

2020 San Mateo Bicycle Master Plan

Sustainability and Infrastructure Commission

February 12, 2020



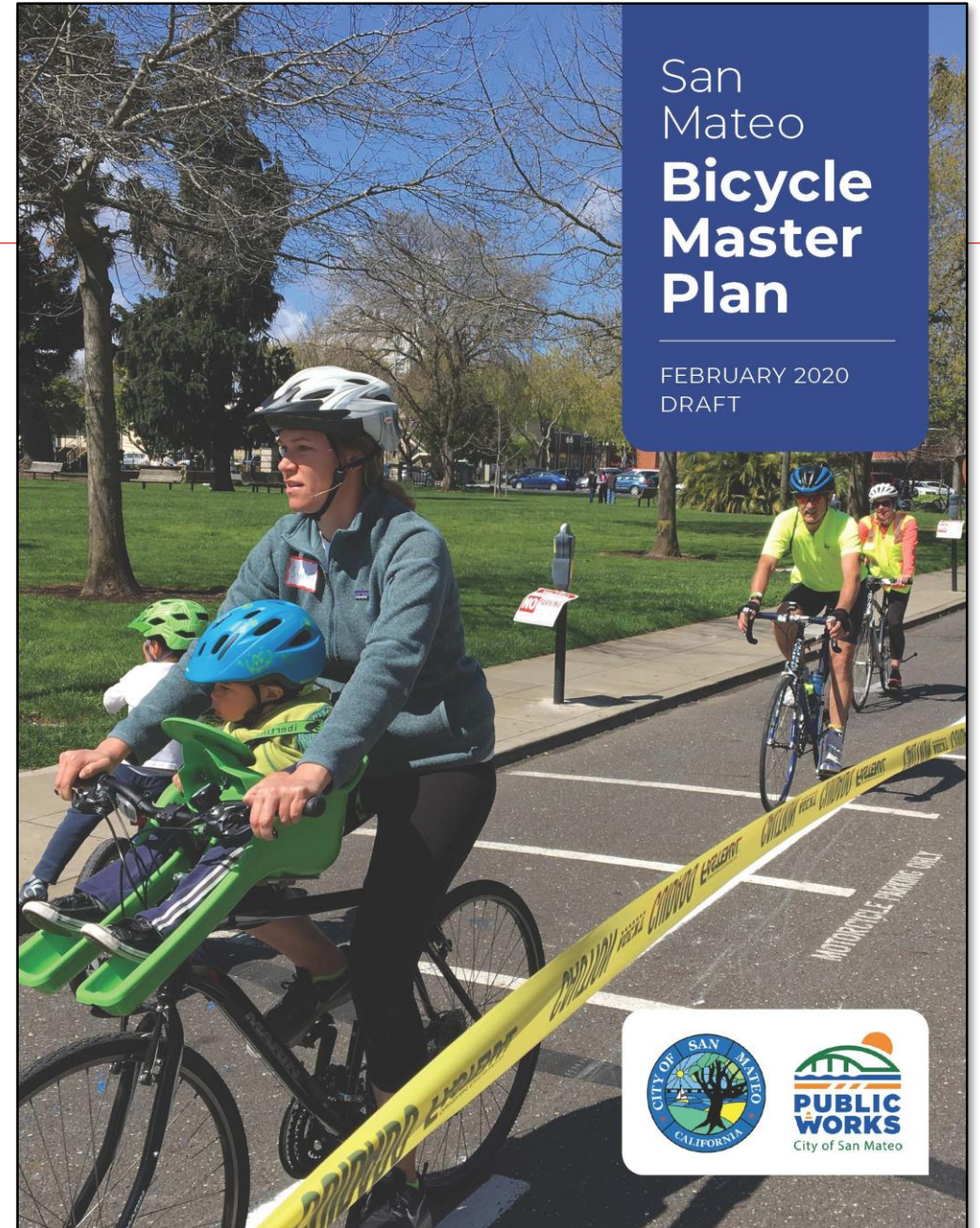
Agenda

- Since We Last Met...
 - Emerging Technology
 - Prioritized Project List
 - Project Cost Estimates
 - Implementation and Funding Strategy
- Progress on 2011 Plan Projects
- Next Steps
- Additional Funding Considerations



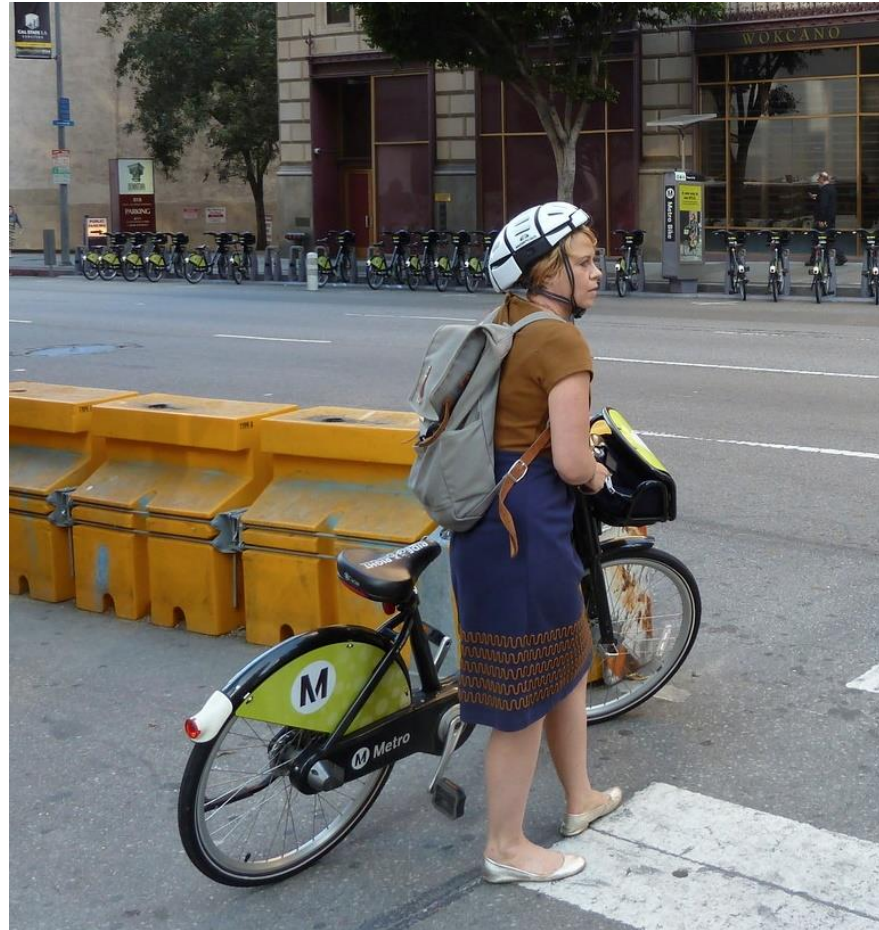
Since We Last Met...

