CITY OF MOUNTAIN VIEW

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE

AGENDA

REGULAR MEETING –WEDNESDAY, JANUARY 28, 2015
PLAZA CONFERENCE ROOM AT CITY HALL – 500 CASTRO STREET
6:30 P.M.

1. **CALL TO ORDER**

2. **ROLL CALL**—Committee members Bruce England, Marc Roddin, Vice Chairperson Simon Purdon, and Chairperson Greg Unangst.

3. **ORAL COMMUNICATIONS FROM THE PUBLIC**

   This portion of the meeting is reserved for persons wishing to address the Committee on any matter not on the agenda. Speakers are limited to three minutes. State law prohibits the Committee from acting on nonagenda items.

4. **MINUTES APPROVAL**

   Minutes for the November 19, 2014 meeting have been delivered to Committee members and copies posted on the City Hall bulletin board. If there are no corrections or additions, a motion is in order to approve these minutes.

5. **UNFINISHED BUSINESS**—None.

6. **NEW BUSINESS**

   6.1 **ELECTION OF 2015 CHAIRPERSON AND VICE CHAIRPERSON**

   Overview:

   The Committee will elect a Chairperson and Vice Chairperson for the 2015 calendar year.

   Recommendation:

   Elect a Chairperson and Vice Chairperson for the 2015 calendar year.

6.2 BICYCLE TRANSPORTATION PLAN UPDATE

Overview:

The Committee will discuss and provide input on the Draft Existing Conditions/Needs and Proposed Recommendations associated with the update to the Bicycle Transportation Plan currently under way.

Recommendation:

Comment on the Draft Existing Conditions/Needs and Proposed Recommendations as part of the Bicycle Transportation Plan (BTP) update.

6.3 VALLEY TRANSPORTATION AUTHORITY (VTA) BICYCLE & PEDESTRIAN ADVISORY COMMITTEE (BPAC) UPDATE

Overview:

The Committee will receive a report from the City's VTA BPAC representative on the VTA BPAC agenda items.

Recommendation:

Comment on the VTA BPAC agenda items.

6.4 UPCOMING AND RECENT EVENTS

Overview:

The Committee will discuss the members' participation in Arbor Day, Spring Family Parade, Council Neighborhood Committee neighborhood meetings, and other events.

Recommendation:

None.

6.5 2014-15 BICYCLE/PEDESTRIAN ADVISORY COMMITTEE WORK PLAN UPDATE

Overview:

The Committee will review the Fiscal Year 2014-15 Bicycle/Pedestrian Advisory Committee (B/PAC) Work Plan and provide updates on their recent activities.

Recommendation:

None.

7. COMMITTEE/STAFF COMMENTS, QUESTIONS, AND REPORTS

No action will be taken on any questions raised by the Committee at this time.

7.1 STAFF COMMENTS

7.2 COMMITTEE COMMENTS

8. SET DATE AND TIME FOR NEXT MEETING

Wednesday, February 25, 2015, at 6:30 p.m.

9. CALENDAR

Wednesday, March 25, 2015 B/PAC Meeting
Wednesday, April 29, 2015 B/PAC Meeting
Wednesday, June 24, 2015 B/PAC Meeting
Wednesday, August 26, 2015 B/PAC Meeting
Wednesday, September 30, 2015 B/PAC Meeting
Wednesday, October 28, 2015 B/PAC Meeting
Wednesday, November 18, 2015 B/PAC Meeting

10. ADJOURNMENT

HK/3/PWK
915-01-28-15A-E

AGENDAS FOR BOARDS, COMMISSIONS, AND COMMITTEES

- The specific location of each meeting is noted on the notice and agenda for each meeting which is posted at least 72 hours in advance of the meeting. Special meetings may be called as necessary by the Committee Chair and noticed at least 24 hours in advance of the meeting.

- Questions and comments regarding the agenda may be directed to the Public Works Department at (650) 903-6311.

- Interested persons may review the agenda and staff reports at http://laserfiche.mountainview.gov/Weblink/Browse.aspx?startid=65710&dbid=0 and the Public Works Department counter beginning at 5:00 p.m. the Friday evening before each regular meeting. Staff reports are also available during each meeting.

- **SPECIAL NOTICE—Reference: Americans with Disabilities Act, 1990**
  Anyone who is planning to attend a meeting who is visually or hearing-impaired or has any disability that needs special assistance should call the Public Works Department at (650) 903-6311 48 hours in advance of the meeting to arrange for assistance. Upon request by a person with a disability, agendas and writings distributed during the meeting that are public records will be made available in the appropriate alternative format.

- The Board, Commission, or Committee may take action on any matter noticed herein in any manner deemed appropriate by the Board, Commission, or Committee. Their consideration of the matters noticed herein is not limited by the recommendations indicated herein.

- **SPECIAL NOTICE—**Any writings or documents provided to a majority of the Bicycle/Pedestrian Advisory Committee regarding any item on this agenda will be made available for public inspection in the Public Works Department, located at 500 Castro Street, during normal business hours and at the meeting location noted on the agenda during the meeting.

ADDRESSING THE BOARD, COMMISSION, OR COMMITTEE

- Interested persons are entitled to speak on any item on the agenda and should make their interest known to the Chair.

- Anyone wishing to address the Board, Commission, or Committee on a nonagenda item may do so during the "Oral Communications" part of the agenda. Speakers are allowed to speak one time on any number of topics for up to three minutes.

DRAFT

CITY OF MOUNTAIN VIEW

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE

MINUTES

SPECIAL MEETING – NOVEMBER 19, 2014
PLAZA CONFERENCE ROOM AT CITY HALL – 500 CASTRO STREET
6:30 P.M.

1. **CALL TO ORDER**

Chairperson Unangst called the meeting to order at 6:32 p.m.

2. **ROLL CALL**

Members Present: Committee members Bruce England, Josette Langevine, Vice Chairperson Simon Purdon, and Chairperson Greg Unangst.

Member Absent: Committee member Marc Roddin.

Staff Members Present: John Marchant, Recreation Manager; Linda Forsberg, Transportation and Business Manager; and Helen Kim, Transportation Planner.

Public Present: Eight (8) members of the public were present.

3. **ORAL COMMUNICATIONS FROM THE PUBLIC**—None.

6:33 4. **MINUTES APPROVAL**

Motion—M/S England/Langevine—Carried 4-0-1; Roddin absent—Approve the minutes of the October 29, 2014 meeting.

5. **UNFINISHED BUSINESS**—None.

