

06

IMPLEMENTATION



This chapter presents the strategies Berkeley should use when implementing this Plan. The chapter includes the evaluation criteria and scoring method, project cost estimates, and a map of prioritized projects. Full project lists can be found in **Appendix E: Project Recommendation and Prioritization Tables**.

6.1 PROJECT EVALUATION STRATEGY

This plan provides a vision, goals, policies and recommendations for building out a network of bikeways and support facilities through the year 2035. In order to provide a strategy for which projects to implement first, the infrastructure recommendations from Chapter 5 were evaluated against a set of criteria that prioritized each project based on safety, community support, and equity factors. Based on the scoring, projects were sorted into Tier 1 (high priority), Tier 2 (mid-term), and Tier 3 (longer term).

The prioritization tiers recommended in this plan are intended to serve as general guidelines. Implementation priorities may change as a result of a variety of factors including funding opportunities or integration with other planning efforts or development. Changes in bicycling patterns, demand or community support may also affect implementation priorities over time.

6.1.1 Evaluation Criteria

Recommended projects were scored against evaluation criteria listed in **Table 6-1**. Prior to being scored, individual project segments and intersections were consolidated and organized into logical implementation corridors based on their location and extents.

6.2 PROJECT PRIORITIZATION

The prioritization corridors were organized into three tiers based on the evaluation scoring.

Figure 6-1 shows the Tier 1 priority projects, and **Figure 6-2** shows projects in all tiers.

Tables that show the projects in each prioritization corridor are included in **Appendix E: Project Recommendations and Prioritization Tables**.

Table 6-2 shows the planning-level cost estimates to implement each tier.

Table 6-1: Evaluation Criteria

CRITERIA	DESCRIPTION	MAX SCORE
Safety	Combination of safety, LTS, and demand analysis	50
Community Support	Projects are scored based on whether the project or area was identified for improvement during the initial community input phase	30
Equity	Projects are scored based on whether they are located within a MTC designated Community of Concern.	20
Total Possible Score		100

TIER 1 PROJECTS

Figure 6-1 shows (and **Table 6-3** lists) the Tier 1 (high priority) projects including planning level cost estimates.

Table 6-2: Planning-Level Capital Cost Estimates

TIER	PLANNING LEVEL COST ESTIMATE
Tier 1	\$26,318,900
Tier 2	\$4,658,400
Tier 3	\$3,493,800
Total	\$34,471,100

