



..... City of San Leandro .....

# Bicycle & Pedestrian Master Plan

2018 Update





On the cover: Residents cross San Leandro Boulevard to reach the San Leandro BART Station in downtown.

City of San Leandro

# Bicycle & Pedestrian Master Plan

2018 Update

Prepared for:  
City of San Leandro



Prepared by:  
Alta Planning + Design  
ActiveWayz Engineering

March 2018



# Acknowledgements

## City Council

**Pauline Russo Cutter, Mayor**

Deborah Cox, District 1

Ed Hernandez, District 2

Lee Thomas, District 3

Benny Lee, District 4

Corina Lopez, District 5

Pete Ballew, District 6

## City Staff

**Engineering & Transportation Department**

Keith Cooke, Engineering & Transportation Director

Michael Stella, Principal Engineer

Reh-Lin Chen, Senior Transportation Engineer

## Planning Commission

**Kenneth Pon, Chair**

Richard Brennan, Vice Chair, District 4

Tony Breslin, District 1

Tom Baker, District 2

Denise Abero, District 3

Jim Hussey, District 5

Esther Collier, District 6

## Consultant Team

**Alta Planning + Design**

Hugh Louch

Jeffery Knowles

Benjamin Frazier

**Activewayz Engineering**

Admas Zewdie

## Bicycle and Pedestrian Advisory Committee

**Naomi Armenta, Chair**

Jeremy Johansen, Vice Chair

Michael Wallace

Diana Souza

William Ho

Sarah Bailey

Maureen Forney

Barbara Butler

Jeff Wong - Interim Member

Aubrey Gibbs

Jason Hammon - Interim Member



# Table of Contents and List of Tables & Figures

## Contents

Executive Summary .....	1
Chapter 1: Introduction .....	8
Chapter 2: Goals & Policies .....	33
Chapter 3: Bicycle Network .....	40
Chapter 4: Pedestrian Network .....	100
Chapter 5: Safety, Education, and Enforcement .....	136
Chapter 6: Implementation .....	158
Appendix A: Existing Policy Documents .....	192
Appendix B: Project Prioritization Worksheets .....	198
Appendix C: ATP Compliance Table .....	202
Appendix D: Funding Sources .....	204
Appendix E: Crosswalk Prioritization & Scoring Policy .....	212
Appendix F: Bicycle and Pedestrian Plan Update Survey .....	214
Appendix G: Safe Routes to School Improvement Plans .....	234
Appendix H: California Streets & Highways Code Compliance .....	242

## List of Tables

Table 1: Existing and Proposed Bikeway Length by Class .....	2
Table 2: High Priority Bicycle and Pedestrian Projects .....	6
Table 3: Collisions Summary .....	31
Table 4: 2010 Bikeway Network .....	42
Table 5: 2018 Existing Bicycle Network .....	44
Table 6: Journey to Work Mode Share .....	59
Table 7: Existing & Proposed Bikeway Length by Class .....	69
Table 8: Recommended Class I Bikeways .....	70
Table 9: Recommended Class II Bikeways .....	72
Table 10: Recommended Class II Buffered Bikeways .....	72
Table 11: Recommended Class III Bikeways .....	74
Table 12: Recommended Class III Bicycle Boulevards .....	75
Table 13: Recommended Class IV Bikeways .....	78
Table 14: Recommended Study Corridors .....	80
Table 15: Recommended Bikeways .....	91
Table 16: Key Pedestrian Policy Action Items .....	115
Table 17: Bikeway Projects with Costs & Priority Score .....	161
Table 18: Prioritized Recommended Bikeway Projects .....	165
Table 19: Pedestrian Projects Costs & Priority Score .....	169
Table 20: Prioritized Recommended Pedestrian Projects .....	174
Table 21: High Priority Bicycle & Pedestrian Projects .....	181
Table 22: Cost Estimates for Bikeway Construction .....	184
Table 23: Unit Cost Estimates for Bikeway Network .....	184



