## Chapter 5

# IMPLEMENTATION

Implementation of the planned bikeway and pedestrian network is anticipated to occur in multiple ways:

- through active transportation projects pursued to implement this plan;
- in conjunction with adjacent land development projects as each jurisdiction requires those projects to construct roadway and sidewalk frontage improvements in accordance with jurisdiction standards and the planned facilities identified in this plan; and
- in conjunction with maintenance and capacity enhancement projects, such as slurry seals, pavement reconstruction, roadway widening, or sidewalk rehabilitation projects.

Active transportation projects will be implemented based upon the priorities identified in the next section. Implementation will require many years to complete; implementation of priority projects will be targeted for completion in the next five to ten years. Implementation of each project is dependent upon availability and acquisition of funding. Projects requiring land acquisition or utility relocation will require extra time to implement. Improvements associated with work on adjacent roadways or development of adjacent land uses will provide opportunities for implementation relatively easily or at lower cost than if implemented separately. In these cases, lower priority improvements may be implemented before higher-priority improvements, depending on the location of these land development and roadway projects. Implementation of each project is also dependent on detailed feasibility and design studies based on local conditions.

Completion of projects in this plan will be reported by jurisdiction staff to the city councils and board of supervisors and on each city's website. Fresno COG will update this plan periodically, to reflect changing conditions and needs and progress toward completion.

### **PRIORITIZATION**

The elements of these networks were prioritized as "High Priority" or "Other" (not high priority) for all jurisdictions except Fresno County based on several criteria:

- proximity to key destinations, including schools, parks, bus stops, and activity centers;
- collision locations;
- disadvantaged community indicators;
- public comment; and
- judgement of local jurisdiction staff.

Lists of projects with priorities are provided in Appendix D, Project Priorities and Cost Estimates.

#### **COSTS**

The estimated costs to implement each type of facility are provided in Appedndix D and summarized in Table 5-1. Summarized costs for each jurisdiction are provided in Chapters 6 to 17. On-street bike routes and bike lanes are the least expensive to construct per mile, while separated bikeways, sidewalks, and bike paths are most expensive to construct. If roads must be widened, utilities relocated, or land acquired to implement any of these facilities, costs will increase. However, many of these facilities may be implemented during development of adjacent land uses or in conjunction with other projects. Therefore, some of these costs will not be directly borne by the jurisdiction.

Project cost estimates are based on local unit cost estimates. These estimates were developed based on relevant project experience in the area. Assumptions for each bikeway type and details of these estimates are described in Appendix D. Note that these are high-level cost estimates, therefore more detailed study and design of individual project will be required to refine them.

*Table 5-1: Project Cost Estimates* 

Facility Type	Cost Per Mile	High Priority	Other	Total
Class I Bike Path	\$750,000	\$4,937,000	\$181,337,000	\$186,274,000
Class II Bike Lane	\$175,000	\$11,694,000	\$264,973,000	\$276,667,000
Class III Bike Route	\$8,000	\$117,000	\$353,000	\$470,000
Class IV Separated Bikeway	\$200,000	\$326,000	\$1,956,000	\$2,282,000
Sidewalk	\$343,000	\$4,150,000	\$27,320,000	\$31,470,000
Intersection Improvements		\$2,440,000	\$3,630,000	\$6,070,000
Overcrossings			\$3,200,000	\$3,200,000
Total		\$23,664,000	\$482,769,000	\$506,433,000

Source: Fehr & Peers, 2017

Unit costs for other equipment, including installation are presented in Table 5-2.

Table 5-2: Unit Costs for Other Equipment

Equipment Type	Cost
Bike Rack (each)	\$2,800
Wayfinding Signage (each)	\$750
Lighting (single street light)	\$12,000

Source: Fehr & Peers, 2017, Mark Thomas & Company, 2017

#### **FUNDING**

Federal, state, regional, county, and local organizations provide funding for pedestrian and bicycle projects and programs. The most recent federal surface transportation funding program, Fixing America's Surface Transportation Act (FAST), was signed into law in December 2015. FAST funding is distributed to federal surface transportation programs. Most of these resources are available through Caltrans and Fresno COG.

Senate Bill 1, The Road Repair and Accountability Act of 2017, was signed in April 2017. It will increase funding for the Active Transportation Program by \$100 million statewide and encourages complete streets improvements in a majority of its funding allocations for local roadways.

Measure C, administered by the Fresno County Transportation Authority, is another important source of funding. The measure is a half-cent sales tax aimed at improving the overall quality of Fresno County's transportation system. This Local Transportation Program can be used on pedestrian and bicycle facilities and trails. Funding is allocated to cities and the county based on population. Measure C funding will also be used to construct the Golden State Corridor bicycle and pedestrian facilities.

Table 5-3 summarizes the applicability of these and other various funding sources to projects, planning efforts, and programs proposed in this plan. Detailed descriptions of the grant funding sources are presented in Appendix E, Funding Sources. The most applicable funding sources for the improvements proposed by this plan are the Active Transportation Program, Highway Safety Improvement Program, Measure C, the Congestion Mitigation and Air Quality Improvement Program, and the Surface Transportation Block Grant Program. This appendix includes details about current programs that are used to fund existing scheduled projects and an assessment of upcoming programs as of August 2017. These details may change as state and local programs adapt to the new SB 1 funding program.

Table 5-3: Funding Sources

Funding Source	Class I Bicycle Paths	Class II Bicycle Lanes	Class III Bicycle Routes	Class IV Separated Bikeways	Pedestrian Projects	Other Projects	Planning and Programs
Congestion Mitigation and Air Quality Improvement Program (CMAQ)							
Surface Transportation Block Grant Program (STBGP)							
Highway Safety Improvement Program (HSIP) Grants			<b>—</b>				0
Caltrans Transportation Planning Grants	0	0	0	0	0	0	
Local Transportation Fund (LTF)							0
California State Parks Recreational Trails Program (RTP)		0	0	0	0	0	0
Land and Water Conservation Fund (LWCP)		0	0	0	0	0	0
Active Transportation Program (ATP)							
Transportation Development Act (TDA)							
Affordable Housing and Sustainable Communities Program (AHSC)	-	-		<u></u>	<u> </u>	<b>—</b>	
California Office of Traffic Safety Pedestrian and Bicycle Safety Grants	0	0	0	0	0	0	
FCTA Measure C							
SJVAPCD Bikeway Incentive Program				0	0	0	0

#### Notes:

1. indicates that funds may be used for this category; indicates that funds may not be used for this category, and indicates that funds may be used, though restrictions apply.

Source: Fehr & Peers, 2017



Mixed-use Path in Reedley