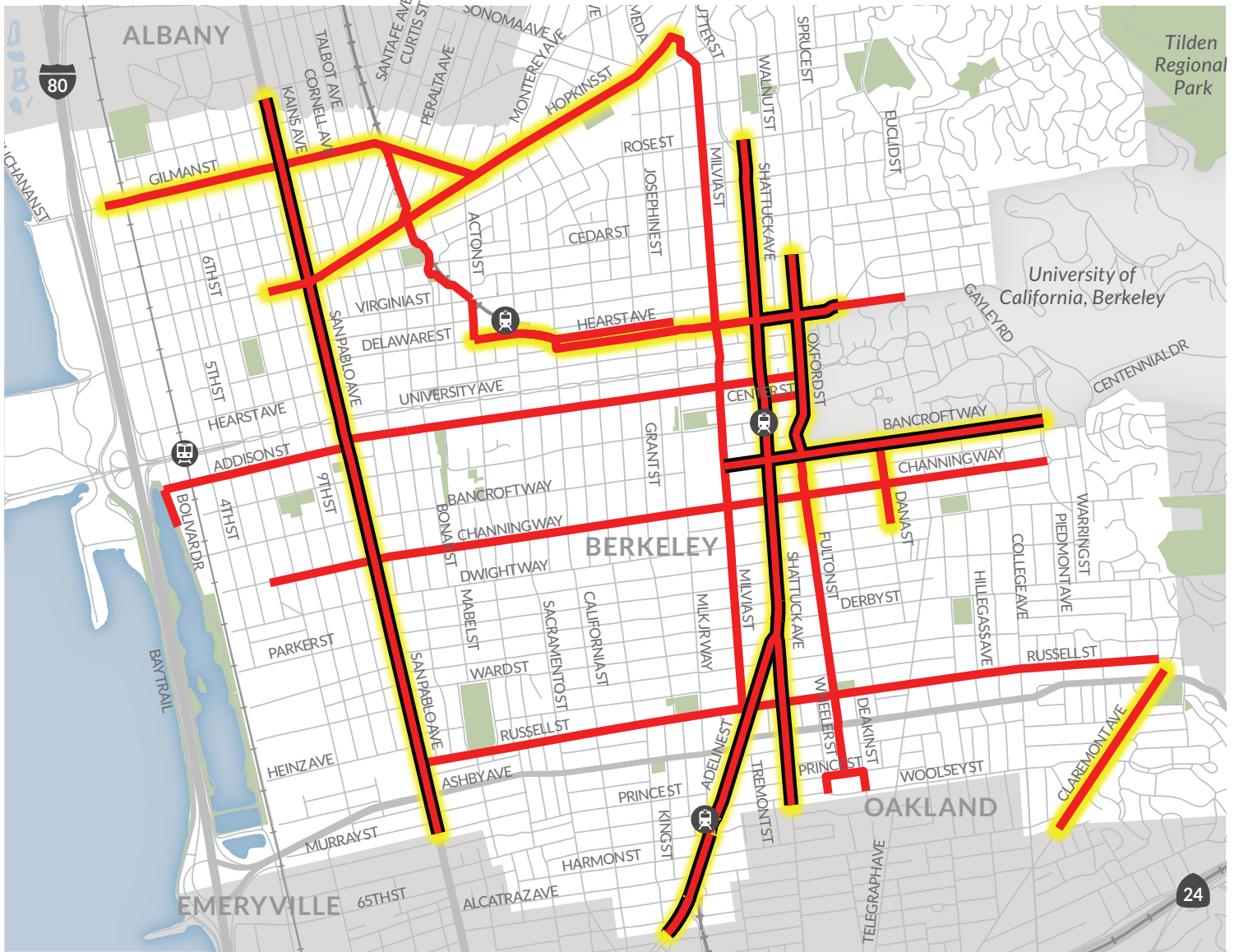
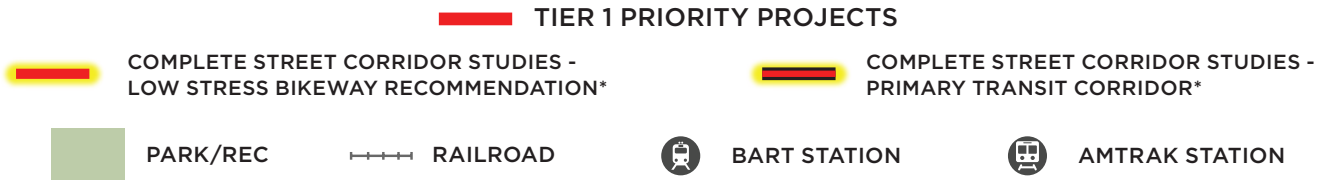


FIGURE 6-1: PROJECT PRIORITIZATION CORRIDORS



*Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Class IV Cycle Tracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without Complete Street Corridor Studies that will include a traffic study, environmental analysis, public process, and coordination with all affected State, County, and local transit agencies. Potential bikeways to be considered as part of future Complete Street Corridor Studies will be evaluated in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan, as well as recommendations from AC Transit's Major Corridors Study. For further information, see Section 5.7 of the Berkeley Bicycle Plan.

Table 6-3: Tier 1 Projects

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	NOTES	MILES	TOTAL COST ESTIMATE
9th St	RRFB	9th St	Cedar St	-		-	\$50,000
	Traffic Signal	Ashby Ave	9th St	-	Future trail project	-	\$500,000
Addison St	1A: Paved Path	Addison St	Curtis St	Browning St	Connector	0.06	\$201,500
	3C: Sharrows	Bolivar Dr	Aquatic Park Path	Addison St		0.12	\$2,800
	3E: Bike Boulevard	Addison St	Bolivar Dr	Oxford St	Class I Path between Curtis St and Browning St	1.96	\$98,000
	Cycletrack Crossing	Addison St	San Pablo Ave			-	\$60,000
	PHB	Addison St	Sacramento St	-		-	\$250,000
	RRFB + Median	Addison St	MLK Jr Way	-		-	\$70,000
	RRFB + Median	Addison St	Oxford St	-		-	\$70,000
	RRFB + Median	Addison St	6th St	-		-	\$70,000
	Traffic Circle	Addison St	7th St	-		-	\$50,000
	Traffic Circle	Addison St	5th St	-		-	\$50,000
	Traffic Diverter	Addison St	Grant St	-		-	\$50,000
Traffic Diverter	Addison St	10th St	-		-	\$50,000	
Adeline St	Study Cycletrack (4)	Adeline St	King St	Shattuck Ave	Complete Street Corridor Study	0.99	\$710,800
Alcatraz Ave	RRFB + Median	Alcatraz Ave	King St	-		-	\$70,000
California St	RRFB	Dwight St	California St	-		-	\$50,000
	RRFB + Median	Ashby Ave	California St	-		-	\$70,000
Camelia St	PHB	San Pablo Ave	Camelia St	-		-	\$250,000
	RRFB + Median	Cornell Ave	Hopkins St	-		-	\$70,000
Channing Wy	2B: Upgraded Bike Lane	Channing Way	MLK Jr Way	Piedmont Ave		1.13	\$204,100
	PHB	Channing Way	San Pablo Ave	-		-	\$250,000
	PHB	Channing Way	Sacramento St	-		-	\$250,000
	Protected Intersection	Channing Way	Shattuck Ave	-		-	\$650,000
	Protected Intersection	Channing Way	Telegraph Ave	-		-	\$650,000

Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Class IV Cycle Tracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without these Complete Street Corridor Studies that will include a traffic study, environmental analysis, public process, and coordination with all affected State, County, and local transit agencies. Potential bikeways to be considered as part of future Complete Street Corridor Studies will be evaluated in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan. For further information, see Section 5.7 of the Berkeley Bicycle Plan.

Table 6-3: Tier 1 Projects Continued

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	NOTES	MILES	TOTAL COST ESTIMATE
Channing Wy	RRFB + Median	Channing Wy	6th St	-		-	\$70,000
	Traffic Circle	Channing Wy	7th St	-		-	\$50,000
	Traffic Circle	Channing Wy	Browning St	-		-	\$50,000
	Traffic Circle	9th St	Channing Wy	-		-	\$50,000
	Traffic Circle	Bonar St	Channing Wy	-		-	\$50,000
	Traffic Circle	California St	Channing Wy	-		-	\$50,000
	Traffic Circle	Channing Wy	Dana St	-		-	\$50,000
	Traffic Circle	Channing Wy	Ellsworth St	-		-	\$50,000
	Traffic Circle	Channing Wy	Fulton St	-		-	\$50,000
	Traffic Diverter	Channing Wy	10th St	-		-	\$50,000
	Traffic Diverter	Channing Wy	Curtis St	-		-	\$50,000
	Traffic Diverter	Channing Wy	Bowditch St	-		-	\$50,000
Claremont Ave	Study Cycletrack (4)	Claremont Ave	City Limits - South	Warring St	Complete Street Corridor Study	1.10	\$675,800
Dana St	Study Cycletrack (4)	Dana St	Bancroft Way	Dwight Way	Complete Street Corridor Study	0.25	\$195,100
Derby St	PHB	San Pablo Ave	Parker St			-	\$250,000
	PHB	Shattuck Ave	Derby St			-	\$250,000
	Traffic Diverter	Derby St	Fulton St			-	\$50,000
Fulton St, Bancroft Way, Hearst Ave	2A: Standard Bike Lane	Center St	Shattuck Ave	Oxford St		0.12	\$10,700
	3C: Sharrows	Hearst Ave	Arch St/Le Conte Ave	Euclid Ave	Climbing route	0.21	\$2,100
	3E: Bike Boulevard	Fulton St, Prince St, Deakin St, Wheeler St	Dwight Way	Woolsey St		0.98	\$49,200
	Study Cycletrack (4)	Bancroft Way	Milvia St	Piedmont Ave	Complete Street Corridor Study	1.00	\$607,200
	Study Cycletrack (4)	Fulton St, Oxford St	Dwight Way	Virginia St	Complete Street Corridor Study	0.89	\$726,700
	Study Cycletrack (4)	Hearst Ave	California St	Arch St/Le Conte Ave	Complete Street Corridor Study	0.91	\$659,300
	Cycletrack Crossing	Bancroft Way	Barrow Ln/ Bowditch St	-		-	\$60,000
	Protected Intersection	Hearst Ave	Shattuck Ave	-		-	\$650,000
	Protected Intersection	Hearst Ave	Oxford St	-		-	\$650,000
	Protected Intersection	Hearst Ave	Arch St/Le Conte Ave	-		-	\$650,000

Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Class IV Cycle Tracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without these Complete Street Corridor Studies that will include a traffic study, environmental analysis, public process, and coordination with all affected State, County, and local transit agencies. Potential bikeways to be considered as part of future Complete Street Corridor Studies will be evaluated in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan. For further information, see Section 5.7 of the Berkeley Bicycle Plan.