## List of Figures

Figure 1: Recommended Bike & Pedestrian Projects . . . . .	5	Figure 23: Bicycle Collision Map: 2012-15 . . . . .	139
Figure 2: Barriers to Walking & Biking . . . . .	14	Figure 24: Pedestrian Collision Map: 2012-15 . . . . .	141
Figure 3: Pedestrian & Bicycle Survey Highlights . . . . .	16	Figure 25: Bay Fair BART Recommendations . . . . .	152
Figure 4: San Leandro Land Use . . . . .	20	Figure 26: San Leandro BART Recommendations . . . . .	153
Figure 5: San Leandro Activity Generators . . . . .	21	Figure 27: Recommended Bike & Pedestrian Projects . . . . .	179
Figure 6: Employment Density & Activity Generators . . . . .	25		
Figure 7: Existing San Leandro BART Bikeways . . . . .	27		
Figure 8: Existing Bay Fair BART Bikeways . . . . .	29		
Figure 9: AC Transit Routes & Ridership . . . . .	30		
Figure 10: San Leandro Collisions Map: 2012-15 . . . . .	32		
Figure 11: 2010 Bikeway Network . . . . .	43		
Figure 12: 2018 Bikeway Network . . . . .	45		
Figure 13: Wayfinding Sign Placement . . . . .	56		
Figure 14: Wayfinding Sign Types . . . . .	57		
Figure 15: Existing & Proposed Support Facilities . . . . .	65		
Figure 16: Recommended Class I Bikeways . . . . .	71		
Figure 17: Recommended Class II Bikeways . . . . .	73		
Figure 18: Recommended Class III Bikeways . . . . .	77		
Figure 19: Recommended Class IV Bikeways . . . . .	79		
Figure 20: Recommended Study Corridors . . . . .	81		
Figure 21: Recommended Bikeway Improvements . . . . .	90		
Figure 22: Pedestrian Improvement Areas & Locations . . . . .	106		



Page intentionally left blank.





# *Executive Summary*

Bicycle & Pedestrian Master Plan Update





## Executive Summary

Bicycling and walking are low-cost, quiet, environmentally friendly, and healthy forms of transportation; ideal for many trips. In 1997, the City of San Leandro adopted a Bicycle Master Plan to set forth a blueprint for completing a system of bikeways, support facilities (such as bicycle parking) and education programs. This document was updated in 2004 and again in 2010 to reflect changes in the bicycling environment and to add a pedestrian component.

This document comprises the 2018 update to the Bicycle and Pedestrian Master Plan. This Plan supports San Leandro's General Plan, *2035 General Plan*, to guide the development of facilities to enhance bicycling and walking as a safe enjoyable, efficient, and practical transportation choice for San Leandro residents. Specifically, the City's vision is for:

**A city where walking and bicycling are fully integrated into daily life, providing environmentally-friendly transportation alternatives that are both safe and convenient for people of all ages and abilities.**

San Leandro has many qualities favorable to bicycle riding and walking, including a temperate climate, flat terrain, and scenic recreational resources along the Bay and hills. Based upon field review and input from City staff, the public, and the Bicycle and Pedestrian Advisory Committee (BPAC), this update identified several issues that currently deter walking and bicycling in San Leandro. These include:

- **Traffic:** High traffic volumes, speeds and significant truck traffic on arterials and collector streets and high speeds and cut-through traffic on neighborhood streets are not conducive to a comfortable bicycling environment.
- **Roadway Width:** Limited available roadway width, especially on arterials and larger streets, can make it challenging to create spaces that provide separation for individual modes.



*A group ride rolling out during 2017's Bike San Leandro.*

- **Barriers:** Barriers limit the number of comfortable streets that pedestrians and bicyclists can use to cross. Barriers in San Leandro include: railroad corridors and freeways that limit roadway network connectivity and present difficult conditions at crossings. Major roadway crossings at unsignalized intersections can also be barriers for bicyclists.
- **Sidewalk and Pavement Conditions:** Bicyclists are challenged by poor roadway and pavement conditions. Broken or missing sidewalks and intersections without pedestrian curb ramps can also limit pedestrian accessibility. Vehicles parked on rolled curbs can also limit accessibility and access and can be a barrier.
- **Turn Lanes:** The presence of right turn lanes, especially free right turn lanes, intrude on the bike facilities when present. Free right turn lanes also make crossings more difficult for pedestrians. Similarly, left turns can be especially difficult for bicyclists to navigate as they typically have to cross multiple lanes of vehicular traffic.