6. **NEW BUSINESS**

6:34 6.1 **VEHICLE EMISSIONS REDUCTIONS BASED AT SCHOOLS (VERBS) UPDATE**

The Committee received an update regarding the City's Vehicle Emissions Reductions Based at Schools (VERBS) Program, including a summary of

services and events completed for the past three years (2011-2014) at Mountain View schools, grades K-12. Pat Hines of Safe Moves responded to Committee questions.

7:00 6.2 **BICYCLE FACILITIES AT CITY-SPONSORED EVENTS**

The Committee received information and provided input regarding the accommodations made to encourage people to bike to City-sponsored events and the Recreation Manager responded to Committee questions.

In response to the Committee's inquiries, staff will provide updates regarding bicycle parking demand/needs at the Farmers' Market (not a City-sponsored event) and the development of a downtown bike rack map at the January Bicycle/Pedestrian Advisory Committee (B/PAC) meeting.

7:10 6.3 **FISCAL YEAR 2015-16 TRANSPORTATION DEVELOPMENT ACT (TDA) ARTICLE 3 FUNDING**

The Committee reviewed and provided input regarding the proposed preliminary list of projects for Fiscal Year 2015-16 Transportation Development Act (TDA) Article 3 funding and the Transportation Planner responded to Committee questions.

SPEAKING FROM THE FLOOR WITH SUPPORT AND/OR RECOMMENDATIONS:

- John Carpenter
- Patrick Moore
- Cherie Walkowiak

The input received from the Committee will be incorporated to develop the refined descriptions and cost information for the projects the Committee identified are worthy of further consideration for TDA funding. The B/PAC will review and recommend project(s) for Fiscal Year 2015-16 TDA Article 3 funding at its February 2015 meeting.

In response to the Committee's inquiry, staff will provide an update regarding the City's bicycle-friendly storm drain grates at the January B/PAC meeting.

7:36 6.4 **BICYCLE TRANSPORTATION PLAN UPDATE—PRIORITIZATION CRITERIA**

The Committee reviewed the proposed criteria to prioritize recommended projects for the Bicycle Transportation Plan Update currently under way and the Transportation Planner responded to Committee questions.

SPEAKING FROM THE FLOOR WITH SUPPORT AND/OR RECOMMENDATIONS:

- K. Shankari
- Cherie Walkowiak
- Patrick Moore

The B/PAC was generally pleased with the proposed criteria and provided input on several criteria, including consideration for Bicycle Level of Service (LOS) and connections to business/service centers serving children and seniors.

7:57 6.5 **UPCOMING AND RECENT EVENTS**

The Committee discussed the members' participation in the Council Neighborhood Committee meetings, Suggested Routes to School Program, and other events.

7:58 6.6 **FISCAL YEAR 2014-15 BICYCLE/PEDESTRIAN ADVISORY COMMITTEE WORK PLAN UPDATE**

The Committee reviewed the Fiscal Year 2014-15 B/PAC Work Plan and provided updates on the Committee's recent activities.

In response to the Committee's inquiry, staff will provide an update regarding the Police Department's pedestrian-related enforcement data at the January B/PAC meeting.

8:06 6.7 **VALLEY TRANSPORTATION AUTHORITY (VTA) BICYCLE & PEDESTRIAN ADVISORY COMMITTEE (BPAC) UPDATE**

The Committee received a report from the City's VTA BPAC representative on the VTA BPAC agenda items.

SPEAKING FROM THE FLOOR WITH CONCERNS AND/OR RECOMMENDATIONS:

- John Carpenter
- Patrick Moore
- Cherie Walkowiak
- K. Shankari

7. COMMITTEE/STAFF COMMENTS, QUESTIONS, AND REPORTS

8:17 7.1 **STAFF COMMENTS**

- Staff distributed to the Committee the Police Department's bicycle- and pedestrian-related accident data (January 2013 to September 2014) and the City's Suggested Routes to School Program (grades K-12) data (August 2013 to July 2014).

- Staff presented to Committee member Langevine the Mayor's Certificate of Appreciation for her service to the community as a member of the B/PAC from January 2011 to December 2014.

8:23 7.2 **COMMITTEE COMMENTS**

- A Committee member shared information regarding the County's 2040 Expressway Plan and the Castro Street/Moffett Boulevard/Central Expressway intersection in Mountain View.

- A Committee member shared information regarding applicants interested in serving on the B/PAC, Senate Bill 743, and that a laser pointer is provided at B/PAC meetings.

- A Committee member would like to encourage more open communications with neighboring cities for consistency.

8. SET DATE AND TIME FOR NEXT MEETING

Wednesday, January 28, 2015, at 6:30 p.m.

9. CALENDAR

Wednesday, February 25, 2015—B/PAC Meeting.

10. **ADJOURNMENT**

The meeting was adjourned at 8:25 p.m.

HK/3/PWK
915-11-19-14mn-E

CITY OF MOUNTAIN VIEW

MEMORANDUM

Public Works Department

DATE: January 28, 2015

TO: Bicycle/Pedestrian Advisory Committee

FROM: Helen Kim, Transportation Planner
Linda Forsberg, Transportation and Business Manager
Michael A. Fuller, Public Works Director

SUBJECT: Election Process for 2015 Chairperson and Vice Chairperson

RECOMMENDATION

Elect a Chairperson and Vice Chairperson for the 2015 calendar year.

BACKGROUND

The Bicycle/Pedestrian Advisory Committee (B/PAC) bylaws (Attachment 1) require that the Committee elect from its own membership a Chairperson and a Vice Chairperson at the first meeting each calendar year beginning January 1.

The duties of the Chairperson are to preside at all meetings of the Committee. The duty of the Vice Chairperson is to perform the duties of the chairperson when the chairperson is absent.

DISCUSSION

The elections are conducted for the Chairperson and Vice Chairperson positions individually and in sequence. Immediately preceding the vote, the Chairperson will ask if there are any nominations from the floor, then close the nominating process to establish the final list of candidates for each position. The affirmative vote of a majority of the Committee members is required to elect the Chairperson and Vice Chairperson. The term of office for both positions is from January to December 2015.

HK-LF-MAF/7/PWK
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Attachment: 1. Bicycle/Pedestrian Advisory Committee (B/PAC) Bylaws

CITY OF MOUNTAIN VIEW
BICYCLE/PEDESTRIAN ADVISORY COMMITTEE

BYLAWS, ROLES, AND RESPONSIBILITIES

ARTICLE I—NAME

The name of the Committee is the City of Mountain View Bicycle/Pedestrian Advisory Committee, hereinafter referred to as the "Bicycle/Pedestrian Advisory Committee."