- Completed the public comment period
- Incorporated input from:
 - Sustainability and Infrastructure Commission
 - Citizen Advisory Group
 - Open House attendees
 - The public
- Developed full Draft Plan



Emerging Technology

Throughout
Plan

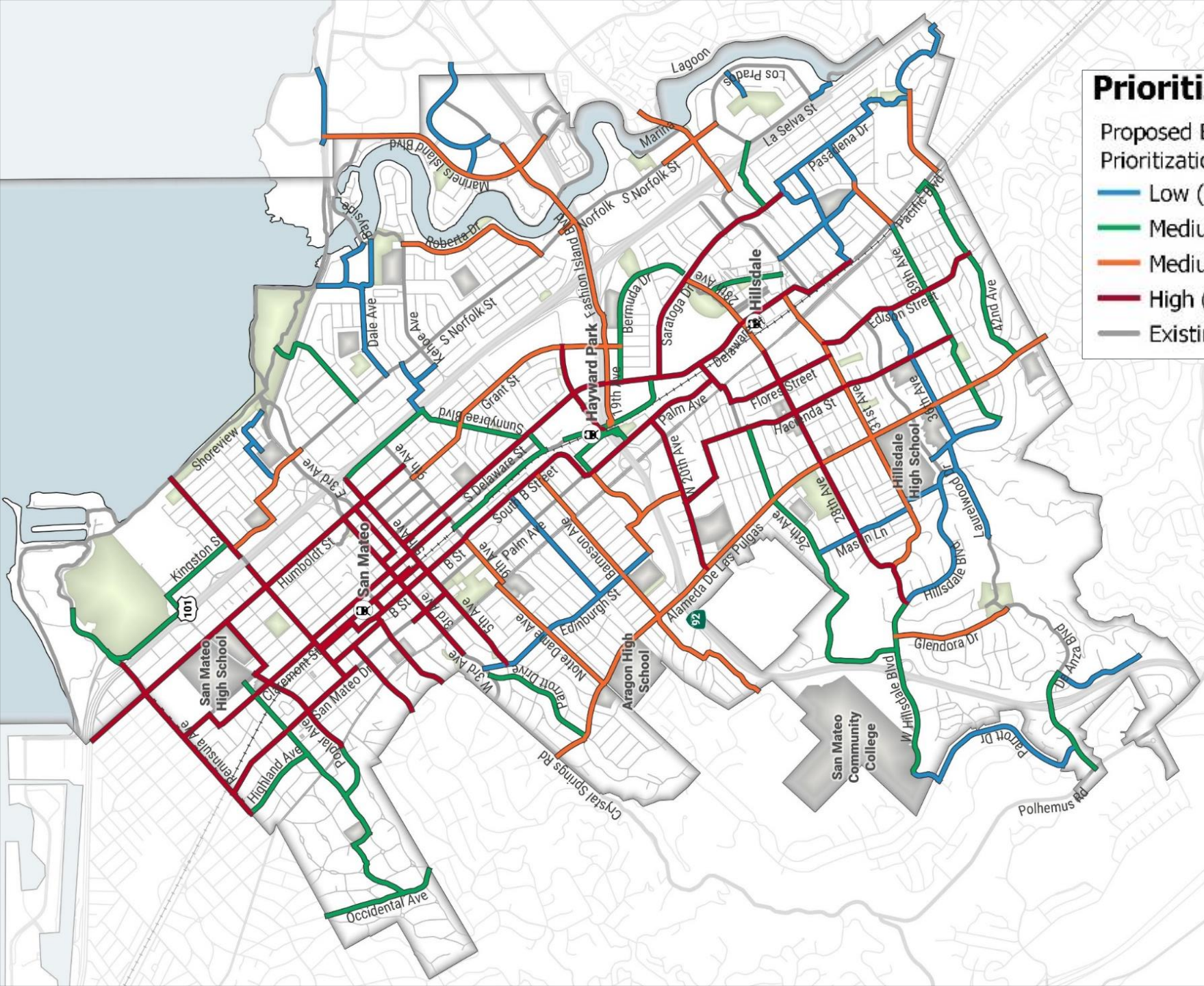


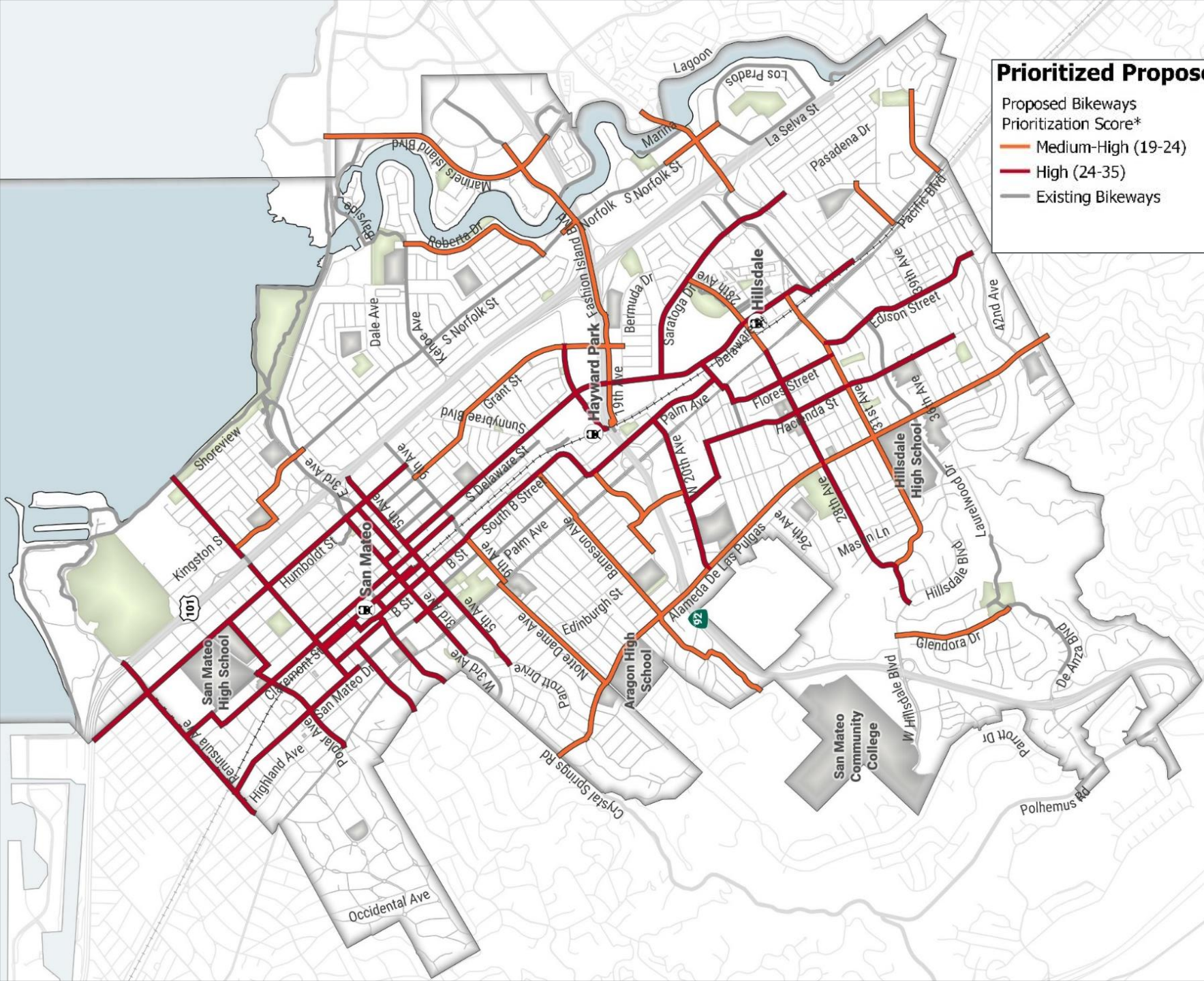
Prioritized Proposed Bicycle Network

Proposed Bikeways
Prioritization Score*

- Low (0-16)
- Medium-Low (16-19)
- Medium-High (19-24)
- High (24-35)
- Existing Bikeways

- Caltrain Stations
- Rail Lines
- Parks
- Schools
- Water





Prioritized Proposed Bicycle Network (Medium and High Priority)

Proposed Bikeways

Prioritization Score*

Medium-High (19-24)

High (24-35)

