alternatives that may be capable of reducing or avoiding potential environmental effects while meeting most of the basic objectives of the project. In addition, the EIR will address cumulative impacts, growth inducing impacts, and other issues required by CEQA.

Grace Wu, Senior Planner

Date of Distribution: January 21, 2022

Attachments: Figure 1: City of Berkeley Location Map

Figure 1 City of Berkeley Location Map

Imagery provided by Esri and its licensors © 2021.

City of Berkeley

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EAST BAY
MUNICIPAL UTILITY DISTRICT

February 7, 2022

Grace Wu, Senior Planner
Land Use Planning Division
1947 Center Street, 2nd Floor
Berkeley, CA 94704

Re: Notice of Preparation of a Draft Environmental Impact Report for the Proposed City of Berkeley Housing Element Update, Berkeley

Dear Ms. Wu:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Preparation of a Draft Environmental Impact Report for the Proposed City of Berkeley Housing Element Update, which encompasses the entirety of the City of Berkeley (City). EBMUD has the following comments.

WATER SERVICE

Effective January 1, 2018, water service for new multi-unit structures shall be individually metered or sub-metered in compliance with California State Senate Bill 7 (SB-7). SB-7 encourages conservation of water in multi-family residential, mixed-use multi-family and commercial buildings through metering infrastructure for each dwelling unit, including appropriate water billing safeguards for both tenants and landlords. EBMUD water services shall be conditioned for all development projects within the Housing Element Update that are subject to SB-7 requirements and will be released only after the project sponsor has satisfied all requirements and provided evidence of conformance with SB-7.

Main extensions that may be required to serve any specific developments within the Housing Element Update to provide adequate domestic water supply, fire flows, and system redundancy will be at the project sponsor's expense. Pipeline and fire hydrant relocations and replacements due to modifications of existing streets, and off-site pipeline improvements, also at the project sponsor's expense, may be required depending on EBMUD metering requirements and fire flow requirements set by the local fire department. When the development plans are finalized for individual projects within the Housing Element Update, project sponsors for individual projects should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions of providing water service to the development. Engineering and installation of new and relocated pipelines and services require substantial lead time, which should be provided for in the project sponsor's development schedule.

Project sponsors for individual projects within the Housing Element Update should be aware that EBMUD will not install piping or services in contaminated soil or groundwater

(if groundwater is present at any time during the year at the depth piping is to be installed) that must be handled as a hazardous waste or that may be hazardous to the health and safety of construction and maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping or services in areas where groundwater contaminant concentrations exceed specified limits for discharge to the sanitary sewer system and sewage treatment plants. The project sponsor must submit copies to EBMUD of all known information regarding soil and groundwater quality within or adjacent to the project boundary and a legally sufficient, complete, and specific written remediation plan establishing the methodology, planning and design of all necessary systems for the removal, treatment, and disposal of contaminated soil and groundwater.

EBMUD will not design piping or services until soil and groundwater quality data and remediation plans have been received and reviewed and will not start underground work until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exists, or the information supplied by the project sponsor is insufficient, EBMUD may require the project sponsor to perform sampling and analysis to characterize the soil and groundwater that may be encountered during excavation, or EBMUD may perform such sampling and analysis at the project sponsor's expense. If evidence of contamination is discovered during EBMUD work on the project site, work may be suspended until such contamination is adequately characterized and remediated to EBMUD standards.

WASTEWATER SERVICE

EBMUD's Main Wastewater Treatment Plant (MWWTP) and interceptor system are anticipated to have adequate dry weather capacity to accommodate the proposed wastewater flows for individual projects within the Housing Element Update and to treat such flows provided that the wastewater generated by the project meets the requirements of the EBMUD Wastewater Control Ordinance. However, wet weather flows are a concern. The East Bay regional wastewater collection system experiences exceptionally high peak flows during storms due to excessive infiltration and inflow (I/I) that enters the system through cracks and misconnections in both public and private sewer lines. EBMUD has historically operated three Wet Weather Facilities (WWFs) to provide primary treatment and disinfection for peak wet weather flows that exceed the treatment capacity of the MWWTP. Due to reinterpretation of applicable law, EBMUD's National Pollutant Discharge Elimination System (NPDES) permit now prohibits discharges from EBMUD's WWFs. Additionally, the seven wastewater collection system agencies that discharge to the EBMUD wastewater interceptor system ("Satellite Agencies") hold NPDES permits that prohibit them from causing or contributing to WWF discharges. These NPDES permits have removed the regulatory coverage the East Bay wastewater agencies once relied upon to manage peak wet weather flows.

A federal consent decree, negotiated among EBMUD, the Satellite Agencies, the Environmental Protection Agency (EPA), the State Water Resources Control Board (SWRCB), and the Regional Water Quality Control Board (RWQCB), requires EBMUD

and the Satellite Agencies to eliminate WWF discharges by 2036. To meet this requirement, actions will need to be taken over time to reduce I/I in the system. The consent decree requires EBMUD to continue implementation of its Regional Private Sewer Lateral Ordinance (www.eastbaypsl.com), construct various improvements to its interceptor system, and identify key areas of inflow and rapid infiltration over a 22-year period. Over the same time period, the consent decree requires the Satellite Agencies to perform I/I reduction work including sewer main rehabilitation and elimination of inflow sources. EBMUD and the Satellite Agencies must jointly demonstrate at specified intervals that this work has resulted in a sufficient, pre-determined level of reduction in WWF discharges. If sufficient I/I reductions are not achieved, additional investment into the region's wastewater infrastructure would be required, which may result in significant financial implications for East Bay residents.

To ensure that individual projects within the Housing Element Update contributes to these legally required I/I reductions, the lead agency should require the project sponsors comply with EBMUD's Regional Private Sewer Lateral Ordinance. Additionally, it would be prudent for the lead agency to require the following mitigation measures for individual projects within the Housing Element Update: (1) replace or rehabilitate any existing sanitary sewer collection systems, including sewer lateral lines to ensure that such systems and lines are free from defects or, alternatively, disconnected from the sanitary sewer system, and (2) ensure any new wastewater collection systems, including sewer lateral lines, for the project are constructed to prevent I/I to the maximum extent feasible while meeting all requirements contained in the Regional Private Sewer Lateral Ordinance and applicable municipal codes or Satellite Agency ordinances.

WATER RECYCLING

EBMUD's Policy 9.05 requires that customers use non-potable water, including recycled water, for non-domestic purposes when it is of adequate quality and quantity, available at reasonable cost, not detrimental to public health, and not injurious to plant, fish, and wildlife to offset demand on EBMUD's limited potable water supply. Appropriate recycled water uses include landscape irrigation, commercial and industrial process uses, toilet and urinal flushing in non-residential buildings, and other applications.

EBMUD's current recycled water infrastructure and services do not extend through the City limits, however, the City is located within the designated service boundaries of EBMUD's East Bayshore Recycled Water Project. As part of EBMUD's long term water supply planning, future expansion plans will extend recycled water to various locations within Berkeley and could potentially serve projects within the Housing Element Update. As EBMUD plans and implements its recycled water supply expansion to the City, EBMUD recommends that the City and project sponsors continue to coordinate closely with EBMUD. The project sponsors are required to provide an estimate of expected water demand for potential recycled water uses for each project in the Housing Element Update

to further explore the options and requirements relating to recycled water use. Accordingly, EBMUD will assess and consider the feasibility of providing recycled water to projects within the Housing Element Update for appropriate uses.

WATER CONSERVATION

Individual projects within the Housing Element Update presents an opportunity to incorporate water conservation measures. EBMUD requests that the City include in its conditions of approval a requirement that the project sponsor comply with Assembly Bill 325, "Model Water Efficient Landscape Ordinance," (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). The project sponsors should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense.

If you have any questions concerning this response, please contact Timothy R. McGowan, Senior Civil Engineer, Major Facilities Planning Section at (510) 287-1981.

Sincerely,

David J. Rehnstrom
Manager of Water Distribution Planning

DJR:KTL:grd
sb22_032 City of Berkeley Housing Element Update Response

cc: City of Berkeley
2180 Milvia Street
Berkeley, CA 94704

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

January 26, 2022

Grace Wu
City of Berkeley
1947 Center Street, 2nd Floor
Berkeley, CA 94704

Re: 2022010331, City of Berkeley Housing Element Update Project, Alameda County

Dear Ms. Wu:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

ALAMEDA County Transportation Commission
1111 Broadway, Suite 800, Oakland, CA 94607 • 510.208.7400 • www.AlamedaCTC.org

February 9, 2022

Grace Wu, Senior Planner
City of Berkeley, Land Use Planning Division
1947 Center St, 2nd Floor
Berkeley, CA, 94704

SUBJECT: Response to the Notice of Preparation (NOP) of a Draft Environmental Impact Report for the City of Berkeley Housing Element Update

Dear Grace Wu,

Thank you for the opportunity to comment on the Notice of Preparation (NOP) of the Draft Environmental Impact Report (DEIR) for the City of Berkeley Housing Element Update. The project would include all 17.2 square miles of the City of Berkeley, located in northern Alameda County. The proposed comprehensive Housing Element Update will be based on the City's latest Regional Housing Needs Allocation which requires the City of Berkely's zoning and other land use regulations to accommodate between approximately 9,750 and 10,500 new units. The Housing Element Update will identify suitable and available housing sites by screening for vacant and underutilized parcels, evaluating sites and calculating the capacity of potential buildouts. The Land Use Element of the General Plan will be updated as needed to maintain consistency with the updated Housing Element.

The Alameda County Transportation Commission (Alameda CTC) respectfully submits the following comments:

Basis for Congestion Management Program (CMP) Review

- It appears that the proposed project will generate at least 100 p.m. peak hour trips over existing conditions, and therefore the CMP Land Use Analysis Program requires the City to conduct a transportation impact analysis of the project. For information on the CMP, please visit: https://www.alamedactc.org/planning/congestion-management-program/.

Use of Countywide Travel Demand Model

- The Alameda Countywide Travel Demand Model should be used for CMP Land Use Analysis purposes. The CMP requires local jurisdictions to conduct travel model runs themselves or through a consultant. The City of Berkeley and the Alameda CTC signed a Countywide Model Agreement on September 15, 2010. Before the model can be used for this project, a letter must be submitted to the Alameda CTC requesting use of the model and describing the project. A copy of a sample letter agreement is available upon request. The most current version of the Alameda CTC Countywide Travel Demand Model was updated in May 2019 to be consistent with the assumptions of Plan Bay Area 2040.

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Impacts

- The DEIR should address all potential impacts of the plan on the Metropolitan Transportation System (MTS) roadway network.
  - MTS roadway facilities in the plan area include:
    - I-80/I-580 in Berkeley, Emeryville, and Albany
    - SR-24 in Berkeley and Oakland
    - SR 123/San Pablo Avenue in Berkeley, Emeryville, Albany, and Oakland
    - SR 13/Ashby Avenue in Berkeley and Oakland
    - University Avenue in Berkeley, and Shattuck Avenue, Telegraph Avenue, and Martin Luther King Jr. Boulevard in Berkeley and Oakland
  - For the purposes of CMP Land Use Analysis, the Highway Capacity Manual 2010 freeway and urban streets methodologies are the preferred methodologies to study vehicle delay impacts.
  - The Alameda CTC has *not* adopted any policy for determining a threshold of significance for Level of Service for the Land Use Analysis Program of the CMP.

- The DEIR should address potential impacts of the project on Metropolitan Transportation System (MTS) transit operators.
  - MTS transit operators potentially affected by the plan include: AC Transit, BART, and Capital Corridor
  - Transit impacts for consideration include the effects of project vehicle traffic on mixed flow transit operations, transit capacity, transit access/egress, need for future transit service, and consistency with adopted plans.

- The DEIR should address potential impacts of the plan to people biking and walking in and near the plan area, especially nearby roads included in the Countywide High-injury Network and major barriers identified in the Countywide Active Transportation Plan.
  - Impacts to consider on conditions for cyclists include effects of vehicle traffic on cyclist safety and performance, site development and roadway improvements, and consistency with adopted plans.

Mitigation Measures

- Alameda CTC's policy regarding mitigation measures is that to be considered adequate they must:
  - Adequately sustain CMP roadway and transit service standards;
  - Be fully funded; and
  - Be consistent with project funding priorities established in the Capital Improvement Program of the CMP, the Countywide Transportation Plan (CTP), and the Regional Transportation Plan (RTP) or the Federal Transportation Improvement Program, if the agency relies on state or federal funds programmed by Alameda CTC.

- The DEIR should discuss the adequacy of proposed mitigation measure according to the criteria above. In particular, the DEIR should detail when proposed roadway or transit route improvements are expected to be completed, how they will be funded, and the effect on service standards if only the funded portions of these mitigation measures are built prior to Project completion. The DEIR should also address the issue of transit funding as a mitigation measure in the context of the Alameda CTC mitigation measure criteria discussed above.

- Jurisdictions are encouraged to discuss multimodal tradeoffs associated with mitigation measures that involve changes in roadway geometry, intersection control, or other changes to the transportation network. This analysis should identify impacts to automobiles, transit, bicyclists, and pedestrians. The HCM 2010 MMLOS methodology is encouraged as a tool to evaluate these tradeoffs, but project sponsors may use other methodologies as appropriate for particular contexts or types of mitigations.

- The DEIR should consider the use of TDM measures, in conjunction with roadway and transit improvements, as a means of attaining acceptable levels of service. Whenever possible, mechanisms that encourage ridesharing, flextime, transit, bicycling, telecommuting and other means of reducing peak hour traffic trips should be considered.

Thank you for the opportunity to comment on this NOP. Please contact me at (510) 208 7484 or Chris G. Marks, Associate Transportation Planner at (510) 208-7453, if you have any questions.

Sincerely,

Cathleen Sullivan
Director of Planning

cc: Chris G. Marks, Associate Transportation Planner
Shannon McCarthy, Associate Transportation Planner

From: Alfred Twu
To: Wu, Grace
Subject: Housing Element scoping comments
Date: Friday, February 11, 2022 7:59:08 PM

Grace,

Here are my comments on the Housing Element scoping.

More capacity needed to meet the RHNA goals
In the last cycle, the current zoning led to about 2,943 units being built.

For this cycle, 4,370 units are expected to come from the "Additional Sites" not including BART, ADUs, and entitled projects. These additional sites have a capacity of 8,574 units. To have a better chance at meeting housing goals, especially since there is less remaining zoned capacity today than there was in the last cycle, more Potential Additional Sites should be identified.

Consider a larger-number-of-units alternative
The BART rezone draft EIR had an alternative with taller buildings that was found to be the environmentally superior alternative. Please also add a larger-number-of-units alternative to be studied.

Include Councilmember Taplin's proposed Affordable Housing Overlay
The RHNA process classifies all large high-density sites as Low Income, however, in practice in Berkeley these types of sites are used both for low income and high income housing. Adding an Affordable Housing Overlay to large low-density sites to allow high density affordable housing could provide more places for low income housing to go.

Consider rezoning R-1, R-1A, R-2 zones next to commercial zones and the North Berkeley BART to R-3 or R-4
The blocks next to the commercial zones areas have similarly excellent transit access, and have the added benefit of being quieter places to live than the commercial corridor itself.

Allow limited retail in residential zones
Retail in residential areas with limited operating hours (for example, 8 or 9pm close times) can reduce the need for driving to go shopping.

Gilman, Claremont, and North Shattuck should have additional capacity added
These are some of the highest income and opportunity areas in the city, and to affirmatively further fair housing, more capacity should be added here.

Thanks
Alfred

From: Kevin Burke
To: Wu, Grace
Subject: Housing element comment
Date: Friday, February 11, 2022 10:56:21 PM

I am a life long Bay Area resident and I am interested in moving to Berkeley.

I would appreciate if it was possible for Berkeley to add more housing so people can move in without people needing to move out or move into their cars. More housing will also mean more impact fees that can be used to add BMR housing, student housing, better quality roads, etc.

I support increasing density throughout Berkeley, especially in the wealthy areas, and making it legal to build fourplexes throughout the city with ministerial approval.

Kevin

--
Kevin Burke
phone: 925-271-7005 | kevin.burke.dev

From: Markus Feyh
To: Wu, Grace
Subject: Comments on Berkeley"s Housing Element
Date: Sunday, February 13, 2022 10:50:26 PM

Hello,

Please study increasing the density in the C-SA - South Area Commercial District, which would bring it in line with the most recently updated C-AC Adeline Corridor Commercial District zoning.