ARTICLE II—PURPOSE

The purpose of the Bicycle/Pedestrian Advisory Committee is:

1. To promote the development and maintenance of the City's bikeway and pedestrian facilities;

2. To promote, through education, bicycling and walking as an alternative means of transportation; and

3. To ensure sensitivity to bicycle, pedestrian, and disabled transportation issues in the design and implementation of public works projects which impact bicycles and pedestrians.

ARTICLE III—MEMBERSHIP

Section 1. Composition. Members of the Bicycle/Pedestrian Advisory Committee shall be appointed by the City Council of Mountain View. The Bicycle/Pedestrian Advisory Committee shall consist of five (5) members who shall live or work within the City limits and have a strong interest and enthusiasm for the planning, improving, and maintaining of bicycle and pedestrian facilities. A majority of the members shall be Mountain View residents.

Section 2. Term of Membership. Terms of membership of the Bicycle/Pedestrian Advisory Committee shall be for four (4) years. Members of the Bicycle/Pedestrian Advisory Committee shall serve a maximum of two (2) consecutive four (4) year terms.

Section 3. Voting Rights. Each member shall be entitled to one (1) vote on each matter submitted to a vote of the members. Voting by proxy or absentee ballot shall not be permitted.

Section 4. Resignation and Termination of Membership. Any member may resign by filing a written resignation with the Chairperson of the Bicycle/Pedestrian Advisory Committee and/or the City Council. The City Charter requires an advisory body member's office to become vacant if the member has been absent from three (3) regular consecutive meetings without a qualified excuse as defined in City Council Policy K-2, Council Advisory Body Appointments.

Section 5. Vacancies. Vacancies in the membership of the Bicycle/Pedestrian Advisory Committee shall be filled in the same manner as provided in the case of the original selection in accordance with Article III, Sections 1 and 2, and/or defined in City Council Policy K-2, Council Advisory Body Appointments.

ARTICLE IV – MEETINGS OF MEMBERSHIP

Section 1. Regular Meetings. Regular meetings shall be scheduled each month, except for the months of May, July, and December. The Bicycle/Pedestrian Advisory Committee may cancel meetings or schedule additional meetings as deemed necessary.

Section 2. Special Meetings. Special meetings of the Bicycle/Pedestrian Advisory Committee may be called by the Chairperson or Vice Chairperson.

Section 3. Place of Meetings. The Bicycle/Pedestrian Advisory Committee shall designate a place within the City as the place of any meeting.

Section 4. Notice of Meetings. Notice stating the place, day, hour, and agenda of any meeting of the Bicycle/Pedestrian Advisory Committee shall be provided to the public pursuant to the requirements of the Ralph M. Brown Act (Government Code 54950 *et seq.*).

Section 5. Quorum. A quorum shall constitute three (3) members.

ARTICLE V – COMMITTEE ROLE AND RESPONSIBILITIES

The Bicycle/Pedestrian Advisory Committee shall be an advisory body to the City Council on matters relating to bicycle and pedestrian transportation. The fundamental responsibility of the Bicycle/Pedestrian Advisory Committee shall be to advise and make recommendations to the City Council on policy, improvement, operation, and maintenance of the City's bicycle/pedestrian facilities. The Committee's role which defines and supports this basic charge includes, but is not specifically limited to, the following:

- Propose, review, prioritize, and recommend bicycle/pedestrian/disabled transportation projects for application to the Metropolitan Transportation

Commission for the annual Transportation Development Act, Article 3 funds. (The application for these funds is usually required by December 31 of each year.) Review and recommend projects for other State or Federal bicycle, pedestrian, or access grant programs.

- Participate in the development and review of comprehensive bicycle/pedestrian facility plans and regulations (e.g., bicycle/pedestrian section of the Circulation Chapter of the General Plan, other circulation plans of the City, Zoning Ordinance requirements for bicycle parking).

- Review the City's existing bikeway system and pedestrian facilities and make recommendations on operational improvements to the existing bicycle/pedestrian facilities.

- Make recommendations on capital improvements to bicycle/pedestrian facilities (e.g., bikeways, pedestrian/bicycle bridges, bike parking facilities, intersection and traffic signals and walkways, etc.).

- Review, as directed by the City Council, private development project applications requiring General Plan, Precise Plan, and/or zoning amendments (Gatekeeper projects), as prescribed in Chapter 36, Zoning, of the Mountain View City Code.

- Review public projects that impact bicycle and pedestrian facilities to ensure adequate consideration of the needs of bicyclists, pedestrians, and the disabled (site access, bicycle parking, etc.).

- Review the City's roadway system for bicycle and pedestrian suitability.

- Work with the Police Department to promote bicycle/pedestrian safety through education and enforcement.

ARTICLE VI—OFFICERS

Section 1. Officers. The officers of the Bicycle/Pedestrian Advisory Committee shall be a Chairperson and a Vice Chairperson. The coordination of staff support shall be designated by the City Manager.

Section 2. Election of Officers. The officers shall be elected annually by the Bicycle/ Pedestrian Advisory Committee members from their own membership at the first meeting each calendar year beginning January 1.

Section 3. Duties. The Chairperson shall preside at all meetings of the members. The City's designated representative to the Valley Transportation Authority's Bicycle and

Pedestrian Advisory Committee shall be appointed from a recommendation by the membership of the Bicycle/Pedestrian Advisory Committee to the City Council. The Vice Chairperson, in the absence of the Chairperson, shall perform duties of the Chairperson. A City of Mountain View staff person shall act as the Committee secretary and record and preserve the minutes of all meetings of the membership.

ARTICLE VII – DURATION AND REVIEW OF THE BICYCLE/PEDESTRIAN ADVISORY COMMITTEE

The Bicycle/Pedestrian Advisory Committee shall continue for as long as the City Council deems necessary or desirable. The Mountain View City Council shall have the authority to dissolve the Bicycle/Pedestrian Advisory Committee upon determination that it is in the best interest of the City that the Bicycle/Pedestrian Advisory Committee be dissolved. The Council may review the Committee's activities and make changes in their role or functions as needed.

CITY OF MOUNTAIN VIEW

MEMORANDUM

Public Works Department

DATE: January 28, 2015

TO: Bicycle/Pedestrian Advisory Committee

FROM: Helen Kim, Transportation Planner
Linda Forsberg, Transportation and Business Manager
Michael A. Fuller, Public Works Director

SUBJECT: **Bicycle Transportation Plan Update—Draft Existing Conditions, Needs, and Recommendations**

RECOMMENDATION

Comment on the Draft Existing Conditions/Needs and Proposed Recommendations as part of the Bicycle Transportation Plan (BTP) update.