- **Providing Facilities for All Types of Bicyclists:** Currently, most bikeways in San Leandro are not comfortable or inviting facilities for all types of bicycle riders as they provide minimal or no separation from vehicles.
- **Connectivity to Destinations and Surrounding Facilities:** Some bicycle and pedestrian facilities do not connect to adjacent facilities and developments, limiting and discouraging access by active modes.
- **Lighting:** Certain areas in San Leandro lack sufficient levels of lighting at night, which can cause both safety (visibility) and security issues for all road users.
- **Pedestrian Crossings:** Pedestrian crossings, especially at mid-block and uncontrolled intersections, can be difficult for pedestrians to navigate without crossing enhancements increasing their visibility. Broken and missing curb ramps and unmarked crosswalks can also be barriers for pedestrians. Marked crossings can also serve bicyclists who wish to make left turns without merging into traffic.
- **Bicycle Parking:** Limited secure short and long term bicycle parking throughout the city and at major destinations discourages bicycle trips as riders need to feel comfortable parking their bicycles.

## Bicycles

Existing bicycle facilities in San Leandro include shared-use paths (Class I), on-street striped bike lanes and buffered bike lanes (Class II) and on-street signed bike routes (Class III). This plan also recommends bicycle boulevards, an enhanced version of a bicycle route (Class III) and separated bikeways (Class IV). These facilities are described in more detail in Chapter 3.

The City has approximately 43.4 miles of existing bikeway facilities consisting of:

- 5.2 miles of Class I shared-use paths
- 23.2 miles of Class II bike lanes

**Table 1 - Existing & Proposed Bikeway Length by Class**

Length (miles) of System by Bikeway Classification			
Bikeway Classification	Existing	Proposed**	Total**
Class I	5.20	6.15	11.35
Class II	23.20	3.65	26.85
Class II Buffer	1.30	4.30	5.60
Class III	13.70	4.64	18.30
Class III Bicycle Boulevard	0	14.31	14.31
Class IV	0	8.10	8.10
Study Corridor*	-	14.60	-
<b>Total</b>	<b>43.4</b>	<b>41.2</b>	<b>84.6</b>

\* Not included in total. Study Corridors are streets that require additional study (parking occupancy, traffic, intersection, etc.) and public input before bikeway decisions can be made.  
 \*\* Totals include the lengths of existing bikeways proposed to be upgraded.

- 1.3 miles of Class II buffered bike lanes
- 13.7 miles of Class III bike routes

Improvements identified to meet these needs were organized into bikeway network improvements, spot improvements and bicycle parking improvements. In total, an additional 37.3 miles of bikeways are proposed, which would almost double the current total. Table 1 shows a breakdown of these proposed facilities. The Plan also identifies 41 spot improvements that include enhancements to existing facilities to better define the bikeway network, increase its accessibility, and improve its safety. Recommendations



for a bike share program and locations for additional short and long-term parking have also been developed.

Bicycle-related policy changes related to educational programs, enforcement, maintenance, and other areas are provided in Chapter 5 of the Plan.

## Pedestrians

San Leandro has nearly 200 miles of roadway, which corresponds to a widespread adjacent pedestrian network. The state of the pedestrian network varies greatly throughout the city. Much of the city is a very walkable and pedestrian friendly environment, composed of small blocks, complete sidewalks, street trees and accessibility features. However, there are areas of the city that are missing sidewalks, street trees, or accessibility features. Additionally, barriers such as railroad crossings, wide intersections, and free right turn lanes, limit the connectivity of the pedestrian network.

This Plan evaluates and presents the existing pedestrian network and future improvement strategies at three levels: Citywide, Pedestrian Improvement Areas, and Pedestrian Key Locations.