In addition, please study:
1. Removing the height restrictions between sub-areas (see Table 23.204-28. C-SA MAXIMUM BUILDING HEIGHT)
2. Increasing the lot coverage percentages (see Table 23.204-30. C-SA LOT COVERAGE STANDARDS FOR MIXED USE AND RESIDENTIAL-ONLY USES)
3. Reducing setbacks when abutting or confronting residential lots (see 23.204.150(E)(5))

Please also study merging C-SA into the C-AC Adeline Corridor Commercial District

Sincerely,
Markus Feyh

Feb 21, 2022

Jordan Klein
Department of Planning and Development
1947 Center Street, 3rd Floor
Berkeley, CA 94704

Director Klein,

East Bay for Everyone is a membership organization committed to building just cities through land use, transit and housing policy. We write to provide the following principles and policy suggestions as Berkeley prepares an update to its 6th Cycle Housing Element.

We also request that the Draft EIR (DEIR) explore the environmental consequences of the policies below where applicable, so that the scope of the EIR is broad enough to include any of these policies should Council choose to include them in the final Housing Element.

High Level Goals

1. Encourage new housing in affluent, high-resource neighborhoods and areas well-served by transit and bicycle infrastructure.
2. Development without displacement
    a. Ensure that any redevelopment of existing rent controlled housing includes robust protections for tenants, including compliance with right to return and no net loss provisions of SB 330.
3. Provide opportunities for longtime and multi-generational Berkeleyans to realize the increased value of their property without selling their property and leaving the city.
4. Create more ADA-accessible, family-sized and deed-restricted affordable units.
5. Create substantial quantities of lower-cost "missing middle" housing throughout Berkeley's lower-density neighborhoods.
    a. Small unit development permitted by-right makes providing ADU-like units more flexible and accessible to people with disabilities. Simple construction and permitting for multi-family housing opens urban home-building to smaller, local contractors, property owners, and land trusts.
    b. This "missing middle" housing type can satisfy moderate-income housing needs, allowing the city to concentrate affordable housing funds on the most needy.

6. Enable and encourage larger multifamily buildings on commercial and transit corridors.
7. Allow for a variety of housing types and sizes, including townhomes, small apartment buildings, and bungalow courts.

With these goals in mind, we suggest the following the policies for consideration within the draft housing element:

<u>Increased density along transit corridors, up to 8-12 stories</u>

- For commercial parcels near BART and along major bus corridors (lines 51, 6, 18, and 12), rezone for 6-8 stories of mixed-use housing.
- With the potential of cross-laminated timber construction, it may also be worth exploring 12-story buildings, particularly in Downtown and Southside. We expect local area plans to evaluate buildings taller than 12 stories.
- For single-family and duplex parcels within 0.5 miles of BART stations, consider midrise, mixed-use zoning for 4 to 5 stories rather than just missing middle.

<u>Increased "missing middle" housing throughout Berkeley neighborhoods</u>

- These revisions should apply in R-1, R-1A, R-2, R-2A, and MU-R zones citywide.
- Four (4) units on any lot that allows ADUs. A base zoning of 8 units if near transit, and up to 12 units near transit if the project includes 2 affordable units (50% density bonus). All approvals should be ministerial.
    - Due to fire and building codes, the maximum of 12 units would likely only be feasible on certain larger lots.
    - Four units trigger the ADA's requirement of at least one accessible unit.
    - Allow flexibility for the subdivision of existing non-conforming structures
    - No public hearings if the appearance from the street is unchanged.
    - One public hearing for input if appearance from the street changes significantly.
- Rules should be crafted with multiple housing types in mind: small apartment buildings, bungalow courts, and townhouses. Modular or pre-fabricated construction should be encouraged. Planning staff should consult with architects, engineers and contractors to conform policy design with current and expected building industry standards.
- As part of the code update, Planning could develop a pre-approved plan for a four-unit dwelling that would work on the vast majority of residential lots. Architectural ornamentation and exterior finishes can accommodate neighborhood and owner preference.
- Loosen development standards to be at least as permissive as ADU standards. Ensure that setback requirements and FAR do not interfere with the ability to build 4-12 units where allowed.
- Allow ministerial lot splits/condo mapping for newly-built units (not house conversions).
- Enforce Berkeley's demolition protections and SB 330 where applicable.

Citywide Affordable Housing Overlay

Berkeley City Council referred adoption of an Affordable Housing Overlay to the Housing Element process. The proposed overlay would allow for additional height and density of affordable housing developments anywhere in Berkeley, including lower-density neighborhoods, outside of the Very High Fire Hazard Severity Zone (VHFHSZ). This proposed AHO must be included for analysis in the DEIR.

Ministerial Approval Process

- Adopt an ordinance for fully ministerial approval of qualifying housing developments, modeled on the one recently adopted in Sacramento. This would facilitate faster and more cost effective construction of needed homes, while reducing the discretionary review burden on planning staff and planning commissions.
    - Qualifying developments should be zoning compliant. Berkeley may also consider as requirements a maximum development size (in Sacramento this is 200 units; square footage may make sense as an alternative) and electing for on-site Affordable Housing rather than an in-lieu fee.
- Include a menu of commonly chosen density bonus concessions that could be used in this ministerial process for qualifying developments.

Tenant Protections

- Audit enforcement of demolition protections, no net loss and right to return required by SB330 within the planning process. Incorporate these standards directly into Berkeley law, as well as permit application forms.
- Coordinate with Berkeley's Rent Board to provide clear processes for tenant right to return required by SB330.
- Create a local rental registry in order to capture rental data and enforce tenant protections, including demolition protections.

We look forward to continuing to engage with the City of Berkeley in the 6th Cycle Housing Element Update.

Sincerely,

Greg Magofña
Co-Executive
East Bay for Everyone

Sid Kapur
Chapter Lead
East Bay YIMBY

Appendix B

Special-Status Species in the Vicinity of the Project Area

Local, state, and federal agencies regulate special-status species and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of any proposed development on a property. The potential occurrence table of special-status species is based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB species occurrence records from other sites in the vicinity of the project area, and previous reports for the Plan Area.

Table B-1 Special Status Plant Species and Sensitive Natural Communities Known to Occur or with Potential to Occur in the Vicinity of the Project Area

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CRPR	Habitat Requirements
Amsinckia lunaris bent-flowered fiddleneck	None/None G3/S3 1B.2	Annual herb. Cismontane woodland, coastal bluff scrub, valley and foothill grassland. Elevations: 10-1640ft. (3-500m.) Blooms Mar-Jun.
Arctostaphylos franciscana Franciscan manzanita	FE/None GHC/S1 1B.1	Perennial evergreen shrub. Coastal scrub. Serpentine outcrops in chaparral. Elevations: 195-985ft. (60-300m.) Blooms Feb-Apr.
Arctostaphylos imbricata San Bruno Mountain manzanita	None/SCE G1/S1 1B.1	Perennial evergreen shrub. Chaparral, coastal scrub. Rocky. Elevations: 900-1215ft. (275-370m.) Blooms Feb-May.
Arctostaphylos montana ssp. *ravenii* Presidio manzanita	FE/SCE G3T1/S1 1B.1	Perennial evergreen shrub. Chaparral, coastal prairie, coastal scrub. Open, rocky serpentine slopes. Elevations: 150-705ft. (45-215m.) Blooms Feb-Mar.
Arctostaphylos pacifica Pacific manzanita	None/SCE G1/S1 1B.1	Evergreen shrub. Chaparral, coastal scrub. Elevations: 1085-1085ft. (330-330m.) Blooms Feb-Apr.
Arctostaphylos pallida pallid manzanita	FT/SCE G1/S1 1B.1	Perennial evergreen shrub. Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, coastal scrub. Grows on uplifted marine terraces on siliceous shale or thin chert. May require fire. Elevations: 605-1525ft. (185-465m.) Blooms Dec-Mar.
Arenaria paludicola marsh sandwort	FE/SCE G1/S1 1B.1	Perennial stoloniferous herb. Marshes and swamps. Openings, sandy. Elevations: 10-560ft. (3-170m.) Blooms May-Aug.
Astragalus tener var. *tener* alkali milk-vetch	None/None G2T1/S1 1B.2	Annual herb. Playas, valley and foothill grassland, vernal pools. Alkaline. Elevations: 5-195ft. (1-60m.) Blooms Mar-Jun.
Calochortus tiburonensis Tiburon mariposa-lily	FT/SCT G1/S1 1B.1	Perennial bulbiferous herb. Valley and foothill grassland. On open, rocky, slopes in serpentine grassland. Elevations: 165-490ft. (50-150m.) Blooms Mar-Jun.
Calystegia purpurata ssp. *saxicola* coastal bluff morning-glory	None/None G4T2T3/S2S3 1B.2	Perennial herb. Coastal bluff scrub, coastal dunes, coastal scrub, north coast coniferous fores. Elevations: 0-345ft. (0-105m.) Blooms (Mar)Apr-Sep.
Carex comosa bristly sedge	None/None G5/S2 2B.1	Perennial rhizomatous herb. Coastal prairie, marshes and swamps, valley and foothill grassland. Lake margins, wet places; site below sea level is on a Delta island. Elevations: 0-2050ft. (0-625m.) Blooms May-Sep.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CRPR	Habitat Requirements
Carex praticola northern meadow sedge	None/None G5/S2 2B.2	Perennial herb. Meadows and seeps. Moist to wet meadows. Elevations: 0-10500ft. (0-3200m.) Blooms May-Jul.
Castilleja affinis var. *neglecta* Tiburon paintbrush	FE/SCT G4G5T1T2/S1S2 1B.2	Perennial herb (hemiparasitic). Valley and foothill grassland. Rocky serpentine sites. Elevations: 195-1310ft. (60-400m.) Blooms Apr-Jun.
Chloropyron maritimum ssp. *palustre* Point Reyes salty bird's-beak	None/None G4?T2/S2 1B.2	Annual herb (hemiparasitic). Marshes and swamps. Usually in coastal salt marsh with Salicornia, Distichlis, Jaumea, Spartina, etc. Elevations: 0-35ft. (0-10m.) Blooms Jun-Oct.
Chloropyron molle ssp. *molle* soft salty bird's-beak	FE/SCR G2T1/S1 1B.2	Annual herb (hemiparasitic). Marshes and swamps. In coastal salt marsh with Distichlis, Salicornia, Frankenia, etc. Elevations: 0-10ft. (0-3m.) Blooms Jun-Nov.
Chorizanthe cuspidata var. *cuspidata* San Francisco Bay spineflower	None/None G2T1/S1 1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub. Sandy. Elevations: 10-705ft. (3-215m.) Blooms Apr-Jul(Aug).
Chorizanthe robusta var. *robusta* robust spineflower	FE/None G2T1/S1 1B.1	Annual herb. Chaparral, cismontane woodland, coastal dunes, coastal scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 10-985ft. (3-300m.) Blooms Apr-Sep.
Cirsium andrewsii Franciscan thistle	None/None G3/S3 1B.2	Perennial herb. Broadleafed upland forest, coastal bluff scrub, coastal prairie, coastal scrub. Mesic, serpentinite (sometimes). Elevations: 0-490ft. (0-150m.) Blooms Mar-Jul.
Clarkia franciscana Presidio clarkia	FE/SCE G1/S1 1B.1	Annual herb. Coastal scrub, valley and foothill grassland. Serpentine outcrops in grassland or scrub. Elevations: 80-1100ft. (25-335m.) Blooms May-Jul.
Collinsia multicolor San Francisco collinsia	None/None G2/S2 1B.2	Annual herb. Closed-cone coniferous forest, coastal scrub. Serpentinite (sometimes). Elevations: 100-900ft. (30-275m.) Blooms (Feb)Mar-May.
Dirca occidentalis western leatherwood	None/None G2/S2 1B.2	Perennial deciduous shrub. Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. Elevations: 80-1395ft. (25-425m.) Blooms Jan-Mar(Apr).
Eriogonum luteolum var. *caninum* Tiburon buckwheat	None/None G5T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Serpentine soils; sandy to gravaelly sites. Elevations: 0-2295ft. (0-700m.) Blooms May-Sep.
Eryngium jepsonii Jepson's coyote-thistle	None/None G2/S2 1B.2	Perennial herb. Valley and foothill grassland, vernal pools. Clay. Elevations: 10-985ft. (3-300m.) Blooms Apr-Aug.
Extriplex joaquinana San Joaquin spearscale	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with Distichlis spicata, Frankenia, etc. Elevations: 5-2740ft. (1-835m.) Blooms Apr-Oct.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CRPR	Habitat Requirements
Fissidens pauperculus minute pocket moss	None/None G3?/S2 1B.2	Moss. North coast coniferous forest. Moss growing on damp soil along the coast. In dry streambeds and on stream banks. Elevations: 35-3360ft. (10-1024m.)
Fritillaria liliacea fragrant fritillary	None/None G2/S2 1B.2	Perennial bulbiferous herb. Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Often on serpentine; various soils reported though usually on clay, in grassland. Elevations: 10-1345ft. (3-410m.) Blooms Feb-Apr.
Gilia capitata ssp. *chamissonis* blue coast gilia	None/None G5T2/S2 1B.1	Annual herb. Coastal dunes, coastal scrub. Elevations: 5-655ft. (2-200m.) Blooms Apr-Jul.
Gilia millefoliata dark-eyed gilia	None/None G2/S2 1B.2	Annual herb. Coastal dunes. Elevations: 5-100ft. (2-30m.) Blooms Apr-Jul.
Helianthella castanea Diablo helianthella	None/None G2/S2 1B.2	Perennial herb. Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Azonal soils, Partial shade (often), rocky (usually). Elevations: 195-4265ft. (60-1300m.) Blooms Mar-Jun.
Hemizonia congesta ssp. *congesta* congested-headed hayfield tarplant	None/None G5T2/S2 1B.2	Annual herb. Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. Elevations: 65-1835ft. (20-560m.) Blooms Apr-Nov.
Hesperolinon congestum Marin western flax	FT/SCT G1/S1 1B.1	Annual herb. Chaparral, valley and foothill grassland. In serpentine barrens and in serpentine grassland and chaparral. Elevations: 15-1215ft. (5-370m.) Blooms Apr-Jul.
Heteranthera dubia water star-grass	None/None G5/S2 2B.2	Perennial herb (aquatic). Marshes and swamps. Alkaline, still or slow-moving water. Requires a pH of 7 or higher, usually in slightly eutrophic waters. Elevations: 100-4905ft. (30-1495m.) Blooms Jul-Oct.
Hoita strobilina Loma Prieta hoita	None/None G2?/S2? 1B.1	Perennial herb. Chaparral, cismontane woodland, riparian woodland. Serpentine; mesic sites. Elevations: 100-2820ft. (30-860m.) Blooms May-Jul(Aug-Oct).
Holocarpha macradenia Santa Cruz tarplant	FT/SCE G1/S1 1B.1	Annual herb. Coastal prairie, coastal scrub, valley and foothill grassland. Light, sandy soil or sandy clay; often with nonnatives. Elevations: 35-720ft. (10-220m.) Blooms Jun-Oct.
Horkelia cuneata var. *sericea* Kellogg's horkelia	None/None G4T1?/S1? 1B.1	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. Elevations: 35-655ft. (10-200m.) Blooms Apr-Sep.
Lasthenia conjugens Contra Costa goldfields	FE/None G1/S1 1B.1	Annual herb. Cismontane woodland, playas, valley and foothill grassland, vernal pools. Vernal pools, swales, low depressions, in open grassy areas. Elevations: 0-1540ft. (0-470m.) Blooms Mar-Jun.
Layia carnosa beach layia	FE/SCE G2/S2 1B.1	Annual herb. Coastal dunes, coastal scrub. On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. Elevations: 0-195ft. (0-60m.) Blooms Mar-Jul.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CRPR	Habitat Requirements
Leptosiphon rosaceus rose leptosiphon	None/None G1/S1 1B.1	Annual herb. Coastal bluff scrub. Elevations: 0-330ft. (0-100m.) Blooms Apr-Jul.
Lessingia germanorum San Francisco lessingia	FE/SCE G1/S1 1B.1	Annual herb. Coastal scrub. On remnant dunes. Open sandy soils relatively free of competing plants. Elevations: 80-360ft. (25-110m.) Blooms (Jun)Jul-Nov.
Lilaeopsis masonii Mason's lilaeopsis	None/SCR G2/S2 1B.1	Perennial rhizomatous herb. Marshes and swamps, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. In brackish or freshwater. Elevations: 0-35ft. (0-10m.) Blooms Apr-Nov.
Meconella oregana Oregon meconella	None/None G2G3/S2 1B.1	Annual herb. Coastal prairie, coastal scrub. Open, moist places. Elevations: 820-2035ft. (250-620m.) Blooms Mar-Apr.
Monolopia gracilens woodland woollythreads	None/None G3/S3 1B.2	Annual herb. Broadleafed upland forest, chaparral, cismontane woodland, north coast coniferous forest, valley and foothill grassland. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns, but may have only weak affinity to serpentine. Elevations: 330-3935ft. (100-1200m.) Blooms (Feb)Mar-Jul.
Oenothera deltoides ssp. *howellii* Antioch Dunes evening-primrose	FE/SCE G5T1/S1 1B.1	Perennial herb. Inland dunes. Remnant river bluffs and sand dunes east of Antioch. Elevations: 0-100ft. (0-30m.) Blooms Mar-Sep.
Pentachaeta bellidiflora white-rayed pentachaeta	FE/SCE G1/S1 1B.1	Annual herb. Cismontane woodland, valley and foothill grassland. Open dry rocky slopes and grassy areas, often on soils derived from serpentine bedrock. Elevations: 115-2035ft. (35-620m.) Blooms Mar-May.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcornflower	None/None G3T1Q/S1 1B.2	Annual herb. Chaparral, coastal prairie, coastal scrub. Mesic sites. Elevations: 10-525ft. (3-160m.) Blooms Mar-Jun.
Plagiobothrys diffusus San Francisco popcornflower	None/SCE G1Q/S1 1B.1	Annual herb. Coastal prairie, valley and foothill grassland. Historically from grassy slopes with marine influence. Elevations: 195-1180ft. (60-360m.) Blooms Mar-Jun.
Polemonium carneum Oregon polemonium	None/None G3G4/S2 2B.2	Perennial herb. Coastal prairie, coastal scrub, lower montane coniferous forest. Elevations: 0-6005ft. (0-1830m.) Blooms Apr-Sep.
Polygonum marinense Marin knotweed	None/None G2Q/S2 3.1	Annual herb. Marshes and swamps. Coastal salt marshes and brackish marshes. Elevations: 0-35ft. (0-10m.) Blooms (Apr)May-Aug(Oct).
Sanicula maritima adobe sanicle	None/SCR G2/S2 1B.1	Perennial herb. Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland. Moist clay or ultramafic soils. Elevations: 100-785ft. (30-240m.) Blooms Feb-May.
Stebbinsoseris decipiens Santa Cruz microseris	None/None G2/S2 1B.2	Annual herb. Broadleafed upland forest, chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Open areas in loose or disturbed soil, usually derived from sandstone, shale or serpentine, on seaward slopes. Elevations: 35-1640ft. (10-500m.) Blooms Apr-May.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CRPR	Habitat Requirements
Streptanthus albidus ssp. *peramoenus* most beautiful jewelflower	None/None G2T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Serpentine outcrops, on ridges and slopes. Elevations: 310-3280ft. (95-1000m.) Blooms (Mar)Apr-Sep(Oct).
Streptanthus glandulosus ssp. *niger* Tiburon jewelflower	FE/SCE G4T1/S1 1B.1	Annual herb. Valley and foothill grassland. Shallow, rocky serpentine slopes. Elevations: 100-490ft. (30-150m.) Blooms May-Jun.
Stuckenia filiformis ssp. *alpina* northern slender pondweed	None/None G5T5/S2S3 2B.2	Perennial rhizomatous herb (aquatic). Marshes and swamps. Shallow, clear water of lakes and drainage channels. Elevations: 985-7055ft. (300-2150m.) Blooms May-Jul.
Suaeda californica California seablite	FE/None G1/S1 1B.1	Perennial evergreen shrub. Marshes and swamps. Margins of coastal salt marshes. Elevations: 0-50ft. (0-15m.) Blooms Jul-Oct.
Trifolium amoenum two-fork clover	FE/None G1/S1 1B.1	Annual herb. Coastal bluff scrub, valley and foothill grassland. Sometimes on serpentine soil, open sunny sites, swales. Most recently cited on roadside and eroding cliff face. Elevations: 15-1360ft. (5-415m.) Blooms Apr-Jun.
Trifolium hydrophilum saline clover	None/None G2/S2 1B.2	Annual herb. Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. Elevations: 0-985ft. (0-300m.) Blooms Apr-Jun.
Triphysaria floribunda San Francisco owl's-clover	None/None G2?/S2? 1B.2	Annual herb. Coastal prairie, coastal scrub, valley and foothill grassland. On serpentine and non-serpentine substrate (such as at Pt. Reyes). Elevations: 35-525ft. (10-160m.) Blooms Apr-Jun.
Northern Coastal Salt Marsh	None/None G3/S3.2	Coastal salt marshes, alkaline flats. The USFWS Wetland Inventory (1996 national list) recognizes Sarcocornia pacifica as an OBL plant.
Northern Maritime Chaparral	None/None G1/S1.2	Varied topography. Soils are commonly shallow over colluvium and many kinds of bedrock.
Serpentine Bunchgrass	None/None G2/S2.2	All topographic locations. Soils may be deep with high clay content, loamy, sandy, or silty derived from mudstone, sandstone, or serpentine substrates.
Valley Needlegrass Grassland	None/None G3/S3.1	All topographic locations. Soils may be deep with high clay content, loamy, sandy, or silty derived from mudstone, sandstone, or serpentine substrates
Viburnum ellipticum oval-leaved viburnum	None/None G4G5/S3? 2B.3	Perennial deciduous shrub. Chaparral, cismontane woodland, lower montane coniferous forest. Elevations: 705-4595ft. (215-1400m.) Blooms May-Jun.

