



Office of the City Manager

CONSENT CALENDAR
January 26, 2021

To: Honorable Mayor and Members of the City Council
 From: Dee Williams-Ridley, City Manager
 Submitted by: Liam Garland, Director, Department of Public Works
 Subject: Approval of Berkeley Strategic Transportation Plan Second Addendum

RECOMMENDATION

Adopt a Resolution:

1. Approving the Berkeley Strategic Transportation Plan Second Addendum.
2. Authorizing the City Manager to submit unfunded Five-Year Priority Projects from the Berkeley Strategic Transportation Plan Second Addendum to the Alameda County Transportation Commission for inclusion and funding in the County's Fiscal Year (FY) 2022 – FY 2026 Comprehensive Investment Plan.
3. Authorizing the City Manager to execute agreements as needed for accepting the awarded grant funds.

FISCAL IMPACTS OF RECOMMENDATION

If awarded, the Alameda County Transportation Commission (Alameda CTC) Comprehensive Investment Plan (CIP) grants would bring a total of up to \$6 million of competitive grant revenue to the Local Capital Grants Fund (Fund 307) for high-priority pedestrian and bicycle transportation projects and transit projects starting in FY 2022.

Alameda CTC FY 2022 – FY 2026 CIP Grant Funding Requests and Matching Funds

Ohlone Greenway Upgrade and Street Crossings	up to \$2,000,000
Adeline Corridor Project	up to \$2,000,000
Telegraph Complete Streets Corridor	up to \$2,000,000
<hr/>	
Total Alameda CTC Grant Funding Request	up to \$6,000,000
City Matching Funds Available	\$2,000,000

The total estimated cost of the projects is up to \$8 million. As a share of the total project cost, capital projects have a required local match of 25% under the Alameda CTC CIP Program. Funding for the required \$2 million local match is available from the Alameda County Measure BB Bicycle and Pedestrian Program Fund (Fund 135) and the Measure BB Local Streets and Roads Fund (Fund 134).

CURRENT SITUATION AND ITS EFFECTS

In the two years since the first Addendum to the BeST Plan¹ was adopted, the City has made substantial progress in acquiring funding for the BeST Plan Five-Year Priority Projects and has approved a Vision Zero Action Plan. The Second Addendum reports on the City's progress and describes the nationally recognized street design guidelines used by the City as part of the Complete Streets Policy Implementation Strategy that was introduced in the BeST Plan. The design guideline recommendations will help standardize the City's approach to designing and planning for complete streets.

In addition, the Second Addendum proposes an amendment to the BeST Plan Five-Year Priority Project list to add "High-Priority Bicycle Plan Projects" to the "Bikeway Intersections" project category. This change would incorporate Tier 1 projects from the 2017 Bicycle Plan into the BeST Plan Five-Year Priority Projects list without these projects being limited to Bikeway Crossings. The change is also consistent with the High-Priority Pedestrian Plan projects category already included on the BeST Plan Five-Year Priority Projects list.

The Alameda CTC CIP has funding categories for bicycle and pedestrian transportation projects and transit projects, and allows cities within the County to submit up to three grant applications. Of the remaining unfunded individual projects from the BeST Plan Five-Year Priority Projects list, the following are technically eligible for the CIP grant funding: the Center Street Plaza, Downtown Transit Center, Transit Signal Priority portion of the Signal Interconnect project, and the Ohlone Greenway Upgrade and Street Crossing Project. However, the Center Street Plaza design and construction are estimated to exceed the \$2 million CIP grant cap and cannot proceed until after the conceptual design phase to be funded through the Downtown Streets and Open Space Improvement Program (SOSIP) fund. Also, recent communications from AC Transit staff have indicated that the Downtown Transit Center is not as high a priority to the agency as transit corridor improvements prioritized through the AC Transit Major Corridors Study² (2016). The Transit Signal Priority portion of the Signal Interconnect project would be eligible for CIP grant funding, but this is a small part of the project cost compared to the ineligible Signal Interconnect, and AC Transit has already acquired funding for the highest priority transit signal priority upgrades on Telegraph and San Pablo Avenues.