Existing Bikeways

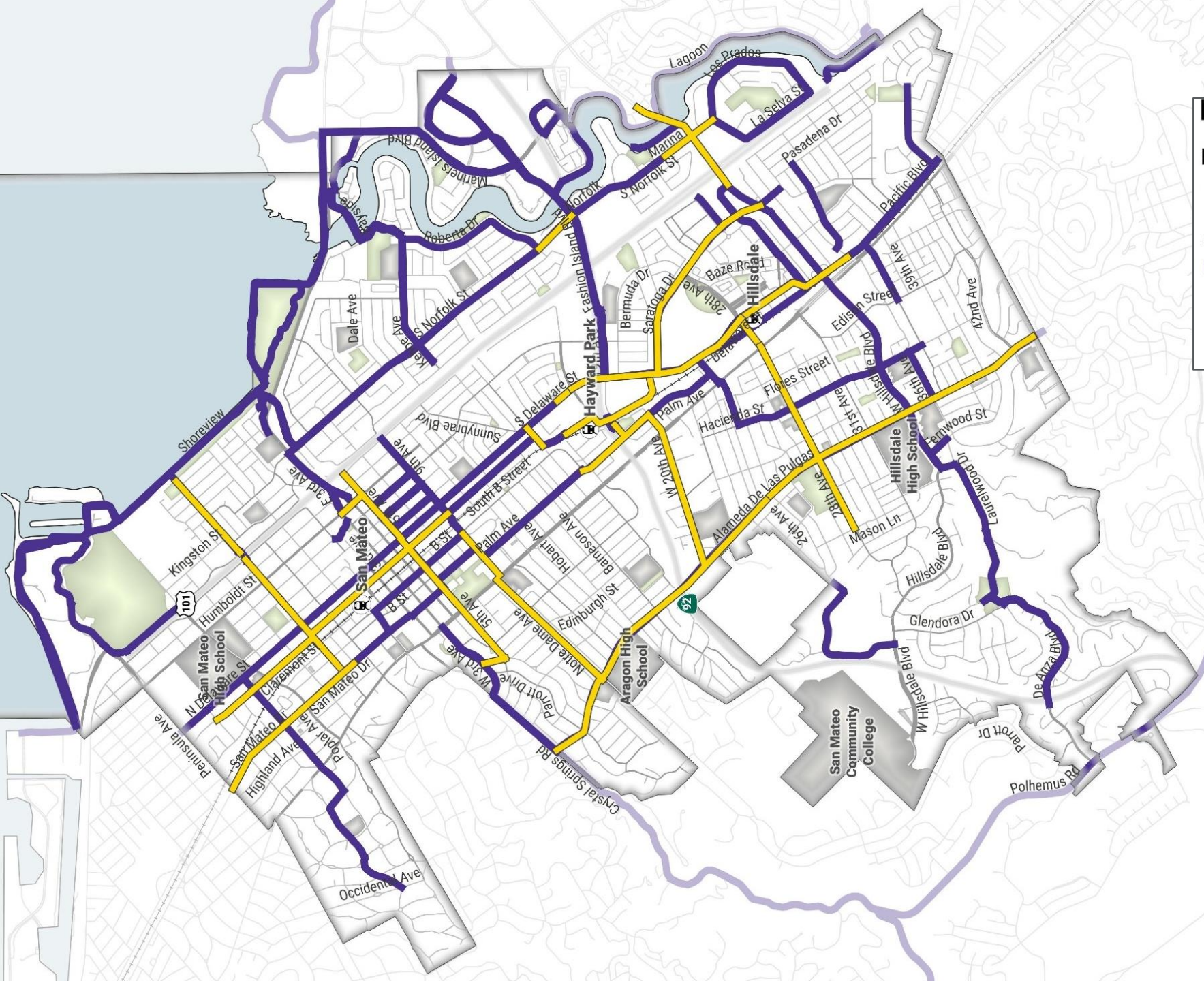
Caltrain Stations

Rail Lines

Parks

Schools

Water



Rapid Implementation Network

Facilities

Proposed

 Rapid Implementation Network

Existing



Other

 Caltrain Stations

 Rail Lines

 Parks

 Schools

 Water

Prioritized Project List

See
Chapter 6

Table 6.3: Prioritized Project List with Cost Estimates

Project Number	Street	Northern/ Western Limit	Southern/ Eastern Limit	Proposed Facility	Prioritization Score	Cost Estimate
High Priority Projects						
2	Peninsula Av	Highland Av	San Mateo Dr	Bike Lane	High	\$330,000 (Level 1 separated bike lanes)
	Peninsula Av	San Mateo Dr	Bayshore Bl	Separated BL		\$1,410,000 (Level 2 separated bike lanes)
3	Humboldt St	City Limit	Poplar Av	Bike Blvd	High	\$320,000
	Humboldt St	Poplar Av	9th Av	Bike Lane		
5	San Mateo Dr	City Limit	Catalpa St	Bike Lane	High	\$70,000
6	Poplar Av	El Camino Real	Delaware St	Bike Lane	High	\$130,000
	Delaware St	Poplar Av	Indian Av	Bike Lane		
	Indian Av	Delaware St	Humboldt St	Bike Blvd		
7	Delaware St	Peninsula Av	State St	Bike Lane	High	\$480,000