Table B-2 Special Status Animal Species Known to Occur or with Potential to Occur in the Vicinity of the Project Area

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Bombus crotchii Crotch bumble bee	None/ST G2/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.
Bombus crotchii Crotch bumble bee	None/ST G2/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.
Danaus plexippus pop. 1 monarch - California overwintering population	FC/None G4T2T3/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.
Euphydryas editha bayensis Bay checkerspot butterfly	FT/None G5T1/S1	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. Plantago erecta is the primary host plant; Orthocarpus densiflorus and O. purpurscens are the secondary host plants.
Acipenser medirostris pop. 1 green sturgeon - southern DPS	FT/None G3T1/S1	Spawning site fidelity. Spawns in the Sacramento, Feather and Yuba Rivers. Presence in upper Stanislaus and San Joaquin Rivers may indicate spawning. Non-spawning adults occupy marine/estuarine waters. Delta Estuary is important for rearing juveniles. Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.
Archoplites interruptus Sacramento perch	None/None G2G3/S1 SSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley. Prefers warm water. Aquatic vegetation is essental for young. Tolerates wide range of physio-chemical water conditions.
Eucyclogobius newberryi tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.
Spirinchus thaleichthys longfin smelt	FC/ST G5/S1	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	FT/ST G2G3T3/S3 WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.
Rana boylii foothill yellow-legged frog	None/SE G3/S3 SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.
Masticophis lateralis euryxanthus Alameda whipsnake	FT/ST G4T2/S2	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna and woodland habitats. Mostly south-facing slopes and ravines, with rock outcrops, deep crevices or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses.
Aquila chrysaetos golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
Athene cunicularia burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
Circus hudsonius northern harrier	None/None G5/S3 SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.
Coturnicops noveboracensis yellow rail	None/None G4/S1S2 SSC	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.
Egretta thula snowy egret	None/None G5/S4	Colonial nester, with nest sites situated in protected beds of dense tules. Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.
Elanus leucurus white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.
Falco peregrinus anatum American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.
Geothlypis trichas sinuosa saltmarsh common yellowthroat	None/None G5T3/S3 SSC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.
Haliaeetus leucocephalus bald eagle	FD/SE G5/S3 FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Hydroprogne caspia Caspian tern	None/None G5/S4	Nests on sandy or gravelly beaches and shell banks in small colonies inland and along the coast. Inland freshwater lakes and marshes; also, brackish or salt waters of estuaries and bays.
Laterallus jamaicensis coturniculus California black rail	None/ST G3T1/S1 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.
Melospiza melodia pusillula Alameda song sparrow	None/None G5T2?/S2S3 SSC	Resident of salt marshes bordering south arm of San Francisco Bay. Inhabits Salicornia marshes; nests low in Grindelia bushes (high enough to escape high tides) and in Salicornia.
Melospiza melodia samuelis San Pablo song sparrow	None/None G5T2/S2 SSC	Resident of salt marshes along the north side of San Francisco and San Pablo bays. Inhabits tidal sloughs in the Salicornia marshes; nests in Grindelia bordering slough channels.
Rallus obsoletus obsoletus California Ridgway's rail	FE/SE G3T1/S1 FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.
Sternula antillarum browni California least tern	FE/SE G4T2T3Q/S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.
Antrozous pallidus pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
Corynorhinus townsendii Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	None/None G5T2T3/S2S3 SSC	Typically found in forest habitats with moderate to dense understory. Can occur in chaparral, riparian woodlands, and coniferous forests, particularly redwood. Builds middens out of grasses, leaves, and woody debris. This subspecies is found only in the San Francisco Bay region.
Nyctinomops macrotis big free-tailed bat	None/None G5/S3 SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.
Reithrodontomys raviventris salt-marsh harvest mouse	FE/SE G1G2/S1S2 FP	Only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat, but may occur in other marsh vegetation types and in adjacent upland areas. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Scapanus latimanus parvus Alameda Island mole	None/None G5T1Q/SH SSC	Only known from Alameda Island. Found in a variety of habitats, especially annual and perennial grasslands. Prefers moist, friable soils. Avoids flooded soils.
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.

Appendix C

Eligibility Status of Housing Inventory Sites

Table C-1 Eligibility Status of Housing Inventory Sites

Address	APN	Date of Construction	Site Type	Eligibility Status
1207 10th Street	60-2354-15-3	1960	Pipeline	Unknown
2031 2Nd Street	56-1954-10	1957	Opportunity	Unknown
2116 5th Street	56-1959-17-5	1955	Opportunity	Unknown
2422 5th Street	56-1944-11	1914	Pipeline	Unknown
2431 5th Street	56-1943-19-1	1957	Opportunity	Unknown
1618 6th Street	57-2117-4-2	1968	Opportunity	Unknown
1650 6th Street	57-2117-9-3	1960	Opportunity	Unknown
1650 6th Street	57-2117-6-1	1976	Opportunity	Unknown
1650 6th Street	57-2117-5	1981	Opportunity	Unknown
1700 6th Street	58-2118-22-2	1977	Opportunity	Unknown
2325 6th Street	56-1941-19	1925	Pipeline	Unknown
2416 6th Street	56-1943-10-1	1928	Opportunity	Unknown
2022 7th Street	56-1966-6	1913	Opportunity	Unknown
2015 8th Street	56-1972-18	1918	Pipeline	Unknown
1930 9th Street	57-2092-7	1945	Opportunity	Unknown
2830 9th Street	53-1659-16-5	1910	Opportunity	Unknown
801 Addison Street	56-1961-16-1	1965	Opportunity	Unknown
1417 Addison Street	56-1996-12-3	1967	Opportunity	Unknown
1728 Alcatraz Avenue	52-1532-16	1965	Opportunity	Unknown
2714 Alcatraz Avenue	52-1563-179	1915	Pipeline	Unknown
2108 Allston Way	57-2030-1	1930	Opportunity	Unknown
901 Ashby Avenue	53-1641-9-5	1984	Opportunity	Unknown
1331 Ashby Avenue	53-1623-12-1	1920	Pipeline	Unknown
2001 Ashby Avenue	53-1591-18-3	1969	Pipeline	Unknown
2414 Ashby Avenue	52-1573-76-1	1910	Opportunity	Unknown
3009 Ashby Avenue	64-4235-8-4	1964	Opportunity	Unknown
3048 Ashby Avenue	64-4236-4	1963	Opportunity	Unknown
742 Bancroft Way	56-1945-1-2	1970	Opportunity	Unknown
2113 Bancroft Way	57-2029-7-2	1961	Opportunity	Unknown
2190 Bancroft Way	55-1893-1	1953	Opportunity	Unknown
1825 Berkeley Way	57-2063-11	1910	Pipeline	Unknown
1841 Berkeley Way	57-2063-6-1	1981	Opportunity	Unknown
1504 Bonita Avenue	59-2268-6-1	1924	Pipeline	Unknown
2068 Center Street	57-2026-4-12	1961	Opportunity	Unknown
2236 Channing Way	55-1888-27	1967	Pipeline	Unknown
2317 Channing Way	55-1884-6	1953	Pipeline	Unknown
3170 College Avenue	52-1410-16-1	1989	Opportunity	Unknown
2510 Durant Avenue	55-1876-23	1914	Opportunity	Unknown

Address	APN	Date of Construction	Site Type	Eligibility Status
2538 Durant Avenue	55-1876-21-1	1922	Pipeline	Unknown
2000 Dwight Way	55-1822-18	1924	Pipeline	Unknown
2012 Dwight Way	55-1822-21	1904	Pipeline	Unknown
2316 Dwight Way	55-1831-25	1950	Opportunity	Unknown
2750 Dwight Way	55-1850-3-3	1957	Opportunity	Unknown
2033 Emerson Street	53-1592-9	1900	Opportunity	Unknown
2210 Harold Way	57-2027-2-2	1938	Pipeline	Unknown
1157 Hearst Avenue	57-2086-14	1945	Pipeline	Unknown
1173 Hearst Avenue	57-2086-13	1927	Pipeline	Unknown
1035 Heinz Avenue	53-1661-20	1928	Opportunity	Unknown
1043 Heinz Avenue	53-1661-19	1922	Opportunity	Unknown
1550 Hopkins Street	60-2434-20-1	1951	Opportunity	Unknown
1601 Hopkins Street	60-2435-28-1	1978	Opportunity	Unknown
2000 Kittredge Street	57-2028-13	1974	Opportunity	Unknown
2150 Kittredge Street	57-2029-16	1981	Opportunity	Unknown
2176 Kittredge Street	57-2029-2-4	1963	Pipeline	Unknown
1711 M L King Jr Way	58-2170-17	1895	Pipeline	Unknown
1921 M L King Jr Way	57-2059-1-1	1928	Opportunity	Unknown
1933 M L King Jr Way	57-2059-12	1948	Opportunity	Unknown
2099 M L King Jr Way	57-2024-13	1938	Pipeline	Unknown
2105 M L King Jr Way	57-2022-9-2	1957	Opportunity	Unknown
2139 Oregon Street	53-1685-11	1924	Pipeline	Unknown
770 Page Street	59-2325-3-1	1943	opportunity	Unknown
920 Pardee Street	54-1747-11	1984	opportunity	Unknown
1013 Pardee Street	54-1745-18-4	1952	opportunity	Unknown
2105 Parker Street	55-1824-14	1908	opportunity	Unknown
3028 Regent Street	52-1574-44	1915	Pipeline	Unknown
2091 Rose Street	60-2455-67	1963	Opportunity	Unknown
1197 San Pablo Avenue	60-2410-5	1942	Opportunity	Unknown
1200 San Pablo Avenue	60-2354-2	1978	Pipeline	Unknown
1223 San Pablo Avenue	60-2405-27	1955	Opportunity	Unknown
1229 San Pablo Avenue	60-2405-24-1	1953	Opportunity	Unknown
1275 San Pablo Avenue	60-2405-21	1958	Opportunity	Unknown
1299 San Pablo Avenue	60-2405-20	1966	Opportunity	Unknown
1337 San Pablo Avenue	60-2404-20	1920	Opportunity	Unknown
1340 San Pablo Avenue	60-2353-9	1959	Opportunity	Unknown
1346 San Pablo Avenue	60-2353-10	1958	Opportunity	Unknown
1399 San Pablo Avenue	60-2404-18-1	1972	Opportunity	Unknown
1425 San Pablo Avenue	60-2396-15	1946	Opportunity	Unknown