The remaining BeST Plan Five-Year Priority Projects eligible for CIP grant funding include the Ohlone Greenway Upgrade and Street Crossing project and projects that fall within larger categories on the Five-Year Priority Projects list. Under the High-Priority Pedestrian Plan Projects category on this list, a project to implement the recently adopted Adeline Corridor Specific Plan³ on a segment of Adeline would qualify for CIP grant funding and is also one of the high-priority projects in the new Berkeley Pedestrian Plan. Under the newly proposed High-Priority Bicycle Plan Projects category, a

¹ <https://www.cityofberkeley.info/Transportation/Strategic-Plan/>

² <http://www.actransit.org/major-corridors-study/>

³ <https://www.cityofberkeley.info/AdelineCorridor/>

Telegraph Complete Streets Corridor project would qualify as a 2017 Bicycle Plan Tier 1 project, be eligible for CIP grant funding, and is a high-priority corridor in the AC Transit Major Corridors Study. In sum, staff proposes to submit the following projects for CIP grant funding.

- **Ohlone Greenway Upgrade and Street Crossing project:** design and construction of the segment between Peralta Avenue and Virginia Gardens, where it would meet the Ohlone Greenway segment being upgraded by BART
- **Adeline Corridor project:** preliminary engineering and design of the segment between Martin Luther King Jr. Way (MLK) and the Oakland border, potentially including funding for construction of a subsegment within these limits (south of MLK is a priority due to being the widest segment at six lanes, with future narrowing of the segment to the north of MLK pending a study currently being funded by BART)
- **Telegraph Complete Streets Corridor:** conceptual design, preliminary engineering, and potentially detailed design and construction (pending budget development for the grant application) for bicycle, pedestrian, and transit improvements on Telegraph Avenue between the Oakland border and Dwight Way, where the project would meet the segment of Telegraph already funded for improvements through the Southside Complete Streets project

BACKGROUND

The BeST Plan was developed to establish a framework for prioritizing the funding and completion of transportation projects pooled from the City's adopted plans and Council referrals. It organizes projects into program areas and applies evaluation criteria in order to establish a list of priority projects for which the City is to seek grant funding over the five years following adoption of the BeST Plan. It also provides an implementation strategy for the City's Complete Streets Policy.

On July 19, 2016, City Council approved the BeST Plan and authorized the City Manager to submit grant applications for the Five-Year Priority Projects identified in the BeST Plan to the Alameda CTC for funding consideration in the Alameda County FY 2018 – FY 2022 Comprehensive Investment Plan. These priority projects totaled \$222 million in projected cost. Alameda CTC awarded a countywide total of \$261 million for FY 2018 and FY 2019, of which \$9 million was awarded to the City. Staff anticipates bringing a comprehensive BeST Plan Update to Council for approval in mid-2021, five years after the original BeST Plan adoption. The BeST Plan Update will include new projects from adopted City transportation plans and Council budget referrals and a new set of five-year priority projects, following review and input by the Berkeley Transportation Commission.

ENVIRONMENTAL SUSTAINABILITY

Increasing the number of Berkeley residents and visitors who walk, bike, and take mass transit will improve traffic management and decrease greenhouse gas emissions. The BeST Plan Addendum projects will further promote transportation sustainability and resiliency that will help the City achieve the Berkeley Climate Action Plan greenhouse

gas emission reduction target of 33% below the year 2000 level by 2020, and 80% below the year 2000 level by 2050. The Climate Action Plan states that, in order to meet these targets, “Transportation modes such as public transit, walking and bicycling must become the primary means of fulfilling our mobility needs.”

RATIONALE FOR RECOMMENDATION

Alameda CTC funding will allow the City to address critical local and regional transportation infrastructure gaps for all modes of travel. These priority projects were identified using criteria drawn directly from adopted City plans and reports, which underwent extensive public review prior to Council adoption.

ALTERNATIVE ACTIONS CONSIDERED

The City could choose not to approve the BeST Plan Addendum and could also choose to forgo the opportunity to seek grant funding from Alameda CTC for three projects among the remaining unfunded Five-Year Priority Projects identified in the BeST Plan.

CONTACT PERSON

Farid Javandel, Transportation Manager, Public Works, 981-7061
Beth Thomas, Principal Planner, Public Works, 981-7068

Attachment:

1: Resolution

Exhibit A: Berkeley Strategic Transportation Plan Addendum

RESOLUTION NO. ##,###-N.S.