**Citywide Improvements** include:

- ADA Transition Plan
- Sidewalk surface assessment and repair
- Curb ramp upgrades to meet ADA standards
- Signal upgrades to meet Accessible Pedestrian Signal Guidelines
- Updated push buttons on pedestrian activated signals
- Implement, maintain and enforce parking restrictions at intersections and crosswalks (daylighting)
- Implement streetscape enhancements
- Utilizing the new Crosswalk Improvement and Scoring Policy

- Studying the removal of free right turn lanes, also known as slip lanes
- Improving access to transit

Eleven **Pedestrian Improvements Areas** are presented in the Plan. These areas were chosen for their proximity to important destinations, need for connectivity improvements, or potential for future development. Seven of these areas were previously identified in the 2004 Plan and four are new to this update. They include:

1. San Leandro Marina
2. Westgate Center
3. Kaiser Development Area/The Spine
4. Manor Boulevard
5. Washington Avenue
6. Downtown San Leandro BART Station
7. East 14th Street Corridor
8. Bancroft Avenue / Dutton Avenue
9. Bay Fair BART Station
10. MacArthur Boulevard
11. Estudillo Avenue - I-580 Underpass to Anthony Chabot Park
12. Hesperian Boulevard

**Key Pedestrian Locations** identify improvements at specific locations. These areas require further analysis to determine specific design solutions. Twenty-nine locations were identified, including the following:

1. Garfield Elementary School
2. Davis Street/I-880
3. Cherry Grove Park





4. Woodrow Wilson Elementary School/ John Muir Middle School
5. Wicks Boulevard at the Marina Community Center
6. Bonaire Park
7. Pacific Community Recreation Complex
8. Washington Elementary School
9. Corvallis Elementary School
10. Floresta Boulevard/Monterey Boulevard/Monroe Elementary School
11. San Leandro Boulevard/Washington Avenue Intersection
12. McKinley Elementary School
13. Bancroft Middle School
14. East 14th Street/San Leandro Boulevard Intersection
15. San Leandro High: 136th Avenue/Bancroft Avenue
16. Washington Avenue/Lewelling Boulevard and Lewelling Boulevard/  
Tropic Court intersections
17. Grand Avenue/Joaquin Avenue intersection
18. Jefferson Elementary School
19. 150th Avenue/Hesperian Boulevard/Bancroft Avenue/East 14th Street  
intersection
20. Hesperian Boulevard/Lewelling Boulevard intersection
21. San Leandro Boulevard/Park Street/Best Avenue intersection
22. Freeway Interchanges for I-238, I-580, and I-880
23. Merced Street/Wicks Boulevard intersection
24. Alvarado Street/Fremont Avenue intersection
25. I-238/Hesperian Boulevard underpass
26. Davis Street/Doolittle Drive intersection

27. Railroad Crossings
28. Dutton Avenue/Chetland Road
29. Bancroft Avenue/Oakes Boulevard

## IMPLEMENTATION

The implementation plan for bicycle and pedestrian improvements prioritizes the projects using several criteria and identifies potential funding sources. Bicycle and pedestrian projects were rated independently and assigned to an appropriate implementation phase based on their performance in the evaluation process. Cost estimates or ranges were identified for all projects.

The highest rated bicycle and pedestrian improvements are also identified. These projects may be implemented in the short-term based on implementation status and available funding. These projects, listed in Table 2 on pages 6 and 7, should be considered for funding in the City's future capital budgets and are eligible for Measure B, Measure BB, and competitive grant funding.