BACKGROUND AND ANALYSIS

The BTP update currently under way will build on the 2008 Bicycle Transportation Plan and also expand on the City's 2030 General Plan mobility goals by providing a vision, strategies, and actions for improving and encouraging bicycle travel in and through the City of Mountain View.

The Bicycle/Pedestrian Advisory Committee (B/PAC) received an overview of the BTP update project at its June 2014 meeting, provided input on the City's existing environment for bicycling and opportunities for improvements at its August 2014 meeting, and provided input on the proposed prioritization criteria to be used in the development of the draft recommended bicycle facilities and projects at its November 2014 meeting. Community outreach activities in support of the BTP update include input solicited at a community workshop in September 2014, various City advisory bodies and stakeholders between August and December 2014, and through the project website (www.bikemountainview.com).

The purpose of this agenda item is to seek the B/PAC's input regarding the Draft Existing Conditions/Needs (Attachment 1) and Proposed Recommendations (Attachment 2) to be used in the development of the Administrative Draft BTP update.

NEXT STEPS

A second community workshop will be held on February 9, 2015 to solicit input on the Draft Existing Conditions/Needs and Proposed Recommendations for the BTP update. The Administrative Draft BTP update will be presented to the B/PAC at its March or April 2015 meeting.

The Draft BTP update is scheduled to be released in May 2015, followed by the completion of the environmental review process in fall 2015 and adoption of the Final BTP update by end of 2015/early 2016.

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Attachments:
1. Draft Existing Conditions and Needs
2. Draft Proposed Recommendations

2 Existing Conditions

2.1 Setting and Land Use

The City of Mountain View has a population of 77,800.[1] It is located in the heart of Silicon Valley, adjacent to the cities of Palo Alto, Los Altos, and Sunnyvale.

The City is comprised of residential neighborhoods, commercial corridors, industrial/office areas, mixed-use areas and nearly 1,000 acres of parkland. As stated in the Mountain View 2030 General Plan (2012), single- and multi-family residential homes account for approximately 42 percent of the City's land area, while commercial designations account for approximately 7 percent of the City. Industrial and office properties makes up about 18 percent of the City's land. Sixteen percent of the City is public, institutional land uses, and 16 percent is open space, and 2 percent is vacant or agricultural.[2] Mountain View is a place where people can live, work and play, and establishes the City as an important employment center in Silicon Valley. The land use maps can be seen in Appendix B.

The population of Mountain View has grown an estimated 5 percent since the 2010 Census. The Mountain View 2030 General Plan estimates the City will grow to nearly 90,000 residents by 2030.[3]

The City of Mountain View is accessible by highways and both regional and local transit. U.S. Route 101 runs through northern Mountain View and connects to San Francisco to the north, and south to San Jose and eventually to Los Angeles. California State Route 85, also called the Norman Y. Mineta Highway or Stevens Creek Freeway, connects Mountain View to southern San Jose. State Route 82, better known as El Camino Real, runs through southern Mountain View in an east-west direction.

2.2 The Five Es and Bikeway Classifications

As defined by the League of American Bicyclists, bicycle-friendly cities demonstrate achievements in each of five categories, often referred to as the Five Es of bicycle planning, which are described below:

- **Engineering** encompasses all forms of bicycle infrastructure from on-street bicycle facilities, to shared-use trails, to bicycle parking as well as signage and maintenance.
- **Encouragement** tools such as bike maps and programs like events like Bike to Work Day reward existing bicyclists and motivate more people to ride bicycles.

[1] Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2013 more information 2013 Population Estimates.

[2] These percentages are taken directly from the Mountain View 2030 General Plan (2012). These percentages may not add up to 100% due to rounding.

[3] Mountain View 2030 General Plan, 2012.

- **Education** programs improve safety and awareness. These may be delivered in schools as bicycle skills programs, or provided at low or no cost to adults through non-profit organizations.
- **Enforcement** programs reinforce legal and respectful driving and bicycling.
- **Evaluation** programs provide a method for monitoring improvements and informing future investments.

The analysis of Mountain View's existing facilities and programs within the framework of the Five Es is one way to assess the City's bicycle-friendly status.

The City of Mountain View has a growing network of Class I, II and III facilities throughout the City. The City has also implemented several programs to support bicycling. This chapter presents existing facilities and programs, which will help identify where new facilities are needed and what programs will better support bicycling in Mountain View.

2.3 Engineering

2.3.1 Bikeway Classifications

The California Department of Transportation (Caltrans) designates three facility design types for bicyclists: Class I, II and III Bikeways. Figure 2-1 shows the general design standards for the three classifications. The recent passage of Assembly Bill (AB) 1193, requires Caltrans to establish engineering standards for protected bike lanes, also called "cycletracks." These street classifications and characteristics are discussed below.[4,5]

Class I Bikeways / Multi-Use Paths

There are 15 miles of Class I bikeways in Mountain View. Class I bikeways are also referred to as multi-use or shared-use paths. They provide completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow minimized. Per Caltrans Standards, Class I bikeways must have a minimum paved width of eight feet (ten feet preferred) plus two-foot wide graded shoulders. Mountain View's Class I paths include the Stevens Creek, Permanente Creek and Hetch HetchyTrails.

[4] Caltrans Highway Design Manual (2012)

[5] Assembly Bill 1193 (2014)

Class II Bikeways / On-Street Bike Lanes

There are 26.5 miles of Class II bikeways in Mountain View. Class II bikeways are striped lanes on roadways for one-way bicycle travel. On streets without parking, Class II bike lanes must be at least four feet wide including a maximum of one-foot concrete gutter. On streets with parallel parking, bike lanes must be at least five-feet wide to provide a buffer in the vehicle door-zone. The Valley Transportation Authority's (VTA) Bicycle Technical Guidelines have adopted wider optimum minimum width standards to reduce potential conflict with the "door zone" and to encourage a wider range of bicyclists. VTA suggests an optimum width of 5 feet for bikeways located on roadways with posted speed limits less than or equal to 30 miles per hour, 6 feet for bikeways located on roadways with posted speed limits and between 35 and 40 miles per hour, and 8 feet for bikeways located on roadways with posted speed limits equal to or greater than 45 miles per hour. VTA also suggests an additional eight feet be added to each of these optimum bike lane widths to accommodate on-street parking.[6]

Class III Bikeways / Bike Routes

There are 10.7 miles of Class III bikeways in Mountain View. Class III bikeways are signed bike routes where bicyclists share a travel lane with motorists. Class III bike routes are appropriate for low-volume streets with slow travel speeds, especially those on which volume is low enough that passing maneuvers can use the full street width, on roadways with bicycle demand but without adequate space for Class II striped bike lanes, and as "gap fillers" where there are short breaks in Class II lanes due to right-of-way constraints.