	State St	Delaware St	Claremont St	Bike Blvd		
	Claremont St	State St	9th Av	Bike Blvd		
8	Monte Diablo Av	San Mateo Dr	US-101	Bike Blvd	High	\$360,000
	Monte Diablo Av	US-101	Bay Trail	Bike Blvd		
9	Tilton Av	City Limit	Ellsworth Av	Bike Lane	High	\$30,000
12	Railroad Av (East)	Monte Diablo Av	4th Av	Bike Blvd	High	\$290,000
	Railroad Av (West)	3rd Av	4th Av	Bike Blvd		
	Railroad Av (West)	4th Av	5th Av	Shared Use Path		

Project Cost Estimates

See
Chapter 6

Table 6.2: Planning-Level Per-Mile Unit Cost Estimates

Bikeway Type	Project Cost Per Mile
Shared Use Path (Class I)	\$1,550,000
Separated Bike Lane (Class IV) – Level 2 (two-way bikeways with cast in place curb and landscaped buffer)	\$1,750,000
Separated Bike Lane (Class IV) - Level 1 (one-way bikeways with flexible delineators and striped buffer)	\$400,000
Buffered Bike Lane (Class II)	\$140,000
Standard Bike Lane (Class II)	\$88,000
Bicycle Boulevard (Class III)	\$310,000
Bike Route (Class III)	\$38,000

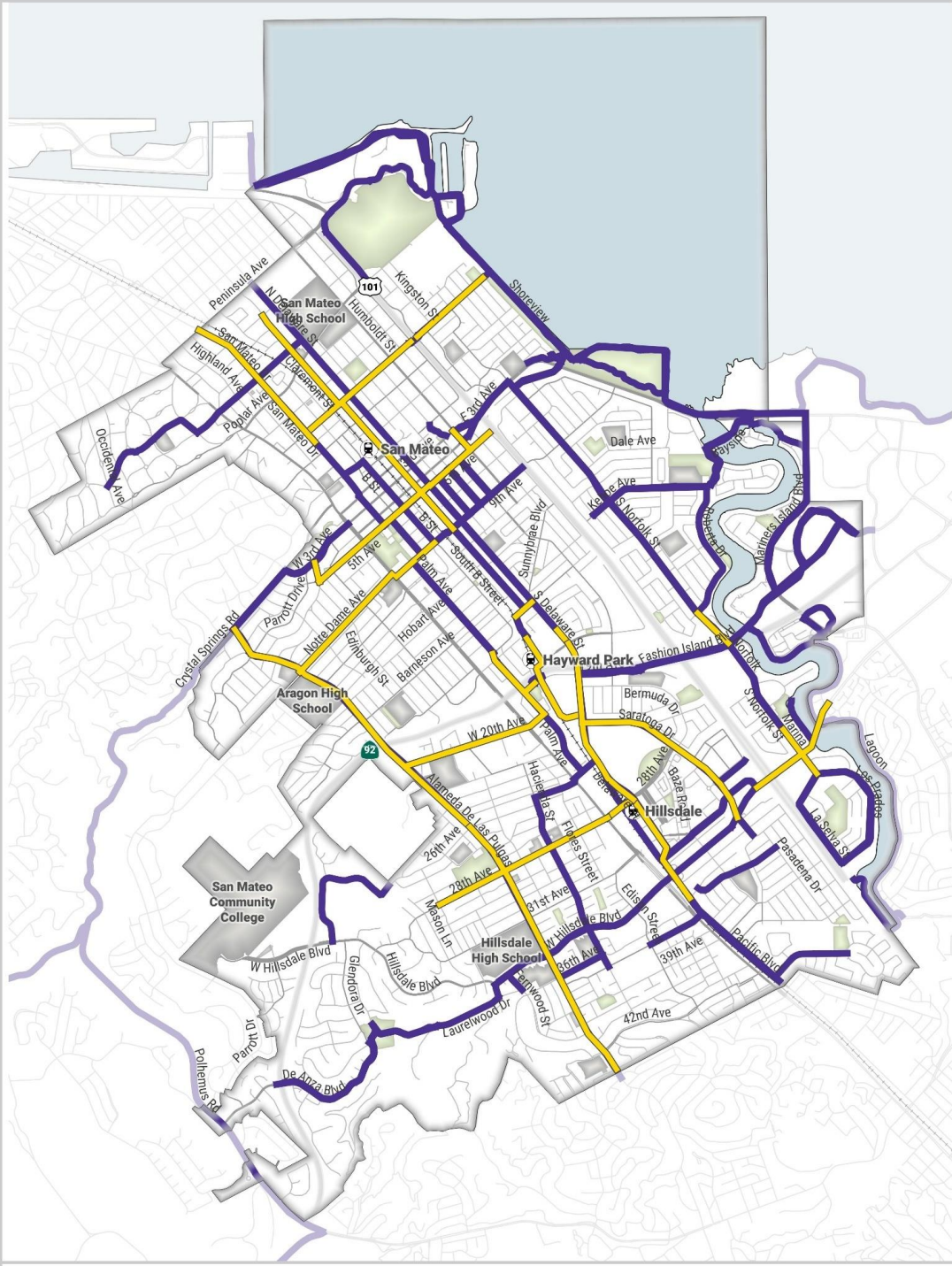
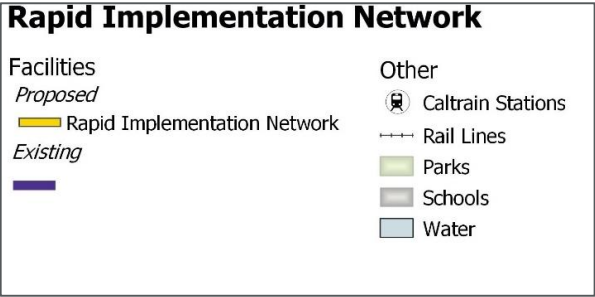