Address	APN	Date of Construction	Site Type	Eligibility Status
1429 San Pablo Avenue	60-2396-14	1973	Opportunity	Unknown
1440 San Pablo Avenue	59-2331-2	1922	Opportunity	Unknown
1443 San Pablo Avenue	60-2395-16	1920	Opportunity	Unknown
1456 San Pablo Avenue	59-2331-3	1916	Opportunity	Unknown
1460 San Pablo Avenue	59-2331-4	1916	Opportunity	Unknown
1501 San Pablo Avenue	60-2395-17	1942	Opportunity	Unknown
1507 San Pablo Avenue	60-2395-33-1	1951	Opportunity	Unknown
1513 San Pablo Avenue	60-2395-31	1963	Opportunity	Unknown
1519 San Pablo Avenue	60-2395-29	1925	Opportunity	Unknown
1521 San Pablo Avenue	60-2395-28	1939	Opportunity	Unknown
1620 San Pablo Avenue	58-2128-3-1	1950	Opportunity	Unknown
1629 San Pablo Avenue	59-2287-25	1939	Opportunity	Unknown
1633 San Pablo Avenue	59-2287-24	1923	Opportunity	Unknown
1634 San Pablo Avenue	58-2128-8-1	1946	Opportunity	Unknown
1639 San Pablo Avenue	59-2287-21-2	1955	Opportunity	Unknown
1640 San Pablo Avenue	58-2128-10	1985	Opportunity	Unknown
1724 San Pablo Avenue	58-2127-9-1	1945	Opportunity	Unknown
1730 San Pablo Avenue	58-2127-12	1963	Opportunity	Unknown
1740 San Pablo Avenue	58-2127-14-3	1925	Pipeline	Unknown
1814 San Pablo Avenue	57-2087-3	1918	Opportunity	Unknown
1819 San Pablo Avenue	57-2086-29-3	1978	Opportunity	Unknown
1835 San Pablo Avenue	57-2086-25-1	1980	Pipeline	Unknown
1955 San Pablo Avenue	57-2085-15	1955	Opportunity	Unknown
2040 San Pablo Avenue	56-1978-8-2	1916	Opportunity	Unknown
2111 San Pablo Avenue	56-1982-2-1	1941	Opportunity	Unknown
2197 San Pablo Avenue	56-1983-40-1	1967	Opportunity	Unknown
2198 San Pablo Avenue	56-1977-13	1928	Pipeline	Unknown
2234 San Pablo Avenue	56-1976-15-1	1958	Opportunity	Unknown
2235 San Pablo Avenue	56-1983-31-3	1988	Opportunity	Unknown
2301 San Pablo Avenue	56-1926-21	1964	Opportunity	Unknown
2366 San Pablo Avenue	56-1933-24-3	1965	Opportunity	Unknown
2400 San Pablo Avenue	56-1932-4-1	1905	Opportunity	Historic
2407 San Pablo Avenue	56-1928-27-1	1953	Opportunity	Unknown
2424 San Pablo Avenue	56-1932-8-3	1962	Opportunity	Unknown
2546 San Pablo Avenue	54-1780-8-1	1980	Opportunity	Unknown
2603 San Pablo Avenue	54-1785-16	1925	Opportunity	Unknown
2613 San Pablo Avenue	54-1785-15	1925	Opportunity	Unknown
2617 San Pablo Avenue	54-1785-13	1955	Opportunity	Unknown
2619 San Pablo Avenue	54-1785-12	1925	Opportunity	Unknown

Address	APN	Date of Construction	Site Type	Eligibility Status
2625 San Pablo Avenue	54-1786-16	1961	Opportunity	Unknown
2641 San Pablo Avenue	54-1786-14-1	1958	Opportunity	Unknown
2246 San Pablo Avenue	56-1976-17	1989	Opportunity	Unknown
2720 San Pablo Avenue	54-1744-7	1945	Pipeline	Unknown
2727 San Pablo Avenue	54-1742-34	1926	Opportunity	Unknown
2729 San Pablo Avenue	54-1742-33	1926	Opportunity	Unknown
2733 San Pablo Avenue	54-1742-32	1948	Opportunity	Unknown
2734 San Pablo Avenue	54-1744-22-5	1955	Opportunity	Unknown
2795 San Pablo Avenue	54-1742-29	1926	Pipeline	Unknown
2830 San Pablo Avenue	53-1661-14	1958	Opportunity	Unknown
2832 San Pablo Avenue	53-1661-15-1	1966	Opportunity	Unknown
2835 San Pablo Avenue	53-1662-21	1947	Opportunity	Unknown
2839 San Pablo Avenue	53-1662-20	1948	Opportunity	Unknown
2840 San Pablo Avenue	53-1661-18-1	1928	Opportunity	Unknown
2843 San Pablo Avenue	53-1662-19	1947	Opportunity	Unknown
2849 San Pablo Avenue	53-1662-17-1	1948	Opportunity	Unknown
2959 San Pablo Avenue	53-1629-19-1	1948	Opportunity	Unknown
3000 San Pablo Avenue	53-1633-1-1	1925	Pipeline	Unknown
1550 Shattuck Avenue	59-2263-10-1	1960	Opportunity	Unknown
1607 Shattuck Avenue	58-2178-24-1	1940	Opportunity	Unknown
1720 Shattuck Avenue	58-2175-4	1947	Opportunity	Unknown
1730 Shattuck Avenue	58-2175-5	1967	Opportunity	Unknown
1748 Shattuck Avenue	58-2175-6	1923	Opportunity	Unknown
1848 Shattuck Avenue	57-2050-5	1964	Opportunity	Unknown
1926 Shattuck Avenue	57-2051-5	1989	Opportunity	Unknown
1950 Shattuck Avenue	57-2053-1	1921	Opportunity	Unknown
1974 Shattuck Avenue	57-2053-2	1921	Opportunity	Unknown
2000 Shattuck Avenue	57-2025-1	1948	Opportunity	Unknown
2020 Shattuck Avenue	57-2025-4	1955	Opportunity	Unknown
2024 Shattuck Avenue	57-2025-5-2	1920	Opportunity	Unknown
2120 Shattuck Avenue	57-2023-3	1930	Opportunity	Historic
2301 Shattuck Avenue	55-1893-16	1979	Opportunity	Unknown
2333 Shattuck Avenue	55-1893-12	1966	Opportunity	Unknown
2414 Shattuck Avenue	55-1896-2	1947	Opportunity	Unknown
2420 Shattuck Avenue	55-1896-3	1940	Opportunity	Unknown
2428 Shattuck Avenue	55-1896-4	1940	Opportunity	Unknown
2450 Shattuck Avenue	55-1897-6	1918	Opportunity	Unknown
2480 Shattuck Avenue	55-1897-1-3	1925	Opportunity	Unknown
2520 Shattuck Avenue	55-1822-4	1910	Opportunity	Unknown

Address	APN	Date of Construction	Site Type	Eligibility Status
2524 Shattuck Avenue	55-1822-5	1928	Opportunity	Unknown
2530 Shattuck Avenue	55-1822-6	1905	Opportunity	Unknown
2550 Shattuck Avenue	55-1821-1-1	1985	Opportunity	Unknown
2555 Shattuck Avenue	55-1824-16	1939	Opportunity	Unknown
2558 Shattuck Avenue	55-1821-3	1927	Opportunity	Unknown
2576 Shattuck Avenue	55-1821-4	1917	Opportunity	Unknown
2609 Shattuck Avenue	55-1825-19	1933	Opportunity	Unknown
2621 Shattuck Avenue	55-1825-15-2	1948	Opportunity	Unknown
2627 Shattuck Avenue	55-1826-20	1940	Opportunity	Unknown
2821 Shattuck Avenue	53-1685-20-1	1969	Opportunity	Unknown
2847 Shattuck Avenue	53-1686-20	1963	Opportunity	Unknown
2920 Shattuck Avenue	53-1590-5-1	1955	Opportunity	Unknown
3054 Shattuck Avenue	53-1594-2	1927	Opportunity	Unknown
2328 Telegraph Avenue	55-1878-3	1915	Pipeline	Unknown
2347 Telegraph Avenue	55-1877-11	1929	Opportunity	Unknown
2566 Telegraph Avenue	55-1837-2	1920	Opportunity	Unknown
2587 Telegraph Avenue	55-1839-19-1	1986	Opportunity	Unknown
2600 Telegraph Avenue	55-1836-6-3	1957	Opportunity	Unknown
2650 Telegraph Avenue	55-1835-9-1	1964	opportunity	Unknown
3030 Telegraph Avenue	52-1576-27-1	1964	Opportunity	Unknown
3031 Telegraph Avenue	52-1574-81	1955	Pipeline	Unknown
805 University Avenue	57-2097-1-6	1950	Opportunity	Unknown
811 University Avenue	57-2097-14-1	1952	Opportunity	Unknown
833 University Avenue	57-2096-10-1	1961	Opportunity	Unknown
907 University Avenue	57-2093-15-1	1988	Opportunity	Unknown
975 University Avenue	57-2092-9	1960	Opportunity	Unknown
1010 University Avenue	56-1973-6-1	1928	Opportunity	Unknown
1011 University Avenue	57-2089-12-1	1943	Opportunity	Unknown
1111 University Avenue	57-2085-26	1939	Opportunity	Unknown
1181 University Avenue	57-2085-8-1	1960	Opportunity	Unknown
1187 University Avenue	57-2085-7-2	1962	Opportunity	Unknown
1198 University Avenue	56-1979-1	1966	Opportunity	Unknown
1199 University Avenue	57-2085-7-1	1949	Opportunity	Unknown
1333 University Avenue	57-2073-8	1938	Opportunity	Unknown
1375 University Avenue	57-2073-4	1948	Opportunity	Unknown
1399 University Avenue	57-2073-2	1940	Opportunity	Unknown
1461 University Avenue	57-2072-6	1948	Opportunity	Unknown
1548 University Avenue	56-2003-24-1	1959	Opportunity	Unknown
1619 University Avenue	57-2070-9-1	1952	Opportunity	Unknown

Address	APN	Date of Construction	Site Type	Eligibility Status
1699 University Avenue	57-2070-3	1954	Opportunity	Unknown
1760 University Avenue	56-2011-25-1	1912	Opportunity	Unknown
1761 University Avenue	57-2061-6-1	1956	Opportunity	Unknown
1800 University Avenue	57-2016-18-1	1968	Opportunity	Unknown
1865 University Avenue	57-2060-2	1947	Opportunity	Unknown
1909 University Avenue	57-2059-10	1951	Opportunity	Unknown
1915 University Avenue	57-2059-9	1979	Opportunity	Unknown
1921 University Avenue	57-2059-8	1925	Opportunity	Unknown
1929 University Avenue	57-2059-7	1963	Opportunity	Unknown
2000 University Avenue	57-2025-13	1979	Pipeline	Unknown
2011 University Avenue	57-2053-14-2	1972	Opportunity	Unknown
2017 University Avenue	57-2053-11	1925	Opportunity	Unknown
2029 University Avenue	57-2053-8-1	1952	Opportunity	Unknown
2058 University Avenue	57-2025-19	1917	Opportunity	Unknown
2154 University Avenue	57-2034-12	1925	Opportunity	Historic
2109 Virginia Street	58-2178-18	1928	Opportunity	Unknown

Appendix D

Energy Modeling Results

City of Berkeley HE Operational Energy

Last Updated: 06/07/22

Populate one of the following tables (Leave the other blank):

Annual VMT		OR	Daily Vehicle Trips	
Annual VMT:	236,867,442		Daily Vehicle Trips:	
			Average Trip Distance:	

Fleet Class	Fleet Mix
Light Duty Auto (LDA)	0.555274
Light Duty Truck 1 (LDT1)	0.059572
Light Duty Truck 2 (LDT2)	0.187289
Medium Duty Vehicle (MDV)	0.120548
Light Heavy Duty 1 (LHD1)	0.022031
Light Heavy Duty 2 (LHD2)	0.005855
Medium Heavy Duty (MHD)	0.011319
Heavy Heavy Duty (HHD)	0.007376
Other Bus (OBUS)	0.000945
Urban Bus (UBUS)	0.000497
Motorcycle (MCY)	0.025792
School Bus (SBUS)	0.000881
Motorhome (MH)	0.002622

Fuel Economy (MPG) [1]	
Passenger Vehicles	24.1
Light-Med Duty Trucks	17.6
Heavy Trucks/Other	7.5
Motorcycles	44

Fleet Mix

Vehicle Type	Percent	Fuel Type	Annual VMT: VMT	Vehicle Trips: VMT	Fuel Consumption (Gallons)
Passenger Vehicles	*55.53%*	*Gasoline*	131,526,332	0.00	5,457,524
Light-Medium Duty Trucks	*36.74%*	*Gasoline*	87,027,230	0.00	4,944,729
Heavy Trucks/Other	*5.15%*	*Diesel*	12,204,832	0.00	1,627,311
Motorcycle	*2.58%*	*Gasoline*	6,109,285	0.00	138,847

Total Gasoline Consumption (gallons)	**10,541,101**
Total Diesel Consumption (gallons)	**1,627,311**

Sources:

[1] United States Department of Transportation, Bureau of Transportation Statistics. 2021. National Transportation Statistics. Available at: https://www.bts.gov/topics/national-transportation-statistics.

Appendix E

Greenhouse Gas Emissions Modeling Results

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

City of Berkeley Housing Element Operational (Single Family)

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	113.00	Dwelling Unit	36.69	203,400.00	323

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2031
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	135	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - East Bay Community Energy is the primary electricity provider, for conservative analysis will use Bright Choice Plan (40 percent renewable)

Land Use - Based on EIR growth assumption of 113 single-family units and 323 new residents.

Construction Phase - Operational model, no construction

Off-road Equipment - Operational model, no construction

Trips and VMT - Operational model, no construction

Architectural Coating - BAAQMD Regulation 8 Rule 3, Nonflat Coating

Vehicle Trips - Default CalEEMod trip generation rates used

Woodstoves - Berkeley Natural Gas prohibition, BAAQMD Regulation 6 Rule 3: No woodburning devices

Area Coating - BAAQMD Regulation 8 Rule 3, Nonflat Coating

Energy Use - Assume 90 percent of development will not include natural gas pursuant to BMC Section 12.80 (natural gas ban)

Water And Wastewater - EBMUD Wastewater treatment plant 100 percent aerobic

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Area Mitigation - BAAQMD Regulation 8 Rule 3, Nonflat Coating

Water Mitigation - Pursuant to CalGreen 20 percent indoor water use reduction

Energy Mitigation - Pursuant to Section 150.1(c)(14) of the 2019 Building Energy Efficiency Standards, low-rise residential up to 3 stories must install PV systems

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	100
tblAreaCoating	Area_EF_Residential_Exterior	150	100
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	150
tblConstructionPhase	NumDays	55.00	1.00
tblEnergyUse	NT24E	6,155.97	6,845.71
tblEnergyUse	NT24NG	2,615.00	261.50
tblEnergyUse	T24E	45.71	9,534.91
tblEnergyUse	T24NG	35,976.14	3,597.64
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	28.25	0.00
tblFireplaces	NumberNoFireplace	9.04	0.00
tblFireplaces	NumberWood	48.59	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	0	135
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblWoodstoves	NumberCatalytic	4.52	0.00
tblWoodstoves	NumberNoncatalytic	4.52	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.3706	1.3706	1.3100e-003	0.0000	1.4032
Energy											0.0000	147.7500	147.7500	4.5000e-004	4.3000e-004	147.8883
Mobile											0.0000	684.6657	684.6657	0.0410	0.0313	695.0092
Waste											27.5378	0.0000	27.5378	1.6274	0.0000	68.2236
Water											2.6048	3.4343	6.0391	8.9700e-003	5.6600e-003	7.9513
Total											**30.1426**	**837.2205**	**867.3631**	**1.6792**	**0.0374**	**920.4756**