Table 6-3: Tier 1 Projects Continued

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	NOTES	MILES	TOTAL COST ESTIMATE
Fulton St, Bancroft Way, Hearst Ave	Protected Intersection	Fulton St	Bancroft Way	-		-	\$650,000
	Protected Intersection	Bancroft Way	Telegraph Ave	-		-	\$650,000
	Protected Intersection	Fulton St	Dwight Way	-		-	\$650,000
	Traffic Circle	Fulton St	Parker St	-		-	\$50,000
	Traffic Circle	Fulton St	Oregon St	-		-	\$50,000
	Traffic Circle	Prince St	Wheeler St	-		-	\$50,000
	Traffic Circle	Prince St	Deakin St	-		-	\$50,000
Hillegass Ave	PHB	Ashby Ave	Hillegass Ave	-		-	\$250,000
	RRFB + Median	Dwight Way	Hillegass Ave/ Bowditch St	-		-	\$70,000
	Traffic Circle	Hillegass Ave	Russell St	-		-	\$50,000
Hopkins St	Study Cycletrack (4)	Hopkins St	9th St	Milvia St	Complete Street Corridor Study	1.50	\$1,014,100
	Study Cycletrack (4)	Gilman St	2nd St	Hopkins St	Complete Street Corridor Study	1.19	\$926,800
Milvia St	4: Two-Way Cycletrack	Milvia St	Hearst Ave	Blake St		0.75	\$451,500
	Protected Intersection	University Ave	Milvia St	-		-	\$650,000
	RRFB	Milvia St	Rose St	-		-	\$50,000
	RRFB	Milvia St	Hopkins St	-		-	\$50,000
	Traffic Circle	Milvia St	Oregon St	-		-	\$50,000
	Traffic Circle	Milvia St	Parker St	-		-	\$50,000
Ohlone Greenway	1A: Paved Path	Ohlone Greenway	City Limits - North	Peralta Ave	Off-street	0.34	\$1,190,000
	1A: Paved Path	Ohlone Greenway	Hopkins St	Virginia St	Off-street	0.36	\$1,276,900
	1A: Paved Path	Ohlone Greenway	Sacramento St	MLK Jr Way	Off-street	0.50	\$1,742,000
	3E: Bike Boulevard	Acton St	Delaware St	Virginia St		0.13	\$6,300
	Study Cycletrack (4)	Delaware St	Acton St	Sacramento St	Complete Street Corridor Study	0.13	\$101,800
	Study Cycletrack (4)	Peralta Ave	Hopkins St	Ohlone Greenway		0.05	\$30,000
	Protected Intersection	Delaware St	Sacramento St	-		-	\$650,000
Raised Intersection	Ohlone Greenway	Gilman St				\$125,000	

Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Class IV Cycle Tracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without these Complete Street Corridor Studies that will include a traffic study, environmental analysis, public process, and coordination with all affected State, County, and local transit agencies. Potential bikeways to be considered as part of future Complete Street Corridor Studies will be evaluated in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan. For further information, see Section 5.7 of the Berkeley Bicycle Plan.

Table 6-3: Tier 1 Projects Continued

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	NOTES	MILES	TOTAL COST ESTIMATE
Ohlone Greenway	RRFB + Median + Raised	Ohlone Greenway	Santa Fe				\$85,000
	RRFB + Median + Raised	Ohlone Greenway	Hopkins St				\$85,000
	RRFB + Median + Raised	Ohlone Greenway	Rose St				\$85,000
	RRFB + Median + Raised	Ohlone Greenway	Cedar St				\$85,000
	RRFB + Median + Raised	Ohlone Greenway	Franklin St				\$85,000
	RRFB + Median + Raised	Ohlone Greenway	Peralta				\$85,000
Russell St	Cycletrack Crossing	San Pablo Ave	Heinz Ave/ Russell St	-	Short term - Sidewalk	-	\$60,000
	PHB	Russell St	Sacramento St	-		-	\$250,000
	PHB	Russell St	Adeline St	-		-	\$250,000
	RRFB + Median	Russell St	Shattuck Ave	-		-	\$70,000
	RRFB + Median	Russell St	Claremont Ave	-		-	\$70,000
	Traffic Circle	Russell St	King St	-		-	\$50,000
	Traffic Signal	San Pablo Ave	Heinz Ave/ Russell St	-		-	\$500,000
San Pablo Ave	Study Cycletrack (4)	San Pablo Ave	City Limits - South	City Limits - North	Complete Street Corridor Study	2.35	\$1,434,100
Shattuck Ave	Study Cycletrack (4)	Shattuck Ave	City Limits - South	Rose St	Complete Street Corridor Study	2.08	\$147,100