Cost Estimate
\$190,000
\$90,000
\$90,000
\$490,000
\$410,000
\$430,000 (Level 1 separated bike lanes) \$530,000 (Level 2 separated bike lanes)
\$640,000 (Level 1 separated bike lanes) \$1,820,000 (Level 2 separated bike lanes)
\$410,000 (Level 1 separated bike lanes) \$1,720,000 (Level 2 separated bike lanes)
\$430,000 (Level 1 separated bike lanes) \$740,000 (Level 2 separated bike lanes)

Rapid Implementation Network

Facility Type	Mileage	Cost Per Mile	Cost
Bicycle Boulevard	5.55	\$310,000	\$1,720,000
Bike Lane	4.73	\$ 88,000	\$420,000
Buffered Bike Lane	1.99	\$140,000	\$ 280,000
Separated Bike Lane*	2.47	\$400,000	\$990,000
Shared-Use Path	0.37	\$1,550,000	\$570,000
Total Mileage and Cost:	15.11		\$3,980,000

*assumes Level 1 quick-build configuration





The implementation of bicycle-related programs and policies in conjunction with a well-designed network can help San Mateo develop a strong bicycle culture and increase ridership among a variety of demographics. Programs and policies are also key components of improving roadway safety and comfort and ensuring that new infrastructure is well-planned and equitably distributed.

Chapter 5 provides a set of support programs and policies the City can use to meet Plan goals. Section 5.1 summarizes the City's existing bicycling-related programs and provides recommendations for additional programs and Section 5.2 lists policies that will help support the implementation of the bicycle projects and programs discussed throughout the Plan.

Support Programs

Bicycle-related programming is an important component of a welcoming, bicycle-friendly community. Bicycle-related programs can also help San Mateo achieve all five of the Plan's goals. A useful way to evaluate and recommend bicycle and micromobility support programs in a community is to consider whether they address the six Es of a bicycle-friendly community (see Figure 5.1). The City already has several engineering, encouragement, education, enforcement, and evaluation programs, however, there are many areas where the City could strengthen its efforts to further support bicycling and micromobility in the community. This chapter summarizes existing and recommended bicycle- and micromobility-related programming using the six Es as a framework.

Chapter 5: Support Programs and Policies

More than just roadway projects:

- Support Programs
 - Engineering
 - Encouragement
 - Education
 - Enforcement
 - Evaluation and Planning
 - Equity
- Policies

Implementation and Funding Strategy

See
Chapter 6

Implementation Strategy

An implementation strategy will assist the City in building out the identified projects and focusing financial and staff resources. This chapter describes a clear, concise implementation strategy that the City can use to build upon the momentum of this planning effort and to get projects on the ground quickly. The strategy includes:

- Rapid implementation strategies, including a Rapid Implementation Network map
- Planning-level cost estimates per unit length for recommended facilities; and
- Next step: Conceptual engineering designs

Rapid Implementation

The City recognizes the importance of constructing a well-connected, low-stress mobility network in the short term to provide safe, enjoyable travel for people of all ages and abilities to use bicycles, scooters, and other emerging technology. So that the City can begin the steps to implement this network immediately after Plan adoption, this chapter includes a Rapid Implementation Network map and rapid implementation strategies.

Rapid Implementation Strategies

Rapid implementation is an approach that focuses resources (such as City staff's and advocates' time and energy, community engagement, and funding) to deliver a full network of high-comfort facilities very quickly. This strategy has already been implemented by many cities in the U.S., including San Jose. Rapid implementation is an effective way to install bikeway projects for several reasons:

- "Good" is the focus of rapid implementation as opposed to "perfect." Quick-build designs focus on implementing flexible pilot projects that can be adjusted and optimized once the network is built out and operating.