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.3706	1.3706	1.3100e-003	0.0000	1.4032
Energy											0.0000	23.2710	23.2710	4.5000e-004	4.3000e-004	23.4093
Mobile											0.0000	684.6657	684.6657	0.0410	0.0313	695.0092
Waste											27.5378	0.0000	27.5378	1.6274	0.0000	68.2236
Water											2.0839	2.9464	5.0302	7.1700e-003	4.5300e-003	6.5600
Total											**29.6216**	**712.2536**	**741.8753**	**1.6774**	**0.0362**	**794.6053**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.73**	**14.93**	**14.47**	**0.11**	**3.02**	**13.67**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/2/2023	1/2/2023	5	1	

Acres of Grading (Site Preparation Phase): 0

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 411,885; Residential Outdoor: 137,295; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	684.6657	684.6657	0.0410	0.0313	695.0092
Unmitigated											0.0000	684.6657	684.6657	0.0410	0.0313	695.0092

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,066.72	1,078.02	966.15	2,434,250	2,434,250
Total	1,066.72	1,078.02	966.15	2,434,250	2,434,250

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.555274	0.059572	0.187289	0.120548	0.022031	0.005855	0.011319	0.007376	0.000945	0.000497	0.025792	0.000881	0.002622

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated											0.0000	124.4790	124.4790	0.0000	0.0000	124.4790
NaturalGas Mitigated											0.0000	23.2710	23.2710	4.5000e-004	4.3000e-004	23.4093
NaturalGas Unmitigated											0.0000	23.2710	23.2710	4.5000e-004	4.3000e-004	23.4093

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	436083											0.0000	23.2710	23.2710	4.5000e-004	4.3000e-004	23.4093
Total												**0.0000**	**23.2710**	**23.2710**	**4.5000e-004**	**4.3000e-004**	**23.4093**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	436083											0.0000	23.2710	23.2710	4.5000e-004	4.3000e-004	23.4093
Total												**0.0000**	**23.2710**	**23.2710**	**4.5000e-004**	**4.3000e-004**	**23.4093**

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	2.03281e+006	124.4790	0.0000	0.0000	124.4790
Total		**124.4790**	**0.0000**	**0.0000**	**124.4790**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1.3706	1.3706	1.3100e-003	0.0000	1.4032
Unmitigated											0.0000	1.3706	1.3706	1.3100e-003	0.0000	1.4032

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.3706	1.3706	1.3100e-003	0.0000	1.4032
Total											**0.0000**	**1.3706**	**1.3706**	**1.3100e-003**	**0.0000**	**1.4032**

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.3706	1.3706	1.3100e-003	0.0000	1.4032
Total											**0.0000**	**1.3706**	**1.3706**	**1.3100e-003**	**0.0000**	**1.4032**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.0302	7.1700e-003	4.5300e-003	6.5600
Unmitigated	6.0391	8.9700e-003	5.6600e-003	7.9513

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	7.3624 / 4.64152	6.0391	8.9700e-003	5.6600e-003	7.9513
Total		**6.0391**	**8.9700e-003**	**5.6600e-003**	**7.9513**

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	5.88992 / 4.64152	5.0302	7.1700e-003	4.5300e-003	6.5600
Total		**5.0302**	**7.1700e-003**	**4.5300e-003**	**6.5600**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.5378	1.6274	0.0000	68.2236
Unmitigated	27.5378	1.6274	0.0000	68.2236

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	135.66	27.5378	1.6274	0.0000	68.2236
Total		**27.5378**	**1.6274**	**0.0000**	**68.2236**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	135.66	27.5378	1.6274	0.0000	68.2236
Total		**27.5378**	**1.6274**	**0.0000**	**68.2236**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

City of Berkeley Housing Element Operational (Single Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

City of Berkeley Housing Element Operational (Multi-Family)

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	17,427.00	Dwelling Unit	458.61	17,427,000.00	42630
Condo/Townhouse	1,570.00	Dwelling Unit	98.13	1,570,000.00	4490

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2031
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	135	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - East Bay Community Energy is the primary electricity provider, for conservative analysis will use Bright Choice Plan (40 percent renewable)

Land Use - Based on EIR growth assumption of 17,427 multi-family units, 1,570 condo/townhome units and 47,120 new residents. ADUs included as condo/townhouse for a conservative assumption.

Construction Phase - Operational model, no construction

Off-road Equipment - Operational model, no construction

Trips and VMT - Operational model, no construction

Architectural Coating - BAAQMD Regulation 8 Rule 3, Nonflat Coating

Vehicle Trips - Default CalEEMod trip generation rates used

Woodstoves - Berkeley Natural Gas prohibition, BAAQMD Regulation 6 Rule 3: No woodburning devices

Area Coating - BAAQMD Regulation 8 Rule 3, Nonflat Coating

Energy Use - Assume 90 percent of development will not include natural gas pursuant to BMC Section 12.80 (natural gas ban)

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water And Wastewater - EBMUD Wastewater treatment plant 100 percent aerobic

Area Mitigation - BAAQMD Regulation 8 Rule 3, Nonflat Coating

Water Mitigation - Pursuant to CalGreen 20 percent indoor water use reduction

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	100
tblAreaCoating	Area_EF_Residential_Exterior	150	100
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	150
tblConstructionPhase	NumDays	660.00	1.00
tblEnergyUse	NT24E	3,054.10	3,743.84
tblEnergyUse	NT24E	3,795.01	4,484.75
tblEnergyUse	NT24NG	2,615.00	261.50
tblEnergyUse	NT24NG	2,615.00	261.50
tblEnergyUse	T24E	90.83	1,628.05
tblEnergyUse	T24E	42.95	4,847.25
tblEnergyUse	T24NG	5,828.01	582.80
tblEnergyUse	T24NG	18,214.40	1,821.44
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	2,614.05	0.00

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFireplaces	NumberGas	235.50	0.00
tblFireplaces	NumberNoFireplace	697.08	0.00
tblFireplaces	NumberNoFireplace	62.80	0.00
tblFireplaces	NumberWood	2,962.59	0.00
tblFireplaces	NumberWood	266.90	0.00
tblLandUse	Population	49,841.00	42,630.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	0	135
tblTripsAndVMT	WorkerTripNumber	2,736.00	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	348.54	0.00
tblWoodstoves	NumberCatalytic	31.40	0.00
tblWoodstoves	NumberNoncatalytic	348.54	0.00
tblWoodstoves	NumberNoncatalytic	31.40	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	230.4107	230.4107	0.2195	0.0000	235.8988
Energy											0.0000	8,476.8888	8,476.8888	0.0184	0.0176	8,482.5917
Mobile											0.0000	65,977.8089	65,977.8089	3.9499	3.0134	66,974.5558
Waste											1,773.8609	0.0000	1,773.8609	104.8322	0.0000	4,394.6653
Water											437.9112	577.3504	1,015.2616	1.5072	0.9523	1,336.7322
Total											**2,211.7721**	**75,262.4588**	**77,474.2308**	**110.5273**	**3.9833**	**81,424.4437**

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	230.4107	230.4107	0.2195	0.0000	235.8988
Energy											0.0000	8,476.8888	8,476.8888	0.0184	0.0176	8,482.5917
Mobile											0.0000	65,977.8089	65,977.8089	3.9499	3.0134	66,974.5558
Waste											1,773.8609	0.0000	1,773.8609	104.8322	0.0000	4,394.6653
Water											350.3289	495.3279	845.6568	1.2058	0.7619	1,102.8333
Total											**2,124.1898**	**75,180.4362**	**77,304.6260**	**110.2258**	**3.7929**	**81,190.5448**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.96**	**0.11**	**0.22**	**0.27**	**4.78**	**0.29**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/2/2023	1/2/2023	5	1	

Acres of Grading (Site Preparation Phase): 0

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 38,468,925; Residential Outdoor: 12,822,975; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	65,977.8089	65,977.8089	3.9499	3.0134	66,974.5558
Unmitigated											0.0000	65,977.8089	65,977.8089	3.9499	3.0134	66,974.5558

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	94,802.88	85,566.57	71276.43	208,147,551	208,147,551
Condo/Townhouse	11,492.40	12,779.80	9859.60	26,428,968	26,428,968
Total	106,295.28	98,346.37	81,136.03	234,576,519	234,576,519

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.555274	0.059572	0.187289	0.120548	0.022031	0.005855	0.011319	0.007376	0.000945	0.000497	0.025792	0.000881	0.002622
Condo/Townhouse	0.555274	0.059572	0.187289	0.120548	0.022031	0.005855	0.011319	0.007376	0.000945	0.000497	0.025792	0.000881	0.002622

5.0 Energy Detail

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	7,517.2030	7,517.2030	0.0000	0.0000	7,517.2030
Electricity Unmitigated											0.0000	7,517.2030	7,517.2030	0.0000	0.0000	7,517.2030
NaturalGas Mitigated											0.0000	959.6858	959.6858	0.0184	0.0176	965.3887
NaturalGas Unmitigated											0.0000	959.6858	959.6858	0.0184	0.0176	965.3887

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.47136e+007											0.0000	785.1746	785.1746	0.0151	0.0144	789.8405
Condo/Townhouse	3.27022e+006											0.0000	174.5112	174.5112	3.3400e-003	3.2000e-003	175.5482
Total												**0.0000**	**959.6858**	**959.6858**	**0.0184**	**0.0176**	**965.3887**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.47136e+007											0.0000	785.1746	785.1746	0.0151	0.0144	789.8405
Condo/Townhouse	3.27022e+006											0.0000	174.5112	174.5112	3.3400e-003	3.2000e-003	175.5482
Total												**0.0000**	**959.6858**	**959.6858**	**0.0184**	**0.0176**	**965.3887**

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.06537e+008	6,523.7901	0.0000	0.0000	6,523.7901
Condo/Townhouse	1.6223e+007	993.4129	0.0000	0.0000	993.4129
Total		**7,517.2030**	**0.0000**	**0.0000**	**7,517.2030**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.06537e+008	6,523.7901	0.0000	0.0000	6,523.7901
Condo/Townhouse	1.6223e+007	993.4129	0.0000	0.0000	993.4129
Total		**7,517.2030**	**0.0000**	**0.0000**	**7,517.2030**

6.0 Area Detail

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	230.4107	230.4107	0.2195	0.0000	235.8988
Unmitigated											0.0000	230.4107	230.4107	0.2195	0.0000	235.8988

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	230.4107	230.4107	0.2195	0.0000	235.8988
Total											**0.0000**	**230.4107**	**230.4107**	**0.2195**	**0.0000**	**235.8988**

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	230.4107	230.4107	0.2195	0.0000	235.8988
Total											**0.0000**	**230.4107**	**230.4107**	**0.2195**	**0.0000**	**235.8988**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	845.6568	1.2058	0.7619	1,102.8333
Unmitigated	1,015.2616	1.5072	0.9523	1,336.7322

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1135.44 / 715.82	931.3557	1.3827	0.8736	1,226.2585
Condo/Townhouse	102.292 / 64.4883	83.9059	0.1246	0.0787	110.4737
Total		**1,015.2616**	**1.5073**	**0.9523**	**1,336.7322**

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	908.351 / 715.82	775.7678	1.1061	0.6989	1,011.6900
Condo/Townhouse	81.8335 / 64.4883	69.8890	0.0997	0.0630	91.1433
Total		**845.6568**	**1.2058**	**0.7619**	**1,102.8333**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,773.8609	104.8322	0.0000	4,394.6653
Unmitigated	1,773.8609	104.8322	0.0000	4,394.6653

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	8016.42	1,627.2608	96.1684	0.0000	4,031.4698
Condo/Townhouse	722.2	146.6001	8.6638	0.0000	363.1955
Total		**1,773.8609**	**104.8322**	**0.0000**	**4,394.6653**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	8016.42	1,627.2608	96.1684	0.0000	4,031.4698
Condo/Townhouse	722.2	146.6001	8.6638	0.0000	363.1955
Total		**1,773.8609**	**104.8322**	**0.0000**	**4,394.6653**

9.0 Operational Offroad

City of Berkeley Housing Element Operational (Multi-Family) - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix G

Noise Analysis

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 04/14/2022
Case Description: Berkeley Housing Element

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
50 Feet from Construction	Residential	65.0	65.0	65.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Jackhammer	Yes	20		88.9	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer	88.9	81.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	88.9	84.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Groundborne Noise and Vibration Modeling

Notes
The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure. Last Updated: 09/29/2021

Variables	
V_{ref}	1E-06
Crest Factor (PPV/RMS)	4
Soil Type *(Choice: default, hard, or sands)*	default
n value	1.1

	Reference Level Inputs			
Equipment	**PPV_{ref} (in/sec)**	**Lv_{ref} (VdB)**	**RMS_{ref} (in/sec)**	**Reference Distance**
Impact Pile Driver	0.644	112	0.398	25
Sonic Pile Driver	0.17	105	0.178	25
Vibratory Roller	0.21	94	0.050	25
Hoe Ram	0.089	87	0.022	25
Large bulldozer	0.089	87	0.022	25
Caisson drilling	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

	Vibration Level at Receiver			
Equipment	**Distance (feet)**	**PPV_x (in/sec)**	**Lv_x (VdB)**	**RMS_x (in/sec)**
Impact Pile Driver	25	0.6440	112	0.398
Sonic Pile Driver	25	0.1700	105	0.178
Vibratory Roller	25	0.2100	94	0.050
Hoe Ram	25	0.0890	87	0.022
Large bulldozer	25	0.0890	87	0.022
Caisson drilling	25	0.0890	87	0.022
Loaded trucks	25	0.0760	83	0.014
Jack hammer	25	0.0350	79	0.009
Small bulldozer	25	0.0030	58	0.001

	Vibration Contours		
	Distance to (feet)		
Equipment	**0.100 PPV**	**72.0 VdB**	**0.0080 RMS**
Impact Pile Driver	136	1645	872
Sonic Pile Driver	40	791	419
Vibratory Roller	49	250	133
Hoe Ram	22	120	64
Large bulldozer	22	120	64
Caisson drilling	22	120	64
Loaded trucks	19	79	42
Jack hammer	10	52	28
Small bulldozer	1	6	3

Sources

California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. April 2020. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Imapact Assessment Manual. September 2018. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Groundborne Noise and Vibration Modeling

Notes
The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure. Last Updated: 09/29/2021

Variables	
V_{ref}	1E-06
Crest Factor (PPV/RMS)	4
Soil Type	
(Choice: default, hard, or sands)	default
n value	1.1

	Reference Level Inputs			
Equipment	**PPV_{ref} (in/sec)**	**Lv_{ref} (VdB)**	**RMS_{ref} (in/sec)**	**Reference Distance**
Impact Pile Driver	0.644	112	0.398	25
Sonic Pile Driver	0.17	105	0.178	25
Vibratory Roller	0.21	94	0.050	25
Hoe Ram	0.089	87	0.022	25
Large bulldozer	0.089	87	0.022	25
Caisson drilling	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

	Vibration Level at Receiver			
Equipment	**Distance (feet)**	**PPV_x (in/sec)**	**Lv_x (VdB)**	**RMS_x (in/sec)**
Impact Pile Driver	50	0.3004	105	0.186
Sonic Pile Driver	50	0.0793	98	0.083
Vibratory Roller	50	0.0980	87	0.023
Hoe Ram	50	0.0415	80	0.010
Large bulldozer	50	0.0415	80	0.010
Caisson drilling	50	0.0415	80	0.010
Loaded trucks	50	0.0355	76	0.007
Jack hammer	50	0.0163	72	0.004
Small bulldozer	50	0.0014	51	0.000

	Vibration Contours		
	Distance to (feet)		
Equipment	**0.100 PPV**	**72.0 VdB**	**0.0080 RMS**
Impact Pile Driver	136	1645	872
Sonic Pile Driver	40	791	419
Vibratory Roller	49	250	133
Hoe Ram	22	120	64
Large bulldozer	22	120	64
Caisson drilling	22	120	64
Loaded trucks	19	79	42
Jack hammer	10	52	28
Small bulldozer	1	6	3

Sources

California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. April 2020. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf
Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Imapact Assessment Manual. September 2018. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Groundborne Noise and Vibration Modeling

Notes
The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure. Last Updated: 09/29/2021

Variables	
V_{ref}	1E-06
Crest Factor (PPV/RMS)	4
Soil Type	
(Choice: default, hard, or sands)	default
n value	1.1