[6] VTA Bicycle Technical Guidelines (December 2012)

Class III Bikeways / Bicycle Boulevards

Bicycle Boulevards are a type of Class III bikeways with additional treatments. They are signed, shared roadways with especially low motor vehicle volume, such that motorists passing bicyclists can use the full width of the roadway. Bicycle Boulevards prioritize convenient and safe bicycle travel through traffic calming strategies, wayfinding, and other measures. One key feature is that stop signs are "flipped" - removed from the boulevard and placed on cross streets - to favor the bicycle direction of travel. This change improves bicyclists' average speed by minimizing unneeded stops. Bicycle Boulevard improvements are coupled with traffic calming features to discourage speeding. There are 5.9 miles of bicycle boulevards in Mountain View.

Class IV Bikeways / Protected On-Street Bike Lanes / Cycletracks

A cycletrack is an on-street bike lane that is physically separated from motor traffic by a curb, bollards, parking, or vertical separation. A cycletrack is similar to a Class II bike lane, but provides the separation and comfort a user can experience on a Class I path. Per Assembly Bill 1193, Caltrans is currently developing state level guidelines for Class IV cycletracks. In the interim, agencies may use the NACTO Urban Bikeway Design Guide to inform their cycletrack designs so long as the City Council adopts or officially endorses the NACTO Guide and the project documentation references NACTO as the source of the design decisions.[7]

[7] Assembly Bill 1193 (2014)

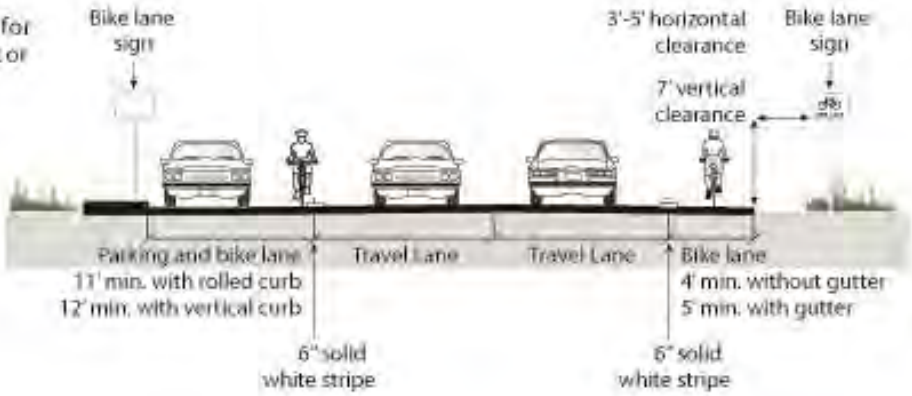
Figure 2-1: Caltrans Bikeway Classifications

CLASS I
Multi-Use Path

Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with crossflow minimized.

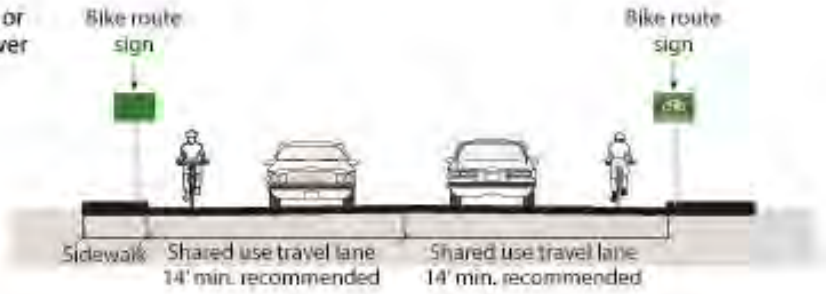
CLASS II
Bike Lane

Provides a striped lane for one-way bike travel on a street or highway.



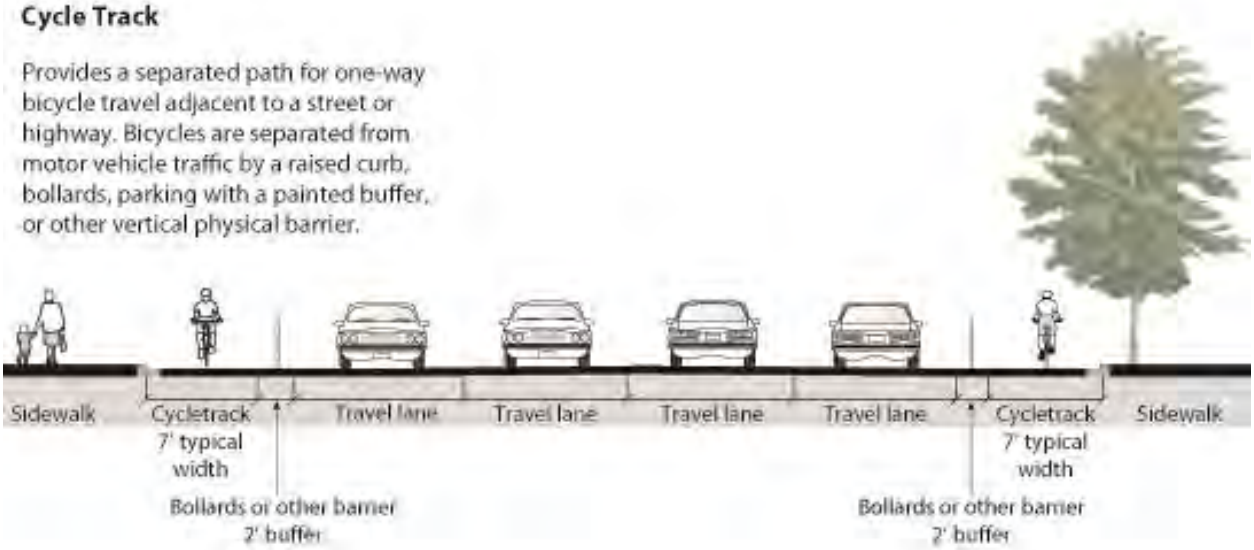
CLASS III
Bike Route
Signed Shared Roadway

Provides for shared use with pedestrian or motor vehicle traffic, typically on lower volume roadways.



CLASS IV
Cycle Track

Provides a separated path for one-way bicycle travel adjacent to a street or highway. Bicycles are separated from motor vehicle traffic by a raised curb, bollards, parking with a painted buffer, or other vertical physical barrier.