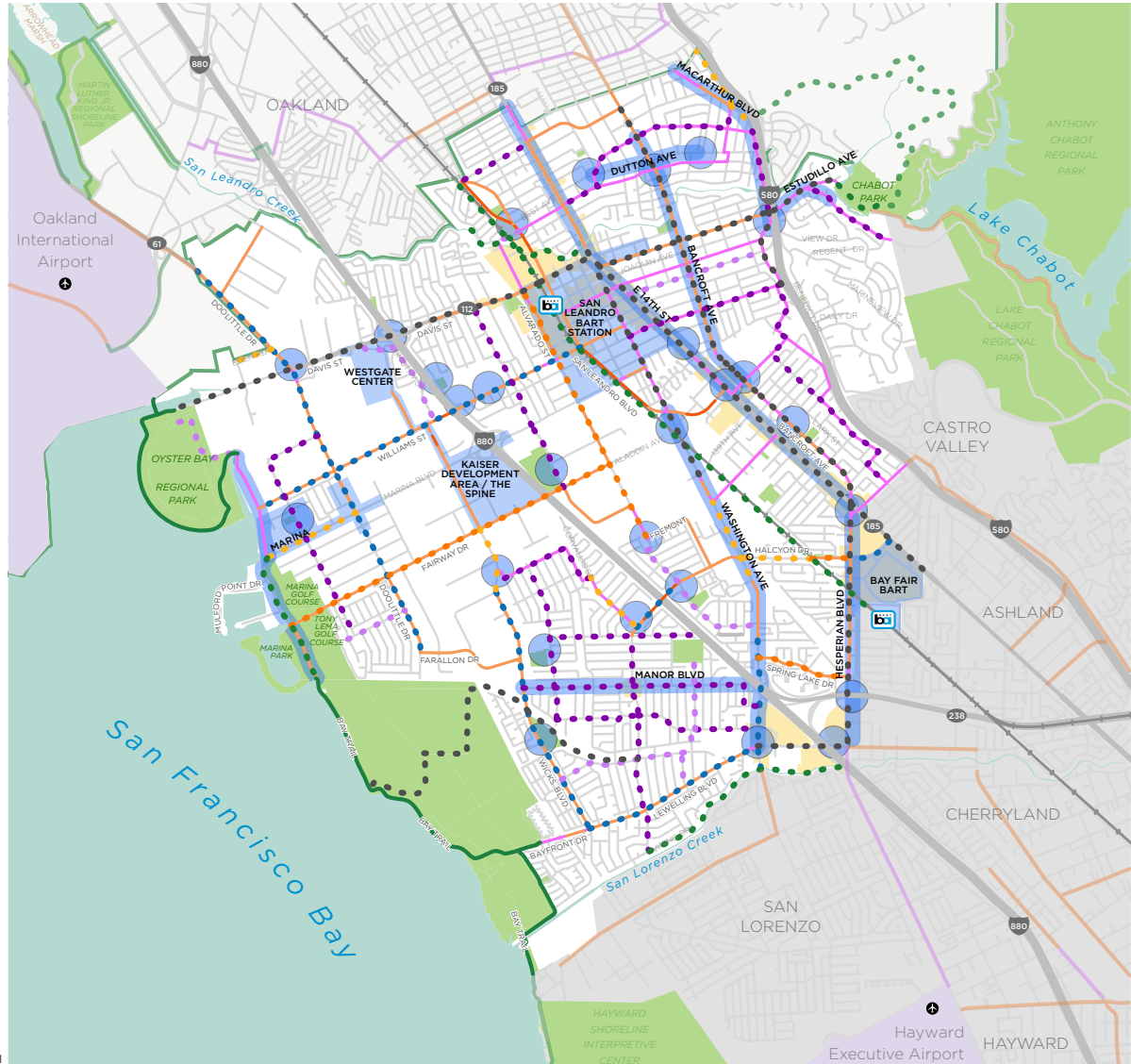
*A busy crossing in Downtown San Leandro across from the BART station.*



Figure 1: Recommended Bicycle and Pedestrian Projects

### SAN LEANDRO BICYCLE & PEDESTRIAN PROJECTS

- PEDESTRIAN PRIORITY WALKING ZONES**
- Blue square: Pedestrian Improvement Areas
  - Blue circle: Key Pedestrian Locations
- RECOMMENDED BIKEWAYS**
- Green dashed line: Shared-use Path (Class I)
  - Orange dashed line: Buffered Bike Lane (Class II)
  - Light orange dashed line: Bike Lane (Class II)
  - Purple dashed line: Bike Route (Class III)
  - Dark purple dashed line: Bike Boulevard (Class III)
  - Blue dashed line: Separated Bikeway (Class IV)
- RECOMMENDED STUDY**
- Black dashed line: Corridor Study
- EXISTING BIKEWAYS**
- Green solid line: Shared-use Path (Class I)
  - Orange solid line: Buffered Bike Lane (Class II)
  - Light orange solid line: Bike Lane (Class II)
  - Purple solid line: Bike Route (Class III)
- DESTINATIONS + BOUNDARIES**
- Black circle with 'S': School
  - Black circle with 'A': Airport
  - Light blue: Water Body
  - Light green: Open Space
  - Grey: Neighboring City
  - Light purple: Airport
  - Yellow: Commercial
- Scale: 0 to 1 mile. North arrow.