	Reference Level Inputs			
Equipment	**PPV_{ref} (in/sec)**	**Lv_{ref} (VdB)**	**RMS_{ref} (in/sec)**	**Reference Distance**
Impact Pile Driver	0.644	112	0.398	25
Sonic Pile Driver	0.17	105	0.178	25
Vibratory Roller	0.21	94	0.050	25
Hoe Ram	0.089	87	0.022	25
Large bulldozer	0.089	87	0.022	25
Caisson drilling	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

	Vibration Level at Receiver			
Equipment	**Distance (feet)**	**PPV_x (in/sec)**	**Lv_x (VdB)**	**RMS_x (in/sec)**
Impact Pile Driver	75	0.1923	102	0.119
Sonic Pile Driver	75	0.0508	95	0.053
Vibratory Roller	75	0.0627	84	0.015
Hoe Ram	75	0.0266	77	0.007
Large bulldozer	75	0.0266	77	0.007
Caisson drilling	75	0.0266	77	0.007
Loaded trucks	75	0.0227	73	0.004
Jack hammer	75	0.0105	69	0.003
Small bulldozer	75	0.0009	48	0.000

	Vibration Contours		
	Distance to (feet)		
Equipment	**0.100 PPV**	**72.0 VdB**	**0.0080 RMS**
Impact Pile Driver	136	1645	872
Sonic Pile Driver	40	791	419
Vibratory Roller	49	250	133
Hoe Ram	22	120	64
Large bulldozer	22	120	64
Caisson drilling	22	120	64
Loaded trucks	19	79	42
Jack hammer	10	52	28
Small bulldozer	1	6	3

Sources

California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. April 2020. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf
Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Imapact Assessment Manual. September 2018. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Groundborne Noise and Vibration Modeling

Notes
The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure. Last Updated: 09/29/2021

	Reference Level Inputs			
Equipment	PPV_{ref} (in/sec)	Lv_{ref} (VdB)	RMS_{ref} (in/sec)	Reference Distance
Impact Pile Driver	0.644	112	0.398	25
Sonic Pile Driver	0.17	105	0.178	25
Vibratory Roller	0.21	94	0.050	25
Hoe Ram	0.089	87	0.022	25
Large bulldozer	0.089	87	0.022	25
Caisson drilling	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

	Vibration Level at Receiver			
Equipment	Distance (feet)	PPV_x (in/sec)	Lv_x (VdB)	RMS_x (in/sec)
Impact Pile Driver	100	0.1402	99	0.087
Sonic Pile Driver	100	0.0370	92	0.039
Vibratory Roller	100	0.0457	81	0.011
Hoe Ram	100	0.0194	74	0.005
Large bulldozer	100	0.0194	74	0.005
Caisson drilling	100	0.0194	74	0.005
Loaded trucks	100	0.0165	70	0.003
Jack hammer	100	0.0076	66	0.002
Small bulldozer	100	0.0007	45	0.000

	Vibration Contours		
	Distance to (feet)		
Equipment	0.100 PPV	72.0 VdB	0.0080 RMS
Impact Pile Driver	136	1645	872
Sonic Pile Driver	40	791	419
Vibratory Roller	49	250	133
Hoe Ram	22	120	64
Large bulldozer	22	120	64
Caisson drilling	22	120	64
Loaded trucks	19	79	42
Jack hammer	10	52	28
Small bulldozer	1	6	3

Variables	
V_{ref}	1E-06
Crest Factor (PPV/RMS)	4
Soil Type	
(Choice: default, hard, or sands)	default
n value	1.1

Sources

California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. April 2020. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf
Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Imapact Assessment Manual. September 2018. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Groundborne Noise and Vibration Modeling

Notes
The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure. Last Updated: 09/29/2021

	Reference Level Inputs			
Equipment	PPV_{ref} (in/sec)	Lv_{ref} (VdB)	RMS_{ref} (in/sec)	Reference Distance
Impact Pile Driver	0.644	112	0.398	25
Sonic Pile Driver	0.17	105	0.178	25
Vibratory Roller	0.21	94	0.050	25
Hoe Ram	0.089	87	0.022	25
Large bulldozer	0.089	87	0.022	25
Caisson drilling	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

	Vibration Level at Receiver			
Equipment	Distance (feet)	PPV_x (in/sec)	Lv_x (VdB)	RMS_x (in/sec)
Impact Pile Driver	125	0.1097	97	0.068
Sonic Pile Driver	125	0.0289	90	0.030
Vibratory Roller	125	0.0358	79	0.009
Hoe Ram	125	0.0152	72	0.004
Large bulldozer	125	0.0152	72	0.004
Caisson drilling	125	0.0152	72	0.004
Loaded trucks	125	0.0129	68	0.002
Jack hammer	125	0.0060	64	0.002
Small bulldozer	125	0.0005	43	0.000

	Vibration Contours		
	Distance to (feet)		
Equipment	0.100 PPV	72.0 VdB	0.0080 RMS
Impact Pile Driver	136	1645	872
Sonic Pile Driver	40	791	419
Vibratory Roller	49	250	133
Hoe Ram	22	120	64
Large bulldozer	22	120	64
Caisson drilling	22	120	64
Loaded trucks	19	79	42
Jack hammer	10	52	28
Small bulldozer	1	6	3

Variables	
V_{ref}	1E-06
Crest Factor (PPV/RMS)	4
Soil Type	
(Choice: default, hard, or sands)	default
n value	1.1

Sources

California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. April 2020. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf
Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Imapact Assessment Manual. September 2018. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Noise Attenuation and Contours

Input Variables

Point or Line Source	Point	
Hard or Soft Site	Hard	
Attenuation Rate	6	dBA/Doubling of Distance
(Choice: 3, 4.5, 6, or 7.5)		
Reference Noise Level	70	dBA
Reference Distance	50	feet

Note: Within 0-10 feet from the source, there is virtually no attenuation.

Noise Level at Receiver

Distance to Receiver		Noise Level	
50	ft	70.0	dBA
100	ft	64.0	dBA
150	ft	60.5	dBA
200	ft	58.0	dBA
400	ft	51.9	dBA
300	ft	54.4	dBA

Noise Contours

Noise Level Contour		Distance from Source	
80	dBA	16	ft
75	dBA	28	ft
70	dBA	50	ft
65	dBA	89	ft
60	dBA	158	ft
55	dBA	281	ft
50	dBA	500	ft
45	dBA	889	ft

Groundborne Noise and Vibration Modeling

Notes
The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure. Last Updated: 04/14/2022

	Reference Level Inputs			
Equipment	PPV_{ref} (in/sec)	Lv_{ref} (VdB)	RMS_{ref} (in/sec)	Reference Distance
Impact Pile Driver	0.644	112	0.398	25
Sonic Pile Driver	0.17	105	0.178	25
Vibratory Roller	0.21	94	0.050	25
Hoe Ram	0.089	87	0.022	25
Large bulldozer	0.089	87	0.022	25
Caisson drilling	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

	Vibration Level at Receiver			
Equipment	Distance (feet)	PPV_x (in/sec)	Lv_x (VdB)	RMS_x (in/sec)
Impact Pile Driver	100	0.1402	99	0.087
Sonic Pile Driver	100	0.0370	92	0.039
Vibratory Roller	100	0.0457	81	0.011
Hoe Ram	100	0.0194	74	0.005
Large bulldozer	100	0.0194	74	0.005
Caisson drilling	100	0.0194	74	0.005
Loaded trucks	100	0.0165	70	0.003
Jack hammer	100	0.0076	66	0.002
Small bulldozer	100	0.0007	45	0.000

	Vibration Contours		
	Distance to (feet)		
Equipment	0.100 PPV	72.0 VdB	0.0080 RMS
Impact Pile Driver	136	1645	872
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Vibratory Roller	49	250	133
Hoe Ram	22	120	64
Large bulldozer	22	120	64
Caisson drilling	22	120	64
Loaded trucks	19	79	42
Jack hammer	10	52	28
Small bulldozer	1	6	3

Sources
California Department of Transportation (Caltrans). 2020. Transportation and Construction

Relative Increase in Noise Levels (Traffic)

Traffic Volume Increase Calculations				
Roadway Segment	Initial Traffic Volume	Future Traffic Volume	Percentage Increase in Traffic Volume	Increase in Noise Level (dBA)
	3213590	3536996	10.1%	0.4

KITTELSON & ASSOCIATES
155 Grand Avenue, Suite 505
Oakland, CA 94612
P 510.839.1742

Technical Memorandum

June 23, 2022 Project# 26756

To: Grace Wu
City of Berkeley
1947 Center Street, 2nd Floor
Berkeley, CA 94704

From: Anusha Musunuru, Damian Stefanakis, Kittelson & Associates, Inc.

CC: Justin Horner, City of Berkeley; Karly Kaufman, Rincon Consultants, Inc.

RE: City of Berkeley Housing Element – Vehicle Miles Traveled (VMT) Impact Assessment Memorandum

INTRODUCTION

Kittelson and Associates (Kittelson) has prepared this vehicle miles traveled (VMT) impact assessment for the City of Berkeley Housing Element Update. This VMT assessment is based on Regional Housing Needs Allocation (RHNA) housing units developed by the City of Berkeley. Kittelson conducted the travel demand modeling with the Alameda County Transportation Commission (CTC) Countywide Model. The VMT assessment is based on the SB 743 requirements and City of Berkeley VMT Guidelines.

The 2023-2031 Draft RHNA estimates include a total of 19,098 units located in the sites inventory within 106 selected traffic analysis zones (TAZs) around the City. Travel forecasts were prepared for both existing 2020 model year and future 2040 cumulative model year conditions. Since the year 2031 represents the Housing Element buildout, VMT for year 2031 was interpolated between 2020 and 2040. VMT results were extracted at the citywide level based on the efficiency metric, VMT per Capita and total VMT. The results were compared to the Bay Area regionwide average to determine if the additional housing units as per the Housing Element Update contribute to a VMT impact under SB 743 and City guidelines.

The overall effect of adding 19,098 housing units in Berkeley in the locations identified by the TAZs in the city and region level VMT is to shorten trip lengths, promote mode choice to transit-related modes and reduce VMT per capita for the City under both 2020 plus project and 2040 plus cumulative project conditions. Kittelson evaluated the Housing Element Update at the programmatic level using an overall systemwide VMT assessment, i.e., considering all the TAZs within the city for evaluating the VMT impacts.

VMT THRESHOLDS

VMT thresholds are defined using recommendations from the California Office of Planning and Research (OPR) based on their final report, dated December 2018. Cities and counties could opt to develop their own methods, but CEQA impact criteria are generally consistent with OPR recommendations. The City of Berkeley's VMT Criteria and Thresholds were developed and published on June 29, 2020[1]. This CEQA analysis is based on the City policy and supplemented with OPR recommendations (where applicable and necessary).

[1] City of Berkeley VMT Criteria and Thresholds, June 2020. Link: https://berkeleyca.gov/sites/default/files/2022-02/VMT-Criteria-and-Thresholds.pdf

The City of Berkeley has opted to compare VMT to the Bay Area regionwide average. Based on OPR and City guidelines, any development that does not immediately screen out for a VMT per capita assessment should produce a VMT per capita of 15% less than the baseline Bay Area regionwide average.

In the City of Berkeley, the screening criteria for CEQA Exemptions include the following for housing projects:

1. Within ½ mile of BART stations and Amtrak station,
2. Within ¼ mile of high-quality transit corridor, which has 15-minute frequency fixed-route bus service,
3. Contains 100% affordable housing,
4. All projects (housing related) expected to generate less than 836 daily VMT (usually around 20 residential units) are also exempt, and
5. All projects located in the low VMT areas, in a TAZ that has the household VMT per capita that is 15% lower than the baseline regional average.

VMT RESULTS

For Berkeley, VMT metrics are compared to the Bay Area regionwide average, and an impact is assessed if the project VMT per capita is higher than the established 15% below the regionwide average threshold. At the aggregate level, Table 1 through Table 3 indicates that the Housing Element Update project's overall VMT per capita produces lower VMT than 15% below the regionwide average (10.64 vs 19.31 in 2020, 10.86 vs 19.08 in 2031, and 11.03 vs 18.93 in 2040), and in aggregate is *less than significant* and does screen out from further VMT analysis and evaluation under CEQA.

Tables and figures of the VMT analysis are summarized below.

- Table 1 provides a summary of 2020 VMT per capita at the City, County, and Regionwide level.
- Table 2 provides a summary of 2040 VMT per capita at the City, County, and Regionwide level.
- Table 3 provides a summary of 2031 VMT per capita at the City, County, and Regionwide level.
- Figure 1 displays the sites inventory (except for the projected ADUs) by TAZ in the City of Berkeley.
- Figure 2 displays the 2020 households by TAZ and color coded based on households per acre by TAZ in the City of Berkeley.
- Figure 3 displays the 2040 households by TAZ and color coded based on households per acre by TAZ in the City of Berkeley.
- Figure 4 displays the 2020 population by TAZ and color coded based on population per acre by TAZ in the City of Berkeley.
- Figure 5 displays the 2040 population by TAZ and color coded based on population per acre by TAZ in the City of Berkeley.
- Figure 6 displays the households added as per housing element by TAZ and color coded based on households per acre by TAZ in the City of Berkeley.
- Figure 6A displays the households added as per housing element by TAZ and color coded based on households added by TAZ in the City of Berkeley.
- Figure 7 displays the population added as per housing element by TAZ and color coded based on population per acre by TAZ in the City of Berkeley.
- Figure 7A displays the population added as per housing element by TAZ and color coded based on population added by TAZ in the City of Berkeley.
- Figure 8 displays the 2020 plus project households by TAZ and color coded based on households per acre by TAZ in the City of Berkeley.
- Figure 9 displays the 2040 plus project households by TAZ and color coded based on households per acre by TAZ in the City of Berkeley.

- Figure 10 displays the 2020 plus project population by TAZ and color coded based on population per acre by TAZ in the City of Berkeley.
- Figure 11 displays the 2040 plus project population by TAZ and color coded based on population per acre by TAZ in the City of Berkeley.

Table 1. 2020 City, County, and Regionwide VMT per capita

Scenario	Households	Population	VMT	VMT/capita	15% Below
2020 No-Project					
City	52,293	128,004	1,436,244	11.22	
County	620,008	1,720,139	33,432,049	19.44	
Regionwide	2,887,140	7,915,267	180,468,151	22.80	19.38
2020 Plus Project					
City	71,391	175,466	1,867,472	10.64	
County	639,106	1,767,601	33,888,385	19.17	
Regionwide	2,906,238	7,962,729	180,855,141	22.71	19.31

SOURCE: KITTELSON & ASSOCIATES, INC., 2022
NOTE: NET CHANGE IN METRICS IS ASSOCIATED WITH HOUSING ELEMENT UPDATE
2020 PLUS PROJECT VMT IS LOWER THAN 15% BELOW REGIONWIDE AVERAGE

Table 2. 2040 City, County, and Regionwide VMT per capita

Scenario	Households	Population	VMT	VMT/capita	15% Below
2040 No-Project					
City	55,366	141,068	1,607,349	11.39	
County	738,755	2,082,721	37,007,548	17.77	
Regionwide	3,431,389	9,626,790	215,286,847	22.36	19.01
2040 Plus Project					
City	74,464	188,530	2,078,822	11.03	
County	757,853	2,130,183	37,536,311	17.62	
Regionwide	3,450,487	9,674,252	215,459,688	22.27	18.93

SOURCE: KITTELSON & ASSOCIATES, INC., 2022
NOTE: NET CHANGE IN METRICS IS ASSOCIATED WITH HOUSING ELEMENT UPDATE
2040 PLUS PROJECT VMT IS LOWER THAN 15% BELOW REGIONWIDE AVERAGE

*Table 3. 2031 City, County, and Regionwide VMT per capita***

Scenario	Households	Population	VMT	VMT/capita	15% Below
2031 No-Project					
City	53,983	135,189	1,530,352	11.32	
County	685,319	1,919,559	35,398,573	18.44	
Regionwide	3,186,477	8,856,605	199,618,434	22.54	19.16
2031 Plus Project					
City	73,081	182,651	1,983,715	10.86	
County	704,417	1,967,021	35,894,744	18.25	
Regionwide	3,205,575	8,904,067	199,887,642	22.45	19.08

SOURCE: KITTELSON & ASSOCIATES, INC., 2022; **- INTERPOLATED RESULTS FROM 2020 & 2040.
NOTE: NET CHANGE IN METRICS IS ASSOCIATED WITH HOUSING ELEMENT UPDATE
2031 PLUS PROJECT VMT IS LOWER THAN 15% BELOW REGIONWIDE AVERAGE

CONCLUSION

The VMT assessment for the Housing Element Update was conducted using the Alameda CTC Countywide model. RHNA housing units were added to the model in each TAZ that represent the sites inventory and projected ADUs. VMT per capita was extracted at the systemwide (City, County, and Regionwide) level for 2020 and 2040. Year 2031 was interpolated from the 2020 and 2040. The results indicate that at the programmatic level, the VMT associated with the additional residential units is more than 15% below the existing regionwide average.