APPROVAL OF THE BERKELEY STRATEGIC TRANSPORTATION (BEST) PLAN
ADDENDUM

WHEREAS, the Berkeley Strategic Transportation (BeST) Plan establishes a framework for prioritizing the funding and completion of transportation projects pooled from the City's adopted plans and Council referrals; and

WHEREAS, City Council adopted Resolution No. 67, 645-N.S. on July 19, 2016 approving the BeST Plan and authorizing the City Manager to submit the Five-Year Priority Projects listed in the BeST Plan to the Alameda County Transportation Commission (Alameda CTC) for inclusion in their fiscal year (FY) 2018 through 2022 Comprehensive Investment Plan (CIP); and

WHEREAS, Alameda CTC awarded \$9 million to the City through the FY 2018 – 2022 CIP, which left some of the BeST Plan Five-Year Priority Projects unfunded or partially funded; and

WHEREAS, City Council adopted Resolution No. 68, 613-N.S. on September 25, 2018 approving the BeST Plan Addendum and authorizing the City Manager to submit the remaining unfunded and partially funded Five-Year Priority Projects listed in the BeST Plan to the Alameda CTC for inclusion in their FY 2020 through 2024 CIP; and

WHEREAS, Alameda CTC limited new grant awards from the FY 2020 through FY 2024 CIP to projects ready for construction, which the City of Berkeley did not have; and

WHEREAS, Alameda CTC will seek projects to fund through their CIP for FY 2022 through 2026; and

WHEREAS, the Draft BeST Plan Second Addendum provides a Five-Year Priority Project Status Update Table showing the remaining unfunded and partially funded Five-Year Priority Projects; and

NOW THEREFORE, BE IT RESOLVED that the Council of the City of Berkeley hereby approves the Berkeley Strategic Transportation (BeST) Plan Second Addendum, Exhibit A attached.

BE IT FURTHER RESOLVED that the City Manager is authorized to submit unfunded BeST Plan Second Addendum Five-Year Priority Projects to the Alameda County Transportation Commission (Alameda CTC) for inclusion in their five-year Comprehensive Investment Plan (CIP) for fiscal year (FY) 2022 through FY 2026, and accept the grants awarded, and execute any resultant agreements and amendments.

Exhibit:

A: Berkeley Strategic Transportation Plan Addendum

Appendix 4

Berkeley Strategic Transportation Plan

DRAFT Second Addendum

January 2021

Table of Contents

Section I: Five-Year Priority Project Update	1
Section II: Vision Zero Program Status Update	5
Section III: Design Guideline Recommendations	8

Appendix 4. Berkeley Strategic Transportation Plan Second Addendum

Since the 2016 adoption of the Berkeley Strategic Transportation Plan (BeST Plan), the City of Berkeley has made strides in project development, safety policies, and complete streets design thinking. This appendix serves as an addendum to the BeST Plan to provide:

- A status update on the Five-Year Priority Projects to demonstrate progress
- An update on the status of the Berkeley Vision Zero Program since Vision Zero was incorporated into the BeST Plan by way of the 2018 Addendum (see Appendix 3)
- Recommendations for use of published national and regional design guidance in order to incorporate best practices into the planning and design of Berkeley's streets

Section I: Five-Year Priority Project Update

The City has made significant progress on the BeST Plan Five-Year Priority Projects since the adoption of the Plan in 2016 and the completion and adoption of the first BeST Plan Addendum in 2018 (see Appendix 3).

This Second Addendum proposes one amendment to the Five-year Priority Projects list. This amendment adds "High-priority Bicycle Plan Projects" to the "Bikeway Intersections" project category. This change incorporates Tier I projects from the 2017 Bicycle Plan into the BeST Plan Five-Year Priority Projects list without these projects being limited to Bikeway Crossings. The change is also consistent with the High-Priority Pedestrian Plan projects category already included on the Five-Year Priority Projects list.