Map produced: January 2018  
Data source: City of San Leandro, ESRI



**Table 2 - High Priority Bicycle & Pedestrian Projects**

Measure B & Measure BB Pass-Through Funding			
Project Type	Bikeway Class/Ped ID	Description/Location	Conceptual Cost Estimates
Bicycle	Class III Boulevard	Farnsworth Street (Vining Drive - Purdue Street)	\$91,411
	Class II	East 14th Street (Chumalia Street - Estudillo Avenue)	\$11,156
	Class II Buffered	Fairway Drive (Monarch Bay Drive - Alvarado Street)	\$356,748
	Class IV	Lewelling Boulevard (Wicks Boulevard - Washington Avenue)	\$626,702
	Class II	Bancroft Avenue (142nd Avenue - 138th Avenue; 136th Avenue - 200 ft S. of Blossom Way; East 14th Street - 136th Avenue)	\$62,676
Pedestrian	B 7B	Improve Crosswalks at Unsignalized Intersections along East 14th Street	\$250,000
	C14	East 14th Street/ San Leandro Boulevard	\$200,000
	C16	Washington Avenue/ Lewelling Boulevard & Lewelling Boulevard/ Tropic Court	\$500,000
	C4	Woodrow Wilson Elementary/ John Muir Middle School	\$120,000
	C12	McKinley Elementary	\$50,000
	C9	Corvallis Elementary School	\$50,000
	B 4B	More Crosswalks on Manor Boulevard	\$25,000
Competitive Funding			
Project Type	Bikeway Class/Ped ID	Description/Location	Conceptual Cost Estimates
Bicycle	Class IV	Williams Street (San Leandro Boulevard - Neptune Drive)	\$1,200,000
	Class I	East Bay Greenway (Thornally Drive-W Broadmoor Boulevard)	\$3,715,460
	Class II Buffered	Alvarado Street (Fremont Avenue - Davis Street)	\$122,237
	Class III Boulevard	Aurora Drive (Polvorosa Avenue - Bermuda Avenue)	\$104,637
	Class III Boulevard	Fargo Avenue (Farnsworth Street -Washington Avenue)	\$51,923
	Class III Boulevard	Manor Boulevard (Wicks Boulevard - Washington Avenue)	\$107,355





**Competitive Funding**

Project Type	Bikeway Class/Ped ID	Description/Location	Conceptual Cost Estimates
Bicycle	Class III Boulevard	Oakes Boulevard (East 14th Street - MacArthur Boulevard)	\$95,274
	Class IV	Washington Avenue (Lloyd Avenue - San Lorenzo Creek)	\$430,838
Pedestrian	B 6D	Implement the Streetscape Improvements Recommended in the East 14th Street South Area Development Strategy	\$4,000,000
	B 4C	Washington Avenue Streetscape Improvements	\$1,000,000
	B 4D	Washington Avenue/Halcyon & Lewelling Boulevard crosswalks	\$160,000
	B 4G	Improve Pedestrian Facilities and Accessibility on Manor Boulevard	\$30,000
	B 4H	Improve Pedestrian Crossings at Farnsworth Street and Manor Boulevard	\$20,000
	C10	Floresta Boulevard/Monterey Boulevard/Monroe Elementary	\$40,000
	C13	Bancroft Middle	\$200,000
	C15	136th Avenue/ Bancroft Avenue	\$100,000
	C29	Bancroft Avenue/Oakes Boulevard	\$80,000
	C7	Pacific Community Recreation Complex	\$100,000
	C8	Washington Elementary School	\$40,000
	B 11A	Hesperian Boulevard	\$1,000,000
	B 1C	Sidewalks and Curb Ramps in the Marina	\$100,000
	C1	Garfield Elementary	\$70,000
	C18	Jefferson Elementary	\$50,000
	C3	Cherry Grove Park	\$100,000
	C6	Bonaire Park	\$60,000