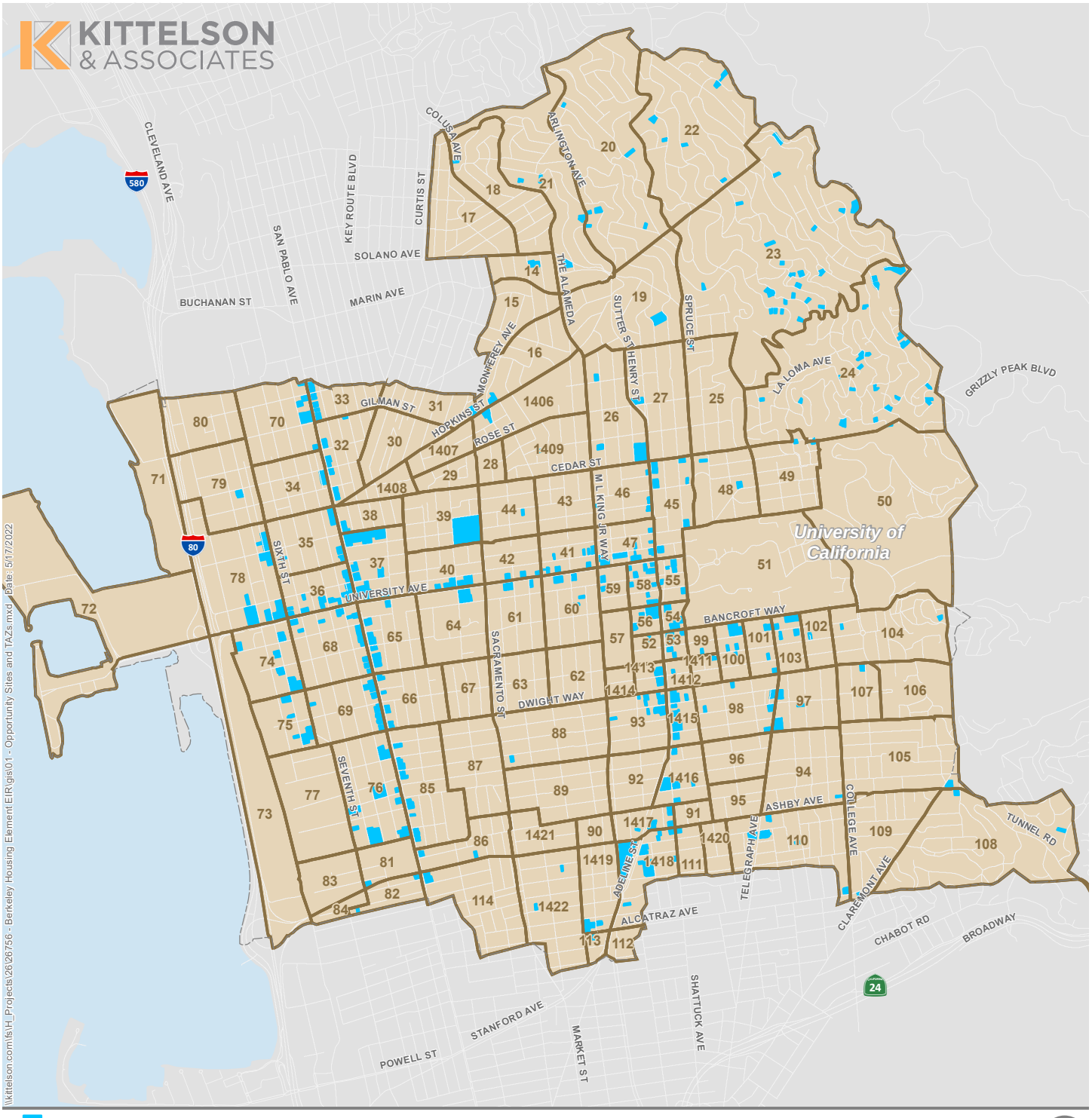


Figure 1

Sites Inventory and TAZs
Berkeley, California

2020 Households by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 1565

- Sites Inventory
- Berkeley City Boundary

0 4,000 Feet

Figure 2

Total 2020 Households: 52,293

2020 Households
Berkeley, California

2040 Households by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 1566

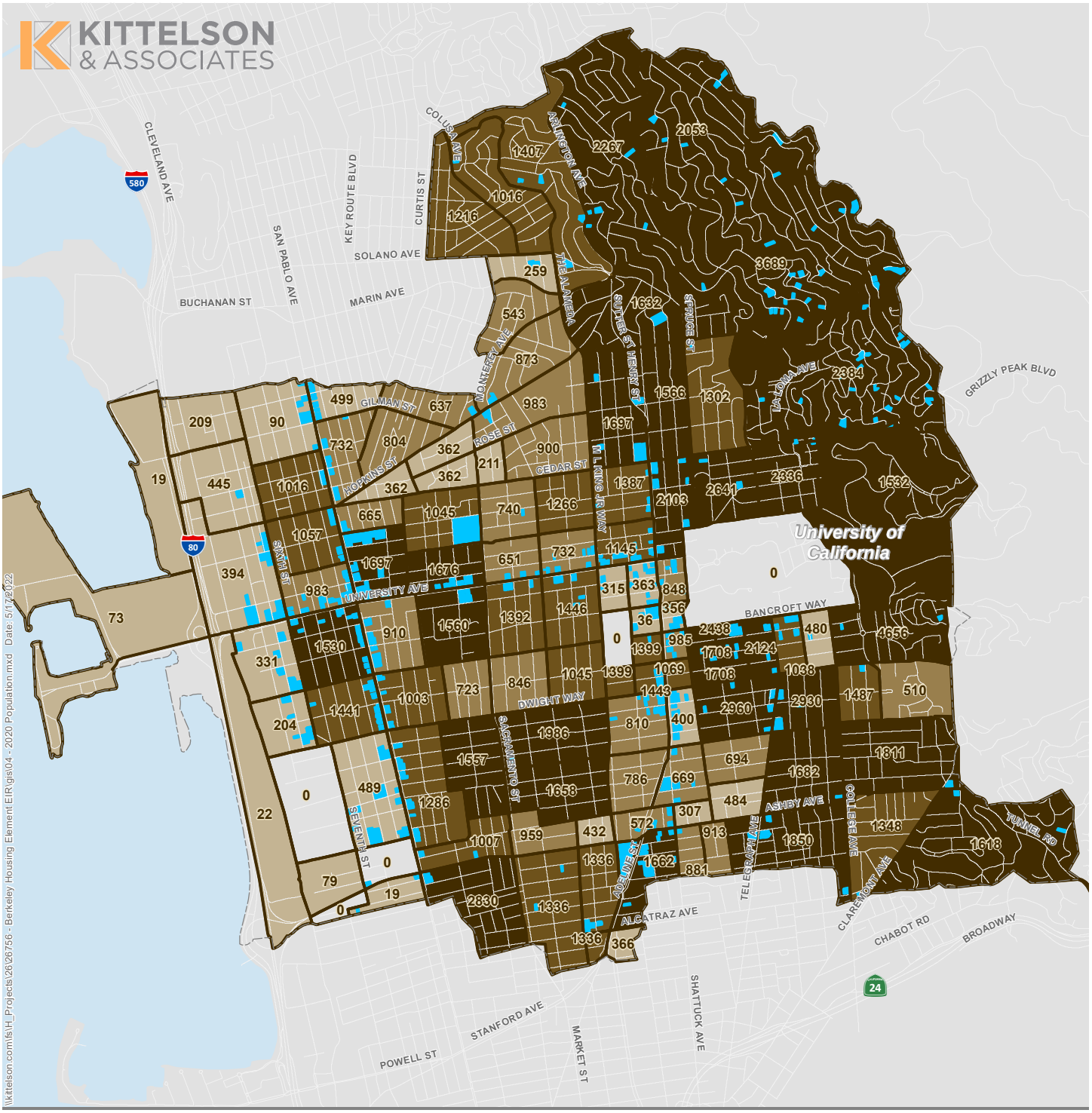
- Sites Inventory
- Berkeley City Boundary

0 — 4,000 Feet

Figure 3

2040 Households
Berkeley, California

Total 2040 Households: 55,366



2020 Population by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 4656

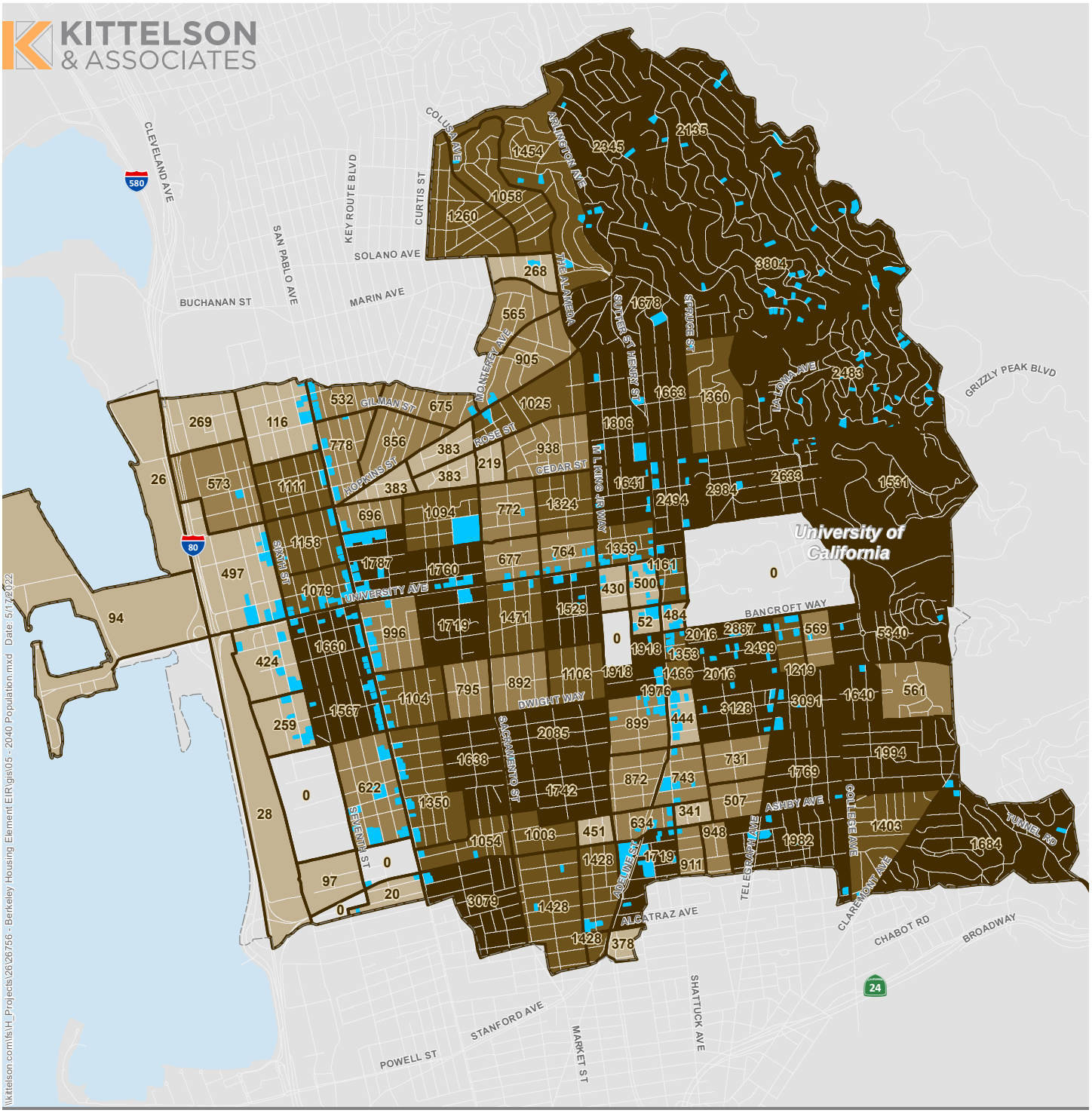
- Sites Inventory
- Berkeley City Boundary

0 4,000 Feet

Figure 4

Total 2020 Population: 128,004

2020 Population
Berkeley, California



2040 Population by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 5340

- Sites Inventory
- Berkeley City Boundary

0 4,000 Feet

Figure 5

Total 2040 Population: 141,068

2040 Population
Berkeley, California

Households Added as per Housing Element by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 1535

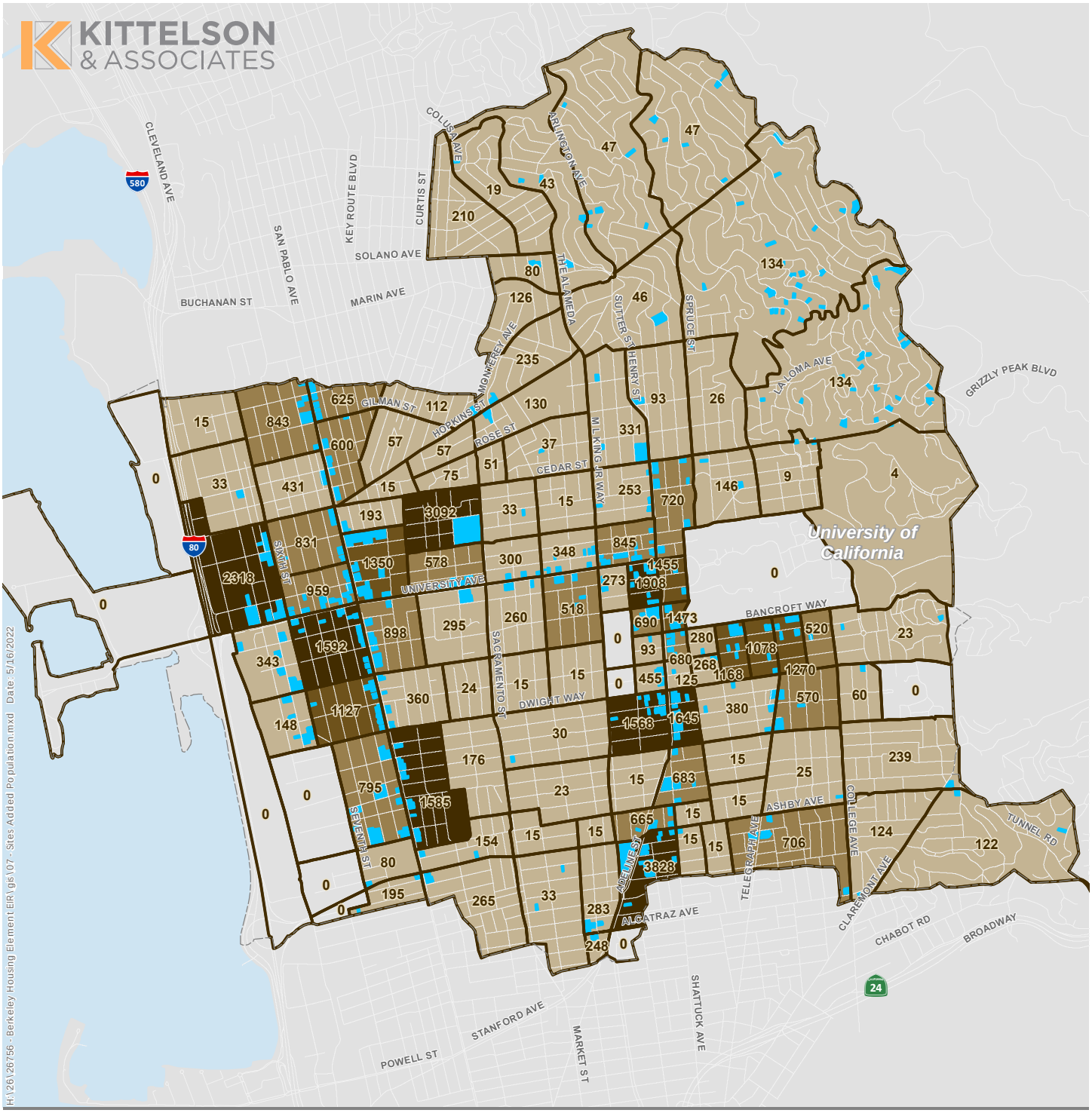
- Sites Inventory
- Berkeley City Boundary