Figure 1: Five-Year Priority Projects

PROJECT	Phase 1 Project Development/ Scoping	Phase 2 Environmental Study/ Preliminary Engineering	Phase 3 Detailed Design	Phase 4 Construction
West Berkeley				
9th Street Bikeway Path Extension	Completed Phase	Completed Phase	Completed Phase	Current Phase
Gilman Grade Separation	Future Phase	Future Phase	Future Phase	Future Phase
Gilman Interchange	Completed Phase	Completed Phase	Current Phase	Future Phase
Railroad Quiet Zone	Completed Phase	Current Phase	Future Phase	Future Phase
Southside Area				
Southside Complete Streets	Current Phase	Future Phase	Future Phase	Future Phase
Bikeway Intersections & High-Priority Bicycle Plan Projects	Ongoing project category with many smaller projects			
Downtown Berkeley				
Center Street Plaza	Future Phase	Future Phase	Future Phase	Future Phase
Downtown Berkeley BART Plaza	Completed Phase	Completed Phase	Completed Phase	Completed Phase
Downtown Transit Center	Future Phase	Future Phase	Future Phase	Future Phase
Hearst Complete Streets	Completed Phase	Completed Phase	Completed Phase	Completed Phase
Milvia Protected Bikeway	Completed Phase	Completed Phase	Completed Phase	Current Phase
Shattuck Avenue Reconfiguration	Completed Phase	Completed Phase	Completed Phase	Completed Phase
Signal Interconnect & Transit Signal Priority	Future Phase	Future Phase	Future Phase	Future Phase
High Priority Pedestrian Plan Projects	Ongoing project category with many smaller projects			
Safe Routes to School Projects	Ongoing project category with many smaller projects			
Ohlone Greenway Upgrade & Street Crossings	Future Phase	Future Phase	Future Phase	Future Phase

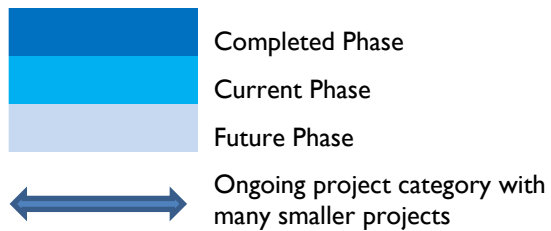


Table 1: Five-Year Priority Project Status Updates^{1,2}

PROJECT	LEAD	COMPLETE	FUNDING STATUS ³	IN BERKELEY STRATEGIC PLAN ⁴	CURRENT PHASE
Hearst Complete Streets	COB	✓		Yes	--
Downtown Berkeley BART Plaza	COB	✓		Yes	--
Safe Routes to School: Emerson, Sylvia Mendez, and John Muir Elementary Schools, King Middle School	COB	✓		Yes	--
Shattuck Avenue Reconfiguration	COB	✓		Yes	--
9th Street Bikeway Path Extension	COB		✓	Yes	Construction
Milvia Protected Bikeway	COB		✓	Yes	Finalizing Construction Bid Documents
Gilman Interchange	Alameda CTC		✓	Yes	Finalizing Construction Bid Documents
Southside Complete Streets	COB		✓	Yes (Dana Street portion)	Project Alternatives Development
Bikeway Intersections & High-Priority Bicycle Plan Projects:					
Virginia Street at Martin Luther King, Jr. Way Rectangular Rapid Flashing Beacon (RRFB)		✓		Yes	--
Hillegass Street at Ashby Avenue Pedestrian Hybrid Beacon (PHB)	COB	✓		Yes	--
Virginia at Sacramento Street Traffic Signal	COB		✓	Yes	Construction
Virginia at San Pablo Avenue PHB, California Street at Ashby RRFB	Caltrans ⁵		✓	Yes	Detailed Design
Russell and Woolsey Streets at Adeline Street PHBs	COB		✓	Yes	Grant Agreement Execution
Russell and Woolsey at Shattuck Avenue, Mabel Street at Dwight Way RRFBs	COB		✓	Yes	Grant Agreement Execution
High Priority Pedestrian Plan Project:					
Sacramento Street/North Berkeley BART Complete Streets	COB		✓	Yes (Virginia Street crossing)	Construction

Table I: Five-Year Priority Project Status Updates^{1,2} (Continued)

PROJECT	LEAD	COMPLETE	FUNDING STATUS ³	IN BERKELEY STRATEGIC PLAN ⁴	CURRENT PHASE
Railroad Quiet Zone	COB		X		Detailed Design of Gilman Railroad Crossing Safety Component
Center Street Plaza	COB		X	Yes	Funding for Conceptual Design Deferred
Safe Routes to School Projects	COB		X ⁸	Yes	--
Downtown Transit Center	COB		O		
Gilman Grade Separation	COB		O		--
Bike Boulevard Intersections ⁶	COB		O	Yes	--
Signal Interconnect and Transit Signal Priority ⁷	COB		O		--
High Priority Pedestrian Plan Projects	COB		O ⁸	Yes	--
Ohlone Greenway Rehabilitation and Street Crossings	COB		O	Yes (street crossing upgrades during repaving projects)	--