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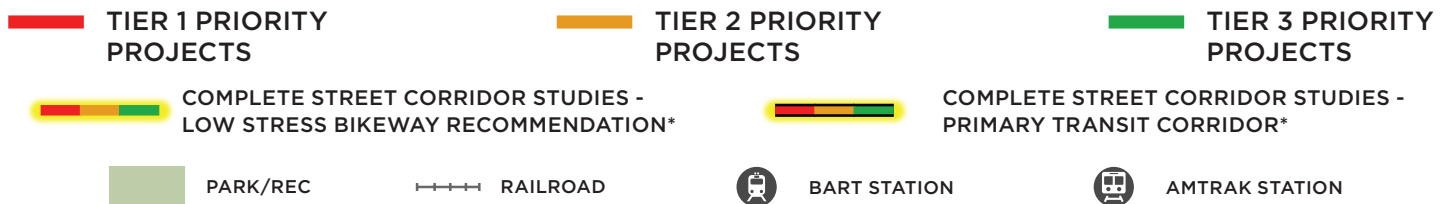
Table 6-3: Tier 1 Projects Continued

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	NOTES	MILES	TOTAL COST ESTIMATE
Virginia St	PHB	San Pablo Ave	Virginia St	-		-	\$250,000
	PHB	Sacramento St	Virginia St	-		-	\$250,000
	PHB	Shattuck Ave	Virginia St	-		-	\$250,000
	RRFB	Oxford St	Virginia St	-		-	\$50,000
	RRFB + Median	MLK Jr Way	Virginia St	-		-	\$70,000
Woolsey St	PHB	Adeline St	Woolsey St	-		-	\$250,000
	RRFB + Median	Woolsey St	Shattuck Ave	-		-	\$70,000
Total							\$26,318,900

Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Class IV Cycle Tracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without these Complete Street Corridor Studies that will include a traffic study, environmental analysis, public process, and coordination with all affected State, County, and local transit agencies. Potential bikeways to be considered as part of future Complete Street Corridor Studies will be evaluated in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan. For further information, see Section 5.7 of the Berkeley Bicycle Plan.



FIGURE 6-2: PROJECT PRIORITIZATION CORRIDORS



*Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Class IV Cycle Tracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without Complete Street Corridor Studies that will include a traffic study, environmental analysis, public process, and coordination with all affected State, County, and local transit agencies. Potential bikeways to be considered as part of future Complete Street Corridor Studies will be evaluated in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan, as well as recommendations from AC Transit's Major Corridors Study. For further information, see Section 5.7 of the Berkeley Bicycle Plan.

6.3 PILOT PROJECTS

“Pilot projects” are a way to test the impacts of changes to the transportation network by temporarily constructing improvements using non-permanent materials, in place for a specified, limited amount of time. These projects enable the City to study the real-world efficacy of such changes, often at a relatively modest cost due to the short-term materials used. Utilizing before and after data collection, they are monitored to understand benefits and tradeoffs, with the goal of adjusting the final design before committing to a more expensive permanent capital project.

Short-term demonstration projects, sometimes called tactical urbanism or temporary installations, are installed for one or two days in order to quickly evaluate a project and to gather feedback from the public. Demonstration projects usually use cones, temporary marking tape, moveable planters, and other non-permanent materials that can be easily be installed, modified, and removed, as needed. Short-term demonstration projects could include but are not limited to the following:

- Complex Bike Boulevard crossings:
 - » Addison Street/San Pablo Avenue
 - » Oregon Street/Heinz Avenue/San Pablo Avenue
 - » Hillegass Avenue/Bancroft Way

Longer-term pilot projects can be installed for a longer period of time prior to permanent implementation. This allows for extensive data collection and public input, especially for potentially contentious projects. Materials such as traffic paint, flexible traffic delineator posts, and moveable planters are often used during pilot projects and then may be later upgraded to permanent treatments such as thermoplastic, asphalt, concrete, and rigid bollards. Long-term pilot projects could include but are not limited to the following:

- Southside Pilot Project (in partnership with AC Transit), including bikeway, pedestrian, and transit improvements:
 - » Telegraph Avenue from Bancroft Way to Dwight Way
 - » Bancroft Way from Piedmont Avenue to Milvia Street
 - » Dana Street from Bancroft Way to Dwight Way
 - » Fulton Street from Bancroft Way to Dwight Way
- Downtown Milvia Street Bikeway including University Avenue intersection
- High-priority Bike Boulevard corridors, such as:
 - » Channing Way
 - » Milvia Street
 - » Addison Street
 - » King Street
 - » Russell Street