2.3.2 Existing Bikeways

As of 2014, there are approximately 58 miles of bikeways in the City of Mountain View, including 15 miles of separated paths, 26.5 miles of on-street bike lanes, 10.7 miles of bicycle routes and 5.9 miles of bicycle boulevards. Figure 2-8 shows the existing bikeways in the City of Mountain View and nearby facilities in adjacent cities.

Class I Bicycle Paths

Class I bike paths in Mountain View include the Stevens Creek Trail, Permanente Creek Trail Hetch Hetchy Trail and 2.2 miles of the San Francisco Bay Trail. The longest Class I bike path is the Stevens Creek Trail, an approximately five mile long shared-use path that extends north to south from the Bay Trail in Shoreline at Mountain View Park south to Heatherstone Way. The existing trails are popular for all types of users.

Class II Bicycle Lanes

The majority of the bikeways in Mountain View are Class II on-street bike lanes. The design of the Class II facilities varies, and can defined into four categories:

1. Standard bike lane (**Figure 2-2**)
2. Bike lane that shares space with a parking lane (**Figure 2-3**)
3. Bike lane that becomes a parking lane (**Figure 2-4**)
4. Buffered bike lane (**Figure 2-5**)

Although all of the facilities shown below are Class II bicycle lanes, their feeling of safety and bicycle-friendliness is not the same for all users.

Figure 2-2 A standard bike lane on Cuesta Avenue includes painted edges lines, delineating the bike lane from the parking lane.

Figure 2-3 On North Whisman Road, the bicycle lane and parking lane share the same road space.

Figure 2-4 On Middlefield Road, the bike lane becomes a parking lane on weekends and after 7pm on weekdays.

Figure 2-5 A buffered bike lane on Moffett Boulevard separates bikes from adjacent traffic.

Class III Bicycle Routes and Boulevards

Since the previous Mountain View Bicycle Transportation Plan passed in 2008, two of the bicycle boulevards proposed in the plan have been implemented: the east-west route that travels along Montecito Avenue and Central Avenue and the north-south route mostly along Dale Avenue and Alice Avenue. Currently, the Mountain View bike boulevards include signage, pavement markings and, in some cases, traffic circles instead of stop signs at the smaller intersections. Each route has green Bike Boulevard signs with directional arrows. The small sharrow symbols painted on the roadway provide additional direction for cyclists, but are not MUTCD compliant and can be hard to see against weathered pavement. The Bike Boulevard signs near approaching major street crossings have additional wayfinding signs added.

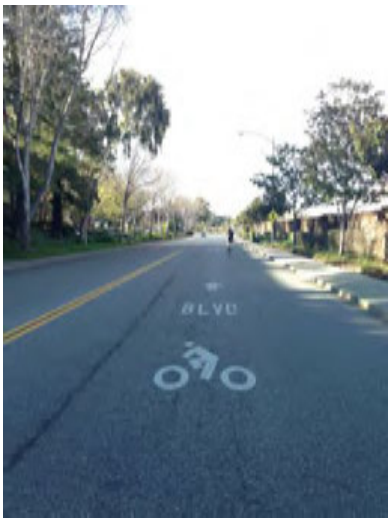


Figure 2-6 Bicycle Boulevard pavement markings on Laura Lane (above) and Dale Avenue (below)

Although these are identified as bicycle boulevards in the City's current bicycle map, they have some operational shortcomings in that their designs are inconsistent with each other and the criteria defined in Section 2.3.1 Bikeway Classifications. A bicycle boulevard is a low-stress facility because it generally has four types of treatment:

1. Signs and pavement markings
2. Wayfinding signs and directional pavement markings
3. Traffic calming and/or diversion to keep traffic volume and speeds low
4. Intersection crossing treatments

The current bicycle boulevards only consistently have the first treatment, bicycle boulevard signs. There are some pavement markings, some wayfinding signs, and some directional pavement markings on various segments. Without a consistent set of these elements, the current bicycle boulevards as a whole do not meet the low-stress criteria and present an opportunity for improvements.