- Notes:
1. Project status are as of December 2020. Figure I and Table I are updates to the table shown on page 69 of the BeST Plan.
 2. COB = City of Berkeley; Alameda CTC = Alameda County Transportation Commission
 3. ✓ = Fully Funded and Project Development Underway; X = Partially Funded; O = Seeking Funding
 4. The City of Berkeley Strategic Plan was passed by the Council of the City of Berkeley to help prioritize projects and programs to help meet the City’s goals. The Plan can be found at: <https://www.cityofberkeley.info/strategic-plan/>.
 5. The City of Berkeley is engaging with Caltrans to refine projects to better serve both pedestrians and bicyclists.
 6. Nine intersections are prioritized for the first phase of future funding: Woolsey Bike Boulevard (BB) at Shattuck; Russell BB at San Pablo Ave, Sacramento St, Adeline, and Shattuck; Channing BB at San Pablo Ave and Sacramento St; California St BB at Dwight; Hillegass/Bowditch BB at Dwight.
 7. First phase includes wayside signal upgrades to support transit signal priority on University Ave between Oxford and San Pablo Ave.
 8. High Priority Pedestrian Plan Projects and Safe Routes to School Projects are ongoing projects and include projects at various phases.

Section II: Vision Zero Program Status Update

The BeST Plan builds upon and enhances existing City goals and policies to help the City achieve Berkeley's transportation vision of Complete Streets. Included are goals and policies oriented towards ensuring the safety of all street users, in support of Vision Zero. The term "Vision Zero" describes a systemic, proactive approach to transportation safety that strives to eliminate all deaths and severe injuries on City roadways through evidence-based engineering, supported by education and enforcement.

In March 2018, the Council of the City of Berkeley showed its commitment to Vision Zero by passing a Vision Zero Policy resolution that established a goal of eliminating traffic deaths and severe injuries in the City by 2028. The resolution also called for establishing a multidisciplinary Vision Zero Task Force to advise Council on the development and implementation of a Vision Zero Action Plan. This resolution was incorporated into the BeST Plan by way of the Addendum approved in September 2018 and incorporated into the BeST Plan as Appendix 3. Subsequent to this, the City convened a Vision Zero Task Force and Advisory Committee for the purpose of advising the City on the development of a Vision Zero Action Plan. The Task Force consisted of staff from key City departments, including Public Works, Fire, Police, and Public Health. The Advisory Committee consisted of representatives from City Commissions, AC Transit and UC Berkeley, and local traffic safety advocacy groups. The Vision Zero Action Plan was adopted by the Berkeley City Council in March 2020 and can be found at the following website: <https://www.cityofberkeley.info/visionzero.aspx>.

Section III: Design Guideline Recommendations

Today, Berkeley uses a variety of resources, including the City’s standard details, **City of Berkeley Municipal Code (BMC)**, and the **California Manual on Uniform Traffic Control Devices (CA MUTCD)** to plan and design complete streets. In recent years, additional national best practices have emerged, which provide a more robust toolkit, with proven safety and mode shift benefits. Through this addendum, the City of Berkeley seeks to adopt these nationally recognized street design guidelines to standardize the City’s approach to designing and planning for complete streets, as outlined in **Table 2**. These design guidelines should be consulted and incorporated into any planning, design, and engineering projects that affect streets and building frontages within the City. These design guidelines do not replace the City’s adopted standards but provide planning and general design guidance that should be the starting point for all transportation projects in Berkeley. These should always be used in conjunction with evidence-based engineering to find a context-sensitive solution that prioritizes safety, accessibility, and complete streets. Table 2 identifies which design guidelines to which to refer based on project type. The **BMC** will prevail in all cases where there are discrepancies. More information about each design guideline document is provided in the sections below.



Transit Design

The Alameda-Contra Costa Transit District (AC Transit) **Designing with Transit**⁴ (2004) handbook serves as general guidance for creating transit-supportive streets. The **AC Transit Multimodal Corridor Design Guidelines**⁵ (2018) is a supplement that provides detailed specifications for bus stop design with adjacent bicycle facilities, taking into consideration AC Transit's operations needs for different service vehicles and different roadway configurations. The National Association of City Transportation Officials (NACTO) **Transit Street Design Guide**⁶ (2016) provides some innovative and detailed transit design elements not contained in AC Transit's materials, such as transit-only lane design and transit signal priority.