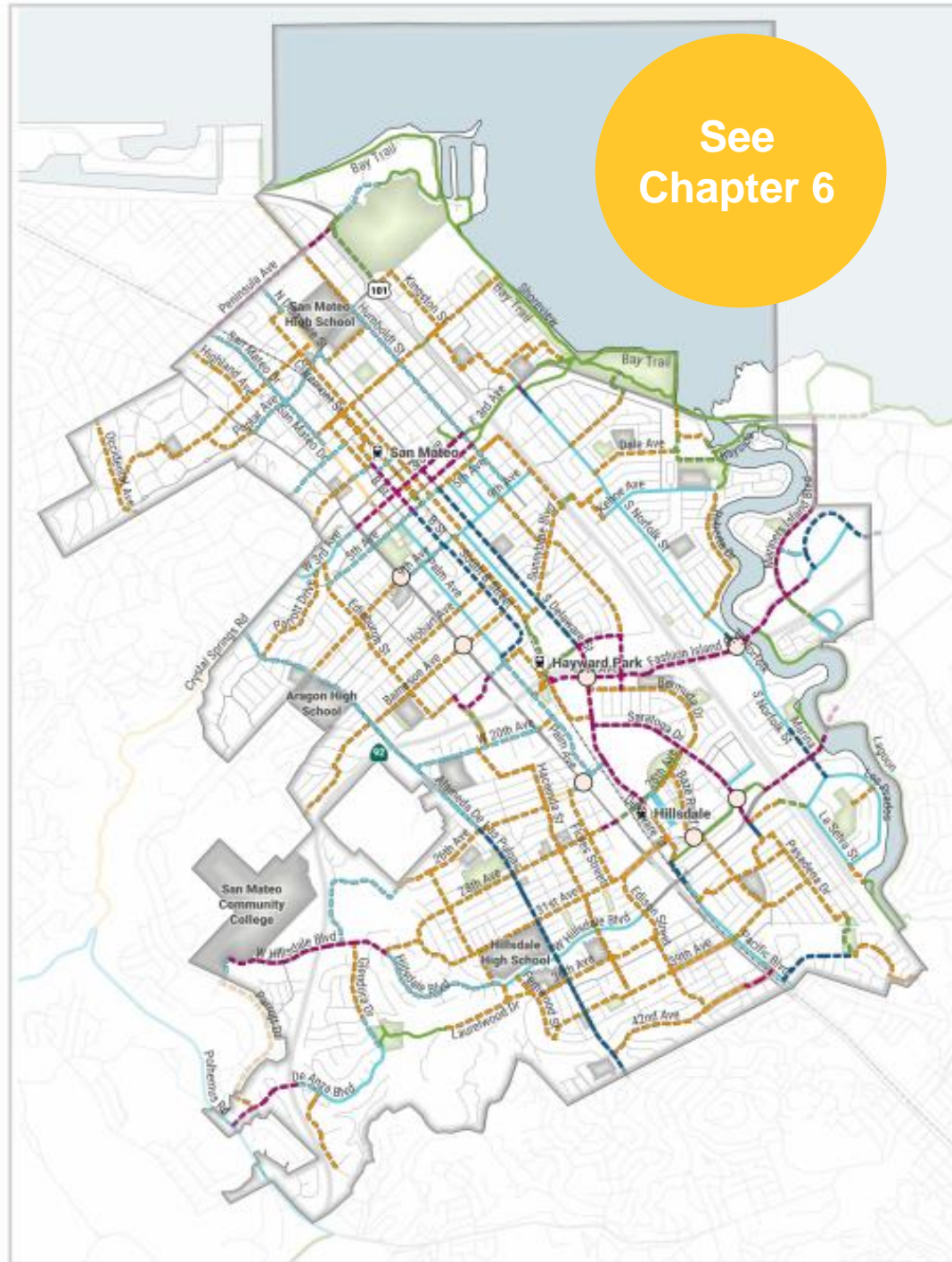
Funding Strategy

Cities can fund bicycle projects and programs in a variety of ways, and funding may come from all different levels of government, the private sector, and non-profits. Historically, the City of San Mateo has relied on grant funding or paving projects for implementation of the existing on-street bicycle network.

San Mateo County provides funding for active transportation projects via motor vehicle registration

intersection improvements, and end-of-trip facilities in a cost-effective manner.

Refer to Appendix G: Funding Sources for a summary of local, county, regional, state, and federal funding sources applicable to bicycle network projects and programs in San Mateo. Refer to Appendix H: Caltrans ATP Project Scoring Criteria for additional information on project scoring when applying to Caltrans grants.



Progress on 2011 Plan Projects

On the ground

- 17 of 26 high priority projects have either been implemented or are in progress

In 2020 Plan

- Many recommendations from the 2011 Plan have been included in the 2020 Plan, and some have been upgraded to more separated facilities