Figure 2-7 Total Miles of Bikeways in Mountain View

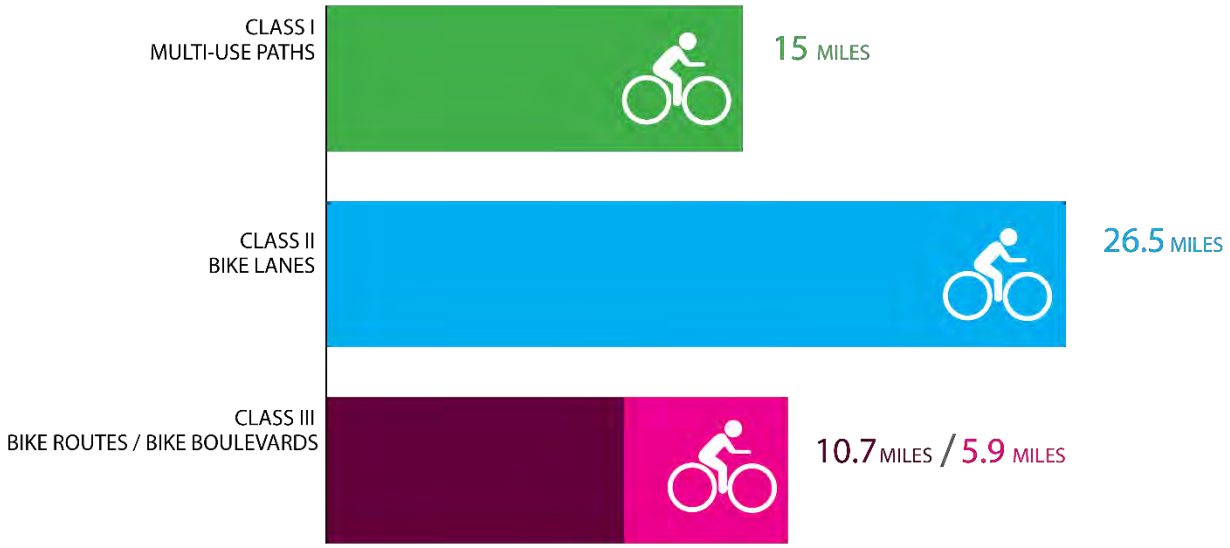
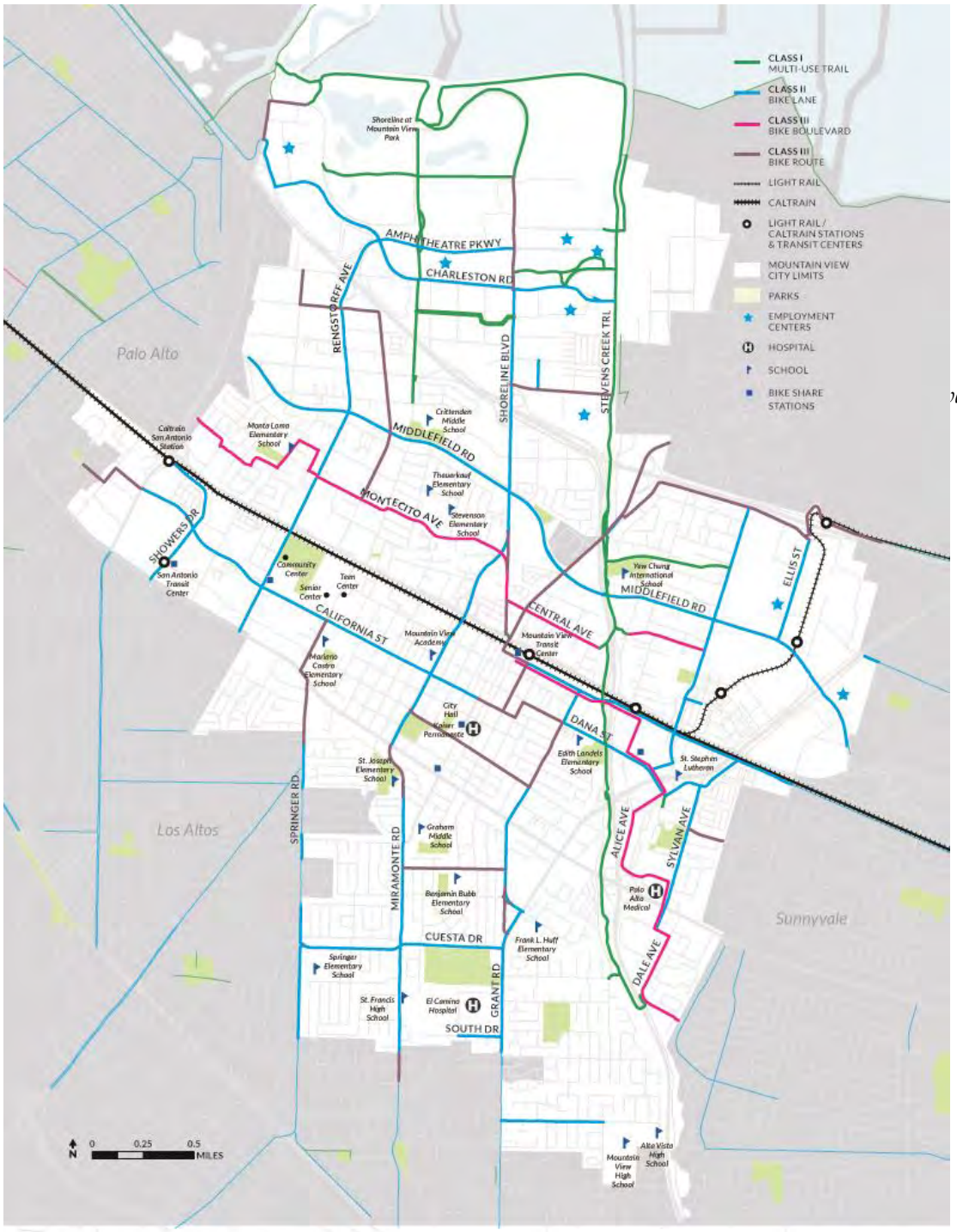


Figure 2-8. Existing Bikeways Map

2.3.3 Signing

The



CITY OF MOUNTAIN VIEW EXISTING BICYCLE FACILITIES

way

California Manual on Uniform Traffic Control Devices (CA MUTCD) outlines the requirements for bikeway signage.

The Bike Lane Sign (R81) is required at the beginning of each designated bike lane and at each major decision point. The Bike Route Sign (D11-1) is required on Class III facilities. Shared-use paths require additional standardized signs to help manage different user groups. The City has installed CA MUTCD standard signs along its bikeways.

The existing local trail systems (Hetch Hetchy Trail, Permanente Creek Trail and Stevens Creek Trail) do not have consistent wayfinding sign standards. A set of wayfinding guidelines would help unify and brand directional signage for trail users.

2.3.4 Bicycle Signal Detection

Bicycle signal detection is important for traffic signs based on traffic detection instead of fixed timing. Bicycle signal detection is similar to automobile detection; it alerts the signal to the presence of a bicyclist and gives the bicyclists a green phase when needed. Without bicycle detection, bicyclists have to wait for an automobile to arrive to trigger the green phase, which can lead to bicyclists delay and red light running. Many of the City's traffic signals on collector and arterial streets have bicycle detection. Typically at intersections with bike lanes, a loop detector is located in the bike lane to detect bicyclists and alert the traffic signal to provide additional time for bicyclists to cross the intersection. If an intersection does not have a bike lane, typically a bicycle symbol alerts bicyclists where to wait to trigger the signal. Loop detectors and pavement markings are installed according to Caltrans standards. Signal timing policies follow accepted traffic engineering standards developed by the Institute for Transportation Engineers (ITE) and CA MUTCD.

Figure 2-10 Bicycle detection pavement marking

2.3.5 First and Last Mile Trips

Some cyclists link their trips with public transit. These linked trips are often called "first and last mile trips" when a cyclist transfers from bicycle to transit or vice-versa to complete a relatively short first or last leg of their journey. Mountain View has multiple transit lines and stops including two Caltrain stations (Mountain View and San Antonio Stations), VTA light rail stations and bus stops, and a new free community shuttle pilot that is being offered to supplement current public transportation service.

2.3.6 Bicycle Parking and End of Trip Facilities

Providing bicycle parking at convenient locations throughout the City is an important part of a comprehensive bikeway system. Bicycle parking can be found throughout the City at community parks, shopping areas and housing developments. Large concentrations of bicycle parking are also available and can be found at major employers, schools, City parks and City facilities and the downtown area.

Parking Ordinance

The City of Mountain View established standards and guidelines for bicycle parking at new developments and redevelopments in 2013 Ordinance No. 18.13. These standards and guidelines also apply to building expansions and changes in use. This ordinance ensures future bicycle parking will be located where it is most needed, at the beginning and end of bicycle commute trips. The type and amount of bicycle parking required depends on the development.