0 4,000 Feet

Figure 6

Total Added Households per Housing Element by TAZ: 19,098

Sites Added Households
Berkeley, California



Population Added as per Housing Element by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 3828

- Sites Inventory
- Berkeley City Boundary

0 4,000 Feet

Figure 7

Total Added Population per Housing Element by TAZ: 47,443

Sites Added Population
Berkeley, California

Plus HE Households by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 2274

- Sites Inventory
- Berkeley City Boundary

0 — 4,000 Feet

Figure 8

Total 2020+HE Households: 71,391

2020 Plus HE Households
Berkeley, California

Plus HE Households by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 2273

- Sites Inventory
- Berkeley City Boundary

0 4,000 Feet

Figure 9

Total 2040+HE Households: 74,464

2040 Plus HE Households
Berkeley, California

Plus HE Population by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 5490

- Sites Inventory
- Berkeley City Boundary

0 — 4,000 Feet

Figure 10

Total 2020+HE Population: 175,466

2020 Plus HE Population
Berkeley, California

Plus HE Population by TAZ

- 0
- 1 - 500
- 501 - 1000
- 1001 - 1500
- 1501 - 5546

- Sites Inventory
- Berkeley City Boundary

0 — 4,000 Feet

Figure 11

Total 2040+HE Population: 188,530

2040 Plus HE Population
Berkeley, California

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
GAVIN NEWSOM, *Governor*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
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November 8, 2022

Jordan Klein, Director
Planning and Development Department
City of Berkeley
1947 Center Street, 3rd Floor
Berkeley, CA 94704

Dear Jordan Klein:

RE: The City of Berkeley's 6th Cycle (2023-2031) Draft Housing Element

Thank you for submitting the City of Berkeley's (City) draft housing element received for review on August 10, 2022, along with revisions received on November 1, 2022. Pursuant to Government Code section 65585, subdivision (b), the California Department of Housing and Community Development (HCD) is reporting the results of its review. Our review was facilitated by a conversation on September 20, 2022 and a sites inventory tour on October 6, 2022, with the City's housing element team. In addition, HCD considered comments from Councilmember Rashi Kesarwani, Councilmember Lori Droste, East Bay for Everyone, TransForm, YIMBY Law and Greenbelt Alliance, David Kellogg, Bee Coleman, Latrel Powell, Katia Kiston, Sheila Goldmacher, Ariana Thompson-Lastad, Elizabeth Ferguson, Gail Brown, Alan Kiviat, Ginny Madsen, Leah Simon-Weisberg, Ms. Omowale Fowles, Amelia Post, S M Ostroff, Rahel Smith, Elana Auerbach, Negeene Mosaed, Yes2TOPA Coalition, pursuant to Government Code section 65585, subdivision (c).

The draft element addresses many statutory requirements; however, revisions will be necessary to comply with State Housing Element Law (Article 10.6 of the Gov. Code), as follows:

1. *An inventory of land suitable and available for residential development, including vacant sites and sites having realistic and demonstrated potential for redevelopment during the planning period to meet the locality's housing need for a designated income level, and an analysis of the relationship of zoning and public facilities and services to these sites. (Gov. Code, § 65583, subd. (a)(3).)*

   *Identify actions that will be taken to make sites available during the planning period with appropriate zoning and development standards and with services and facilities to accommodate that portion of the city's or county's share of the regional housing need for each income level that could not be accommodated on sites identified in the inventory... (*Gov. Code, § *65583, subd. (c)(1).)*

Suitability of Nonvacant Sites: The element lists various factors (e.g., age of structure, improvement to land value ratio, existing floor area) utilized to indicate the potential for redevelopment in the planning period (p. C-15); however, it should support the validity of these factors. To support these factors, the element should evaluate development trends or recent experience in redevelopment relative to the factors. For example, the element could utilize Table C-6 (Pipeline Sites) and list the values of the factors for prior uses.

In addition, specific analysis and actions are necessary if the housing element relies upon nonvacant sites to accommodate more than 50 percent of the Regional Housing Needs Allocation (RHNA) for lower-income households. For your information, the housing element must demonstrate existing uses are not an impediment to additional residential development and will likely discontinue in the planning period. Absent findings (e.g., adoption resolution) based on substantial evidence, the existing uses will be presumed to impede additional residential development and will not be utilized toward demonstrating adequate sites to accommodate the RHNA.

Accessory Dwelling Units (ADU): HCD's October 17, 2022 Review of the City's ADU Ordinance yielded information about potential ADU limitations in the City, including the number of units allowed per lot in the Hillside Overlay District. However, the City's housing element ADU projections do not account for these potential limitations. Therefore, the housing element should lower the ADU projections, or add and/or modify programs to maintain current ADU projections.

Environmental Constraints: While the element provides information on general environmental constraints, it should also relate those constraints to identified sites, including a discussion of any other known conditions (e.g., shape, easements, contamination) and impacts on development in the planning period.

Electronic Sites Inventory: For your information, pursuant to Government Code section 65583.3, the City must submit an electronic sites inventory with its adopted housing element. The City must utilize standards, forms, and definitions adopted by HCD. Please see HCD's housing element webpage at https://www.hcd.ca.gov/community-development/housing-element/index.shtml#element for a copy of the form and instructions. The City can reach out to HCD at sitesinventory@hcd.ca.gov for technical assistance.

Zoning for a Variety of Housing Types (Emergency Shelters): While the element provides general information on development standards for emergency shelters, it should also describe available acreage, capacity, and proximity to transportation and services. For example, the element could describe specific

sites where emergency shelters are feasible and provide information on their location relative to services.

Programs: As noted above, the element does not include a complete site analysis; therefore, the adequacy of sites and zoning were not established. Based on the results of a complete sites inventory and analysis, the City may need to add or revise programs to address a shortfall of sites or zoning available to encourage a variety of housing types.

In addition, the element identifies a total of 1,200 units on two BART sites, including 420 units to meet the lower-income RHNA. The element should amend Program 28 (BART Station Area Planning) with additional milestones and a full schedule of actions throughout the planning period to ensure the site is made available during the planning period. In addition, the program should add provisions that describe when additional actions are triggered (e.g., progress not made three years into the planning period).

2. *An analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the types of housing identified in paragraph (1) of subdivision (c), and for persons with disabilities as identified in the analysis pursuant to paragraph (7), including land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local processing and permit procedures... (Gov. Code, § 65583, subd. (a)(5).)*

   An analysis of potential and actual nongovernmental constraints upon the maintenance, improvement, or development of housing for all income levels, including… …requests to develop housing at densities below those anticipated in the analysis required by subdivision (c) of Government Code section 65583.2... (Gov. Code, § 65583, subd. (a)(6).)

   Address and, where appropriate and legally possible, remove governmental and nongovernmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities. The program shall remove constraints to, and provide reasonable accommodations for housing designed for, intended for occupancy by, or with supportive services for, persons with disabilities. (Gov. Code, § 65583, subd. (c)(3).)

   Land Use Controls: While the element identifies relevant land-use controls (Appendix B), the element must also evaluate those development standards for impacts on housing supply (number of units), cost, feasibility, and the ability to achieve maximum densities. The element currently relies on recently entitled projects, likely projects, and pipeline projects to indicate land use controls are not

a constraint but should also clarify whether projects benefitted from other laws, such as State Density Bonus Law, to achieve project densities or evaluate impacts on cost and feasibility. For example, the element could describe a sample project and determine the feasibility of a project being built at maximum density for each zone with sites currently in the inventory.

Local Processing and Permit Procedures: The element provides an overview of the permit processing procedures but should analyze this process as a constraint. For instance, the element discusses use permits and administrative use permits as potential constraints to projects, including multiple public hearings that can significantly hinder project approval, but does not take meaningful actions to mitigate these factors. The element should describe the factors behind projects facing multiple public hearings, analyze these factors as constraints, and incorporate policies and/or programs to mitigate the constraint, as appropriate.

In addition, the element should fully list and analyze findings of approval for use permits, administrative use permits, and design review as constraints. Moreover, the element should analyze the use permit requirement, instead of a by-right ministerial approval process, for multiple residential uses as a potential constraint. The analysis should describe the requirement for the use permit instead of the previously provided information on the concurrent processing of multiple-use permits. To mitigate these constraints, the element should add and/or modify programs, as appropriate.

Permit Streamlining Act: The element should clarify the process for complying with the Permit Streamlining Act (Government Code section 65950, subdivision (a) (5)) and Public Resource Code sections 21080.1 and 21080.2. In particular, the element should clarify whether decision-making occurs at the Zoning Administration Board or at the staff level. These provisions are critical to meeting the Permit Streamlining Act requirement and generally facilitate the processing of housing developments.

Constraints on Housing for Persons with Disabilities: While the element concludes the definition of family or household is not restrictive and not a constraint on housing for persons with disabilities, it must provide analysis to demonstrate this conclusion or add or modify programs to address identified constraints. For example, the definition appears to require a single lease or rental agreement and shared living experiences which could act as a constraint on housing for persons with disabilities.

Requests for Lesser Densities: While the element (p. 93) states projects are built at a higher density within the City, the element must analyze requests to build at densities below those anticipated in the sites inventory, including hindrance on the construction of a locality’s share of the regional housing need.

Programs: As noted above, the element requires a complete analysis of potential governmental and nongovernmental constraints. Depending upon the results of that analysis, the City may need to revise or add programs and address and remove or mitigate any identified constraints.

3. *Include a program which sets forth a schedule of actions during the planning period, each with a timeline for implementation, which may recognize that certain programs are ongoing, such that there will be beneficial impacts of the programs within the planning period, that the local government is undertaking or intends to undertake to implement the policies and achieve the goals and objectives of the Housing Element. (Gov. Code, § 65583, subd. (c).)*

   Programs must demonstrate that they will have a beneficial impact within the planning period. Beneficial impact means a specific commitment to deliverables, measurable metrics or objectives, definitive deadlines, dates, or benchmarks for implementation. Deliverables should occur early in the planning period to ensure actual housing outcomes. Several programs and actions have timelines that could be moved earlier in the planning period to ensure a beneficial impact. Examples include Programs 4 (Housing Trust Fund), 12 (Workforce Housing), 17 (Accessible Housing), 28 (BART Station Area Planning), 30 (Accessory Dwelling Units), 33 (Zoning Code Amendment: Residential) and 34 (Permit Processing).

4. *Promote and affirmatively further fair housing opportunities and promote housing throughout the community or communities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics... (Gov. Code, § 65583, subd. (c)(5).)*

   The element (pp. 140-146) includes various affirmatively furthering fair housing (AFFH) actions and provides “Citywide” targeting for most programs. While programs may benefit a multitude of neighborhoods, the element should evaluate key programs relative to specific neighborhoods for purposes of AFFH, including promoting housing mobility and new housing choices and affordability in higher resource or higher income areas. For example, several key programs to add housing opportunities in higher resource or income areas could benefit from geographic targeting. In addition, the element should include a mid-term evaluation of progress and effectiveness of AFFH action and commit to make adjustments as appropriate within a specified time (e.g., six months) to better achieve AFFH goals.

The element will meet the statutory requirements of State Housing Element Law once it has been revised and adopted to comply with the above requirements.

Public participation in the development, adoption, and implementation of the housing element is essential to effective housing planning. Throughout the housing element process, the City should continue to engage the community, including organizations that represent lower-income and special needs households, by making information regularly available and considering and incorporating comments where appropriate. Please be aware, any revisions to the element must be posted on the local government's website and to email a link to all individuals and organizations that have previously requested notices relating to the local government's housing element at least seven days before submitting to HCD.

Several federal, state, and regional funding programs consider housing element compliance as an eligibility or ranking criteria. For example, the CalTrans Senate Bill (SB) 1 Sustainable Communities grant; the Strategic Growth Council and HCD's Affordable Housing and Sustainable Communities programs; and HCD's Permanent Local Housing Allocation consider housing element compliance and/or annual reporting requirements pursuant to Government Code section 65400. With a compliant housing element, the City will meet housing element requirements for these and other funding sources.

For your information, some general plan element updates are triggered by housing element adoption. HCD reminds the City to consider timing provisions and welcomes the opportunity to provide assistance. For information, please see the Technical Advisories issued by the Governor's Office of Planning and Research at: https://www.opr.ca.gov/planning/general-plan/guidelines.html.

HCD appreciates the responsiveness, dedication, and collaboration the City's housing element team provided during the review. We are committed to assisting the City in addressing all statutory requirements of State Housing Element Law. If you have any questions or need additional technical assistance, please contact Jose Ayala, of our staff, at Jose.Ayala@hcd.ca.gov.

Sincerely,

Paul McDougall
Senior Program Manager

ATTACHMENT 5

City of Berkeley
Planning Commission

December 15, 2022

Dear Mr. Mayor and Council,

The Planning Commission unanimously recommended the Housing Element for your approval.

Because of the HCD deadline, the Commission left the draft unaltered, however, we collectively want to register a few thoughts with you.

1. There was strong sentiment from Commissioner Teresa Clarke, and general support from the Commission as a whole, to prioritize Program 27 which would increase housing capacity and growth along transit and commercial corridors in the highest resource neighborhoods. We ask that you consider this priority when budgeting and/or advising the City Manager on staff resources.

2. Both the Commission and the community voiced concerns about the risk of displacement, and we recommend that Council prioritize policies to prevent it, such as TOPA. The Commission is supportive of TOPA conceptually.

3. We commend Planning Staff for the clarity and depth of the Housing Element.

All the best,

Elisa Mikiten
Planning Commission Chair

Attachment 6

NOTICE OF PUBLIC HEARING
BERKELEY CITY COUNCIL
PUBLIC PARTICIPATION BY REMOTE VIDEO ONLY

Certification of the Final Environmental Impact Report and Adoption of related California Environmental Quality Act (CEQA) findings, a statement of overriding considerations, mitigation measures, and a mitigation monitoring and reporting program; and Approval and Adoption of a General Plan Amendment to update the Housing Element for the period of 2023-2031.

The Department of Planning and Development is proposing that the City Council adopt a resolution to:

A. Certify the Environmental Impact Report and Adopt related California Environmental Quality Act (CEQA) findings, a statement of overriding considerations, mitigation measures, and a mitigation monitoring and reporting program; and
B. Approve and Adopt a General Plan Amendment to update the Housing Element for the period of 2023-2031.

The hearing will be held on **January 18, 2023** at **4:00 pm**. The hearing will be held via videoconference pursuant to Government Code Section 54953(e) and the state declared emergency.

A copy of the agenda material for this hearing will be available on the City's website at www.berkeleyca.gov as of **January 5, 2023**. **Once posted, the agenda for this meeting will include a link for public participation using Zoom video technology.**

For further information, please contact Grace Wu, Principal Planner, Planning and Development at gwu@cityofberkeley.info.

Written comments should be mailed directly to the City Clerk, 2180 Milvia Street, Berkeley, CA 94704, or emailed to council@cityofberkeley.info in order to ensure delivery to all Councilmembers and inclusion in the agenda packet.

Communications to the Berkeley City Council are public record and will become part of the City's electronic records, which are accessible through the City's website. **Please note: e-mail addresses, names, addresses, and other contact information are not required, but if included in any communication to the City Council, will become part of the public record.** If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service. If you do not want your contact information included in the public record, please do not

include that information in your communication. Please contact the City Clerk at (51) 981-6900 or clerk@cityofberkeley.info for further information.

Published: January 6, 2023 – The Berkeley Voice
Public hearing required per Government Code §65009.

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I hereby certify that the Notice for this Public Hearing of the Berkeley City Council was posted at the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way, as well as on the City's website, on **January 5, 2023**.

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Mark Numainville, City Clerk
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