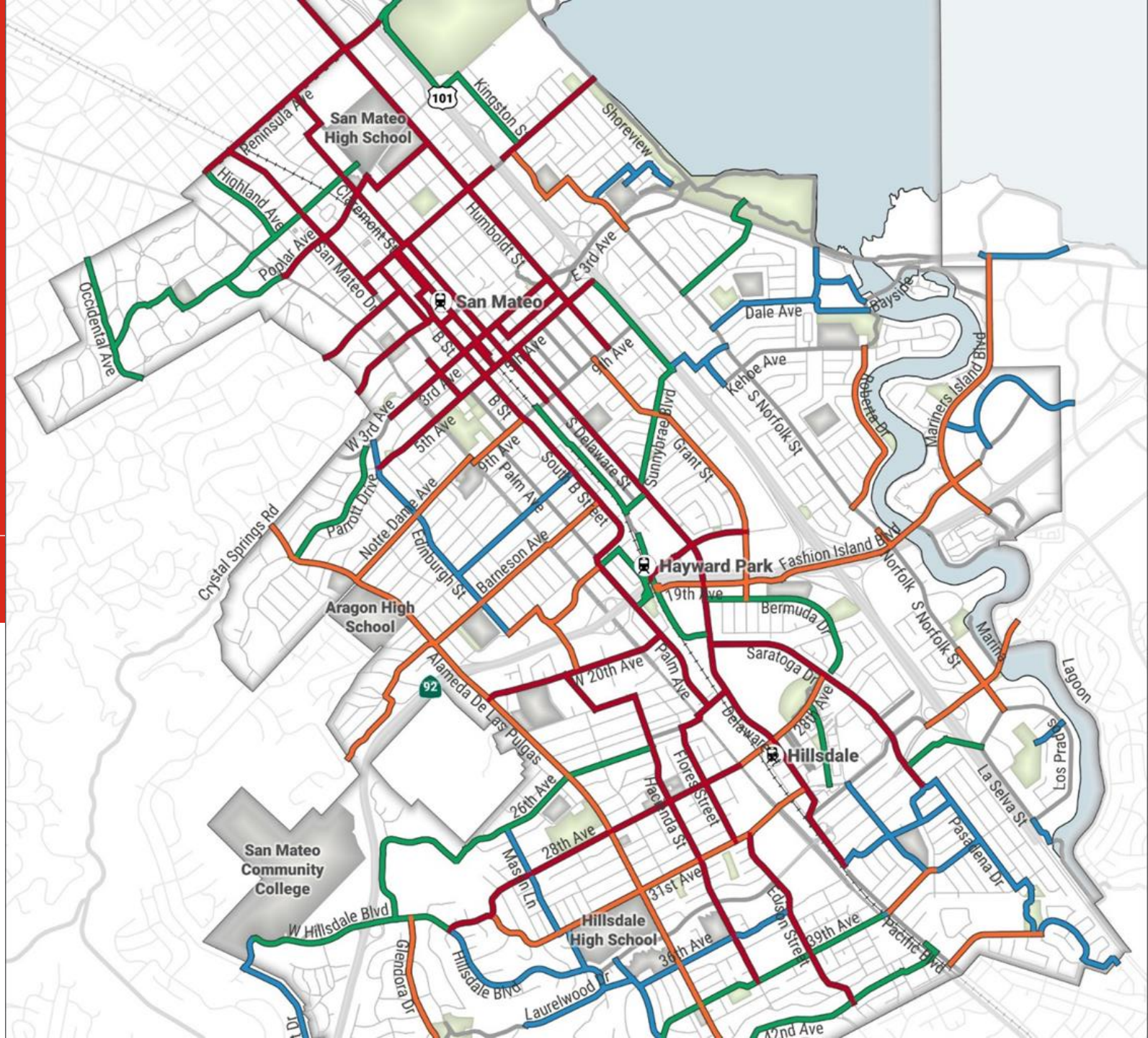
Next Steps

** Sustainability and Infrastructure Commission meetings*

TASKS	2018		2019				2020
	Fall	Winter	Spring	Summer	Fall	Winter	Early
Project Kick-off							
Community Outreach							
Existing Conditions							
Needs and Demand Analysis							
Revised Policies, Goals, and Objectives							
Recommended Citywide Bicycle Network							
Implementation Strategy and Project Prioritization							
Updated Bicycle Master Plan							
Environmental Documentation							