Both demonstration and long-term pilots should be approached from a Complete Streets design perspective, in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan. Pilot Projects should integrate improvements for all modes of transportation whenever possible, including consideration of people walking, biking, riding transit, and driving. For example, pilot projects

on Primary or Secondary Transit Routes should seek to test transit operations and access improvements whenever possible, utilizing the latest national design best practices, such as the National Association of City Transportation Officials (NACTO) Transit Street Design Guide and Urban Street Design Guide. Local guidance, such as the forthcoming AC Transit Design Standards and Guidelines Manual for Safe and Efficient Multimodal Transit Stops and Corridors will also be consulted.

6.4 CAPITAL COST ESTIMATE ASSUMPTIONS

Table 6-4 gives the 2016 planning level cost assumptions used to determine project cost estimates. Unit costs are typical or average costs in the Bay Area. While they reflect typical costs, unit costs do not consider project-specific factors such as right-of-way acquisition, intensive grading, landscaping, or other location-specific factors that may increase actual costs. For some segments, project costs may be significantly greater.

Table 6-4: Planning-Level Cost Estimates

TREATMENT	UNIT	COST ESTIMATE
Bicycle Boulevard	Mile	\$50,000
Sharrow Marking*	Each	\$350
Paved Path	Mile	\$3,500,000
Two-Way Cycletrack	Mile	\$600,000
Standard Class II Bike Lanes	Mile	\$90,000
Upgraded Bike Lanes	Mile	\$180,000
2-Way Cycletrack Connector	Intersection	\$60,000
RRFB	Intersection	\$50,000
RRFB + Median	Intersection	\$70,000
RRFB + Median + Raised Crosswalk	Intersection	\$85,000
Raised Intersection	Intersection	\$125,000
Pedestrian Hybrid Beacon Crossing	Each	\$250,000
Traffic Signal	Intersection	\$500,000
Protected Intersection	Each	\$650,000
Traffic Circle/Diverter	Each	\$50,000
Bike Station	Each	\$1,500,000

*Assume 2 sharrow markings per intersection

6.5 MAINTENANCE COSTS

Maintenance costs are important to factor in during the annual budgeting process. **Table 6-5** shows the estimated total annual costs of maintaining the bikeway facility types discussed in this Plan.

Table 6-5: Total Annual Maintenance Costs

FACILITY TYPE	COST PER MILE PER YEAR	PROPOSED LENGTH (MILES)	TOTAL ANNUAL COST	NOTES
Class I Shared-Use Path	\$8,500	1.5	\$12,750	Lighting, debris cleanup, and removal of vegetation overgrowth
Class II Bicycle Lanes (two sides)	\$1,500	3.1	\$4,650	Repainting lane stripes and stencils; sign replacement as needed
Class III Bicycle Routes (two sides)	\$1,000	26.3	\$26,300	Sign and shared-lane stencil replacement as needed
Class IV Separated Bikeways (two sides)	\$4,000	18.4	\$73,600	Debris removal; repainting stripes and stencils; sign replacement; replacing damaged barriers
Total		49.3	\$117,300	

6.6 PLAN IMPLEMENTATION AND STAFFING COSTS

Capital project costs only capture a portion of the resources needed to fully implement this plan. In addition to base capital costs, contingencies are added to capture unanticipated increases in the cost of project materials and/or labor. The City will need to utilize a combination of staff and consultant resources for project delivery phases that include Planning (conceptual project development and funding); Preliminary Engineering (environmental clearance and design); Final Design; and Construction Management (contractor oversight, inspection, and invoicing). **Table 6-6** provides a planning-level estimate of these “soft costs” associated with delivering Tier 1, 2, and 3 projects.