Roadway Design

The National Association of City Transportation Officials (**NACTO**) **Urban Street Design Guide**⁷ (2013) takes the perspective that roadways are public places for everyone, regardless of travel mode. The Guide provides details on lane width, design speed, and curb radii that fit the needs of the City of Berkeley.

Bicycle Design

The **Berkeley Bicycle Plan**⁸ (2017) should be referenced as a starting point for all transportation and street planning, engineering, and construction projects. The Massachusetts Department of Transportation (**MassDOT**) **Separated Bike Lane Planning & Design Guide**⁹ (2015) provides detailed planning and design considerations for Class IV separated bikeway and intersection design, including protected intersections. It does not cover design of other bicycle treatments (e.g., Class II bicycle lanes and Class III bicycle boulevards). The **NACTO Urban Bikeway Design Guide**¹⁰ (2014) provides detailed bicycle facility design guidance for a range of bikeway types, including Class II bicycle lanes, Class III bicycle routes, and Class IV Separated Bikeways. It does not currently provide guidance for protected intersections. The **NACTO Designing for All Ages & Abilities** guidance (2017) supplements the NACTO Urban Bikeway Design Guide by providing design criteria for making bikeways comfortable to use by children, families, and anyone who does not feel safe when exposed to a high traffic volume or high traffic speeds, which is the majority of the population according to the findings of a survey conducted for the Berkeley Bicycle Plan 2017.

⁴ Available at: http://www.actransit.org/wp-content/uploads/designing_with_transit2.pdf

⁵ Available at: http://www.actransit.org/wp-content/uploads/AC_Transit_Multimodal_Corridor_Guidelines_Final.pdf

⁶ Available at: <https://nacto.org/publication/transit-street-design-guide/>

⁷ Available at: <https://nacto.org/publication/urban-street-design-guide/>

⁸ Available at: <https://www.cityofberkeley.info/berkeleybikeplan/>

⁹ Available at: <https://www.mass.gov/lists/separated-bike-lane-planning-design-guide>

¹⁰ Available at: <https://nacto.org/publication/urban-bikeway-design-guide/>

Pedestrian Design

The **Berkeley Pedestrian Master Plan**¹¹ should be referenced as a starting point for all transportation and street planning, engineering, and construction projects. The **Berkeley Pedestrian Master Plan** is in the process of being updated. The **NACTO Urban Street Design Guide** provides guidance on sidewalk dimensions and intersection treatments, and sidewalk and streetscape recommendations that are applicable to Berkeley streets. Refer to the Access Board's **Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way**¹² (2011) for general guidance on accessibility considerations for street design.

¹¹ Available at: <https://www.cityofberkeley.info/pedestrian/>

¹² Available at: <https://www.access-board.gov/attachments/article/743/nprm.pdf>

Table 2: Design Guidance Applicability Summary^{1,2}

Mode	Design Element	AC Transit Designing with Transit	AC Transit Multimodal Corridor Design Guidelines	NACTO Transit Street Design Guide	NACTO Urban Street Design Guide	NACTO Urban Bikeway Design Guide and Designing for All Ages & Abilities Guide	MassDOT Separated Bike Lane Planning & Design Guide
Transit	Bus Stops with Bicycle Facilities		✓				
	Bus Stops without Bicycle Facilities	✓		✓			
	Midblock and Transit-Only Lanes	✓		✓			
	Intersections and Transit Signal Priority	✓		✓			
Auto	Travel Lane Width				✓		
	Design Speed				✓		
	Curb Radii				✓		
Bicycle	Separated Bikeways					✓	✓
	Bicycle Lanes					✓	
	Bicycle Boulevards					✓	
Pedestrians	Sidewalk/Streetscape				✓		
	Uncontrolled Crosswalks				✓		
	Controlled Crosswalks				✓		

- Notes:
1. The City of Berkeley Municipal Code will prevail over all other guidance sources where there are discrepancies.
 2. The Berkeley Bicycle Plan and Pedestrian Plan should be referenced as a starting point for all transportation and street planning, engineering, and construction projects.