**To
Council
for
adoption**

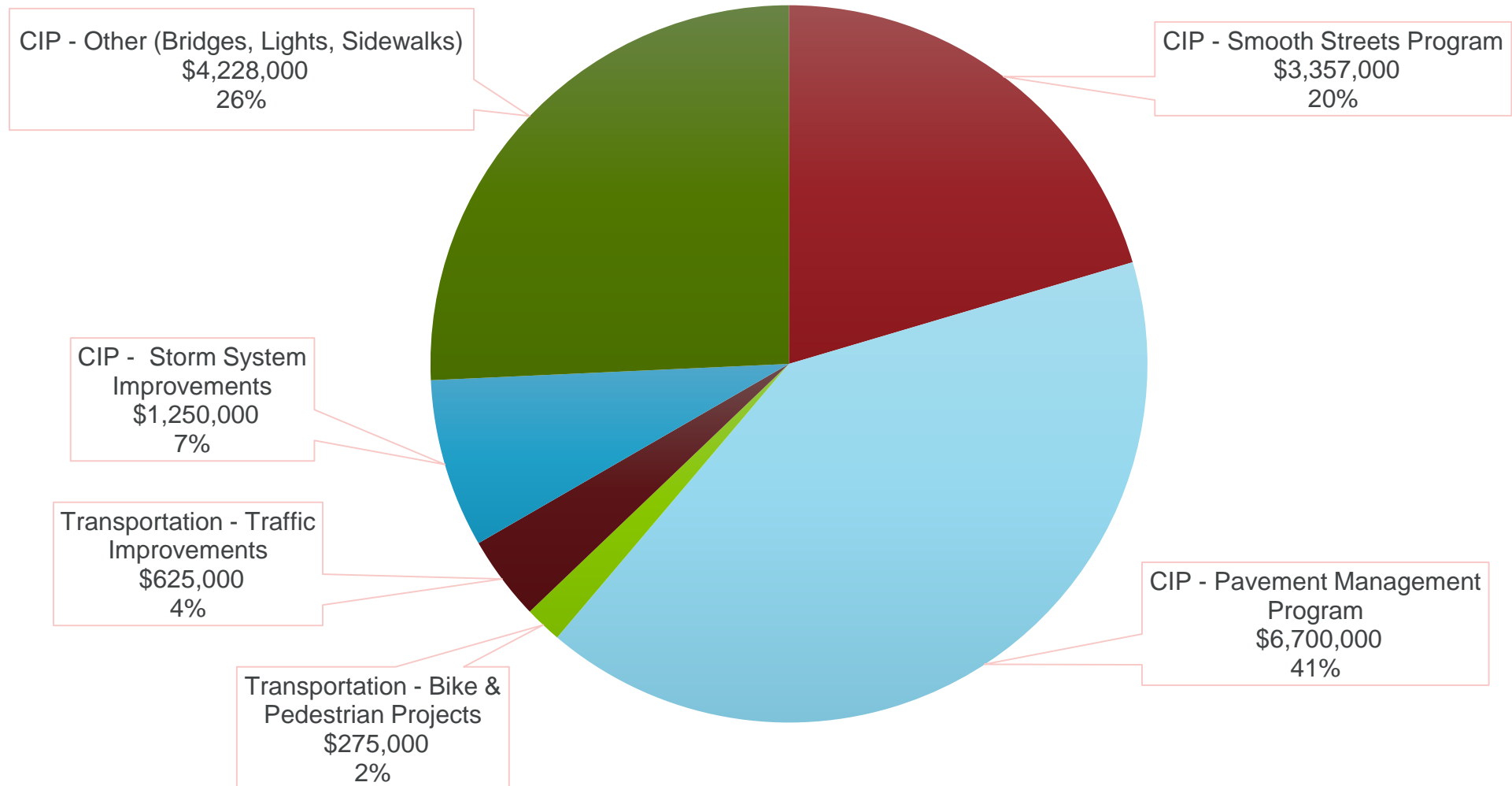


FY 2019-20 Funding



	General Fund	Gas Tax	Measure A	Measure S	Traffic Impact Fee	Measure S Bond	Total
Smooth Streets Program	\$2,000,000		\$1,357,000				\$3,357,000
Pavement Management Program		\$1,700,000				\$5,000,000	\$6,700,000
Bike & Pedestrian Projects		\$250,000	\$25,000				\$275,000
Traffic Improvements			\$375,000	\$250,000			\$625,000
Storm System Improvements	\$500,000					\$750,000	\$1,250,000
Other (Bridges, Lights, Sidewalks)	\$1,875,000		\$53,000			\$2,300,000	\$4,228,000
TOTAL	\$4,375,000	\$1,950,000	\$1,810,000	\$250,000	\$-	\$8,050,000	\$16,435,000

Capital Improvement Program FY 2019-20 Funding

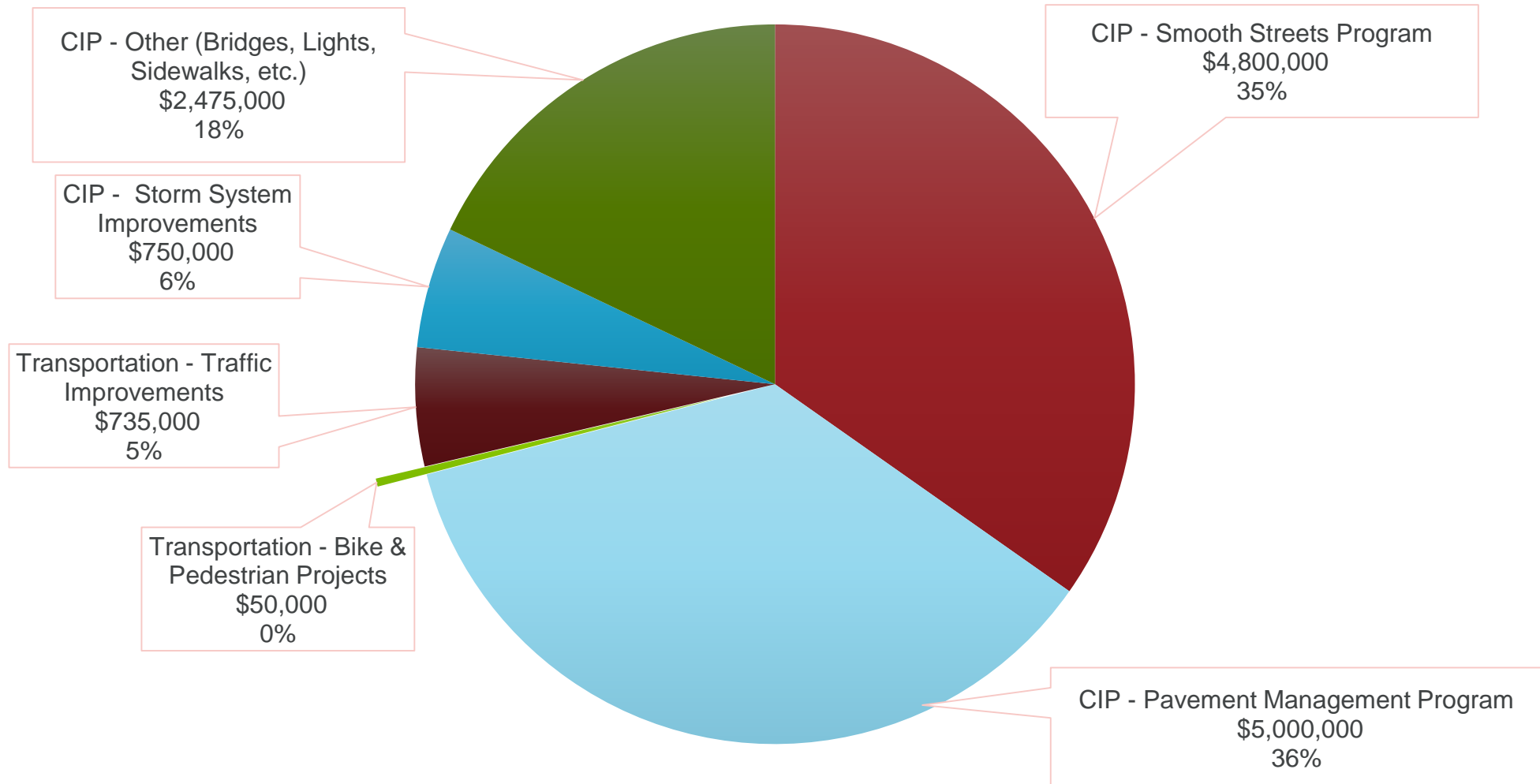


FY 2020-21 Funding



	General Fund	Gas Tax	Measure A	Measure S	Traffic Impact Fee	Measure S Bond	Total
Smooth Streets Program	\$2,000,000	\$1,200,000	\$1,600,000				\$4,800,000
Pavement Management Program						\$5,000,000	\$5,000,000
Bike & Pedestrian Projects		\$25,000	\$25,000				\$50,000
Traffic Improvements			\$335,000	\$250,000	\$150,000		\$735,000
Storm System Improvements						\$750,000	\$750,000
Other (Bridges, Lights, Sidewalks)	\$1,750,000		\$725,000				\$2,475,000
TOTAL	\$3,750,000	\$1,225,000	\$2,685,000	\$250,000	\$150,000	\$5,750,000	\$13,810,000

Capital Improvement Program FY 2020-21 Funding



Funding Bicycle Projects

- Potentially available funding is allocated based on priorities identified by the City Council
- Major priorities include road paving, flood control, high-voltage streetlight program, bridge maintenance, sidewalk repair program
- Not all priorities can be funded and completed
- Recommendations from SIC regarding funding priorities will be brought to City Council

Thank you for your time



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