Table 6-6: Total Planning-Level Implementation Cost Estimate

TIER	YEARS	CAPITAL COST	CAPITAL CONTINGENCY (10%)	CAPITAL TOTAL
Tier 1	2016-2025	\$26,318,900	\$2,631,890	\$28,950,790
Tier 2	2025-2035	\$4,658,400	\$465,840	\$5,124,240
Tier 3	2025-2035	\$3,493,800	\$349,380	\$3,843,180
Totals		\$34,471,100		\$37,918,210

Table continues below

TIER	PLANNING (25%)	PRELIMINARY ENGINEERING (25%)	CONSTRUCTION MANAGEMENT (15%)	TOTAL “SOFT COSTS”	TOTAL COST ESTIMATE
Tier 1	\$7,237,700	\$7,237,700	\$4,342,600	\$18,818,000	\$47,768,800
Tier 2	\$1,281,100	\$1,281,100	\$768,600	\$3,330,800	\$8,455,000
Tier 3	\$960,800	\$960,800	\$576,500	\$2,498,100	\$6,341,300
Totals				\$24,646,900	\$62,565,100

6.7 PROJECT RECOMMENDATIONS

This Plan recommends nearly \$34.5 million in infrastructure recommendations to help Berkeley achieve its vision of becoming a model bicycle-friendly city. **Table 6-7** shows the mileage or count along with total cost estimate by type of recommendation. **Appendix E: Project Recommendation Tables and Prioritization** provides the full project lists and their locations.

Complete Street Corridor Studies

As defined by the Berkeley Complete Streets Policy, “Complete Streets” describes a comprehensive, integrated transportation network for all users. Providing a complete network does not necessarily mean that every street will provide dedicated facilities for all transportation modes, but rather that the

Table 6-7: Summary of Project Recommendations and Cost Estimates

TYPE	MILEAGE/COUNT	COST ESTIMATE
Class 1A: Paved Path	1.5 miles	\$5,285,700
Class 2A: Standard Bike Lane	0.1 miles	\$10,700
Class 2B: Upgraded Bike Lane	3.0 miles	\$541,500
Class 3C: Sharrows	13.9 miles	\$71,600
Class 3E: Bicycle Boulevard	12.4 miles	\$621,900
Class 4: Cycletrack	18.4 miles	\$9,903,300
Complete Street Corridor Interim Treatments	17.0 miles	\$1,181,400
Two-Way Cycletrack Crossing Connector	4 ct.	\$240,000
Pedestrian Hybrid Beacon (PHB)	16 ct.	\$4,000,000
Protected Intersection	10 ct.	\$6,500,000
Raised Intersection	1 ct.	\$125,000
RRFB	5 ct.	\$250,000
RRFB + Median	14 ct.	\$980,000
RRFB + Median + Raised Crosswalk	6 ct.	\$510,000
Traffic Circle	42 ct.	\$2,100,000
Traffic Diverter	13 ct.	\$650,000
Traffic Signal	3 ct.	\$1,500,000
Total	66.3 miles/114 ct	\$34,471,100

transportation network will provide convenient, safe, and connected routes for all modes of transportation within and across the City. For the purposes of bikeway planning, the City of Berkeley considers both the major/collector street and parallel streets part of a Complete Street Corridor; potential bikeways on both the major/collector street bikeway and on parallel streets should be evaluated as part of a Complete Street Corridor Study. Of the major and collector streets shown on **Figure 6-1** and **Figure 6-2** as requiring a Class IV Cycletrack to meet LTS 1 or 2, most of them will require further study in order to evaluate their suitability for this treatment and impacts on other modes of transportation. These major and collector streets provide access to local Berkeley businesses or opportunities for direct cross-town or interjurisdictional travel not duplicated by a parallel street. They currently serve multiple modes of transportation, requiring further consideration above and beyond that of bicycle travel. These streets are therefore labeled as “Complete Street Corridor Studies” on the map figures.

Class IV Cycle Tracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without these Complete Street Corridor Studies that will include a traffic study, environmental analysis, public process, and coordination with all affected State, County, and local transit agencies. Potential bikeways to be considered

as part of future Complete Street Corridor Studies will be evaluated in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan. Studies to consider the inclusion of bikeways will be coordinated with proposed improvements to transit performance on Primary Transit Routes, such as bus boarding islands, transit-only lanes, transit signal priority/queue jump lanes, far-side bus stop relocations, and other improvements as described in the AC Transit Major Corridor Study. In addition, these studies should approach Secondary Transit Routes as opportunities for transit improvements, such as bus stop optimization and relocation, among other potential improvements. At the conclusion of the Complete Streets Corridor Study process, design alternatives which have a significant negative effect on transit on Primary Transit Routes will not be recommended. Criteria to define what constitutes a significant negative effect on transit will be developed and applied during the Study process for each corridor. Example criteria for evaluating transit impacts are provided in Section 5.7 of this Plan. Consideration of how to allocate limited public right-of-way among various travel modes will be made consistent with Alameda County Transportation Commission modal priorities and the City of Berkeley General Plan.

These corridors may have interim treatments installed while the corridor study and final recommended design are being completed. Interim treatments are those that do not require a full Complete Streets Corridor Study. Interim and phased treatments may still require traffic study, interagency coordination, and public process if they impact roadway capacity, parking, or transit operations. Interim and phased treatments should not negatively impact existing transit operations; mitigations should accompany interim treatments to ensure no degradation of transit service. For example, Shared Roadway Bicycle Markings may be installed, or existing bike lanes may first be colored green, then later converted into a Class IV Cycletrack if feasible without

negatively impacting existing or planned transit operations on Primary or Secondary Transit Routes. **Table 6-8** shows the extent of the Complete Street Corridor Study projects and provides the recommended interim treatments. Some corridors list multiple interim treatment types that would be implemented along different segments of the same corridor. **Table E-7** in **Appendix E** presents a more detailed breakdown of the recommended Complete Street Corridor Studies and interim treatments.

For more information about future Complete Street Corridor Studies, see **Section 5.7**, **Appendix E**, and **Appendix F**.

Table 6-8: Complete Street Corridor Studies

LOCATION	CROSS ST A	CROSS ST B	RECOMMENDED STUDY	INTERIM TREATMENT	MILES	TOTAL COST ESTIMATE
4th St	Virginia St	University Ave	2B: Upgraded Bike Lane	3C: Sharrows	0.31	\$58,500
Adeline St	King St	Shattuck Ave	Study Cycletrack (4)	2B: Upgraded Bike Lane, 3C: Sharrows	0.99	\$710,800
Bancroft Way	Milvia St	Piedmont Ave	Study Cycletrack (4)	3C: Sharrows	1.00	\$607,200
Claremont Ave	City Limits - South	Warring St	Study Cycletrack (4)	3C: Sharrows	1.10	\$675,800
Colusa Ave	Solano Ave	Tacoma Ave	Study Cycletrack (4)	2B: Upgraded Bike Lane	0.13	\$104,800
Dana St	Bancroft Way	Dwight Way	Study Cycletrack (4)	2B: Upgraded Bike Lane	0.25	\$195,100
Delaware St	Acton St	Sacramento St	Study Cycletrack (4)	2B: Upgraded Bike Lane	0.13	\$101,800
Euclid Ave	Virginia St	Hearst Ave	2B: Upgraded Bike Lane	3C: Sharrows	0.19	\$36,800
Fulton St, Oxford St	Dwight Way	Virginia St	Study Cycletrack (4)	2B: Upgraded Bike Lane, 3C: Sharrows, Study Cycletrack (4)	0.89	\$726,700
Gilman St	2nd St	Hopkins St	Study Cycletrack (4)	2B: Upgraded Bike Lane	1.19	\$926,800
Hearst Ave	California St	Arch St/Le Conte Ave	Study Cycletrack (4)	2B: Upgraded Bike Lane	0.91	\$659,300
Hopkins St	9th St	Milvia St	Study Cycletrack (4)	2B: Upgraded Bike Lane, 3C: Sharrows	1.50	\$1,014,100
Piedmont Ave, Warring St	Bancroft Way	Derby St	Study Cycletrack (4)	3C: Sharrows	0.54	\$327,000
San Pablo Ave	City Limits - South	City Limits - North	Study Cycletrack (4)	3C: Sharrows	2.35	\$1,434,100
Shattuck Ave	City Limits - South	Rose St	Study Cycletrack (4)	3C: Sharrows	2.08	\$147,100
Solano Ave	City Limits - West	Northbrae Tunnel	Study Cycletrack (4)	3C: Sharrows	0.52	\$317,500
Telegraph Ave	Woolsey St	Bancroft Way	Study Cycletrack (4)	2B: Upgraded Bike Lane	1.09	\$851,100
The Alameda	Hopkins St	Solano Ave	Study Cycletrack (4)	2A: Standard Bike Lane	0.44	\$303,400
University Ave	Oxford St	4th St	Study Cycletrack (4)	3C: Sharrows	1.88	\$1,144,400
Total						\$10,342,300

Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Class IV Cycle Tracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without these Complete Street Corridor Studies that will include a traffic study, environmental analysis, public process, and coordination with all affected State, County, and local transit agencies. Potential bikeways to be considered as part of future Complete Street Corridor Studies will be evaluated in the context of the modal priorities established by the Berkeley General Plan Transportation Element and the Alameda County Transportation Commission Countywide Multimodal Arterial Plan. For further information, see Section 5.7 of the Berkeley Bicycle Plan.