These regulations are detailed in Appendix C. For example, most developments, such as retail stores, corporate offices, shopping centers and restaurants, are required to provide bike parking in an amount equal to 5 percent of vehicle parking spaces. Medical service offices and hotels must set aside 2 percent of vehicle parking spaces while others, such as plant nurseries, require a parking study to determine the amount of spaces needed.

Types of Bicycle Parking

The City of Mountain View defines three types of bicycle parking:

- Class I: overnight (one night or more);
- Class II: long-term (two hours to a full day); and
- Class III: short-term (one to two hours).

Each class has been defined in the Mountain View City Code Section 36.37.100. Known bicycle parking locations are shown on Figure 2-8. Existing Bikeways Map.

Bicycle parking can range from a simple and convenient bicycle rack to storage in a bicycle locker or room that protects against weather, vandalism and theft. Public bicycle parking is concentrated in downtown Mountain View and provided at all schools and City parks. The City provides rent-free bicycle storage at the Downtown Transit Center bicycle shelter and other bicycle lockers downtown. Bicyclists can rent a bicycle locker by contacting the Public Works Department and paying a one-time $25 refundable deposit.

Class I

Class I bicycle parking is the most secure form of parking and is ideal for both the long-term and overnight user. Class I parking can consist of:

- Bike Lockers. Fully enclosed and weather-resistant space only accessible to the owner/operator of the bicycle. Lockers can be pre-manufactured or designed for individual sites (Figure 2-11).
- Restricted Access. Class III bicycle parking located within an interior locked room or a locked enclosure accessible only by the owners/operators of the bicycles contained within.
- Enclosed Cages. An exterior enclosure, with a roof, where the contents are clearly visible from the exterior. The cage can be secured with an owner/operator supplied lock. These types of units can only be used at a retail business or a multifamily development.

Figure 2-11 Class I Bicycle Lockers Behind Mountain View City Hall

Class II

Class II parking is designed for both short- and long-term users. Class II parking facilities are designed so the lock is protected from physical assault, however, the bicycle is still exposed and therefore, should be in visual range. An example of this type of parking is seen in Figure 2-12.

Figure 2-12 Class II "Crankcase" Bicycle Racks

Class III

Class III parking is designed for short-term bicycle parking and is less secure than either Class I or Class II parking facilities. This type of parking must be within constant visual range of persons within the adjacent structure or located in well-traveled pedestrian areas. Figure 2-13 is an example of the Class III City standard Inverted U bike rack.

Figure 2-13 Class III Inverted U Bicycle Rack

Current Downtown Bicycle Parking

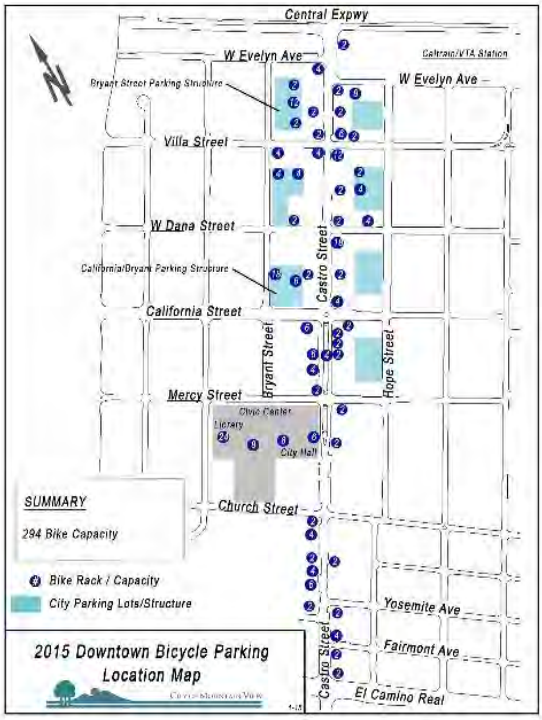


Figure 2-14 Downtown Bicycle Parking Location Map

Mountain View has a vibrant downtown with a mix of restaurants and retail situated primarily along Castro Street, including the Downtown Mountain View Transit Center, a multi-modal transit hub described in Chapter 2 of this plan.

Class III bike racks have been incorporated on each block of Castro Street and 20 two-bike Class I bike lockers have been placed in many of the adjacent public parking areas (Figure 2-14). These lockers are owned by and can be rented from the City. Class III bike racks can be used on a first-come, first-served basis.

Future Downtown Area Bicycle Parking

Any additions to downtown area bicycle parking will be dependent on future usage patterns and the demand for spaces. When future additions are considered, the installation of bike parking will be regulated by guidelines developed by the Mountain View BTP Update and approved by the City Council.

Bike Parking at Multi-Modal Access Points

A Class I bike shelter is located in the Mountain View Train Station Building, adjacent to the Downtown Mountain View Transit Center, described in Chapter 2 of this plan. This bike shelter holds more than 40 bikes, on lockable vertical bike racks, in a secured room, which can be accessed only by authorized renters and City staff. These spaces can be rented through the City.

The Transit Center is also home to several types of Class III bike racks and more than 100 Class I bicycle lockers owned by Caltrain. A photo of a decorative Class III bike rack at the Transit Center is shown in Figure 2-. The bicycle racks at the Transit Center are often full. Bicycle parking is also located at the San Antonio Caltrain Station. Several Class III bike racks and Class I lockers are available in the platform area.

Figure 2-15 Class II bike parking at the Mountain View Transit Center.

Bicycle Support Facilities

Bicycle support facilities are defined as shower and equipment storage facilities located near bicycle parking. These facilities can be found in City buildings, such as City Hall, and at large employers and have been designed for the exclusive use of employees and not for the general public.

Although the number of known support facilities is currently limited, new private non-residential developments, with more than 200 employee parking spaces, must incorporate two employee showers and changing facilities into the design. This requirement is applicable to industrial, research and development, corporate offices and similar high employment businesses. These guidelines can be found in Section 36.32.85 of the Mountain View city code included in Appendix C.

2.3.7 Maintenance

Street and Bike Path Sweeping

Street sweeping clears the road of debris that would otherwise make bicycling difficult. Public streets are the primary focus of the City's street sweeping program. The Mountain View Public Works Department provides street-cleaning services twice a month with a rotating street sweeping schedule. The City operates and maintains all roads except El Camino Real and Central Expressway which are in the jurisdictions of Caltrans and Santa Clara County, respectively. Mountain View maintains approximately 200 miles of streets for safe travel of motorists, bicyclists and pedestrians.

Roadway Maintenance

Potholes are a hazard to bicyclists that can cause crashes and/or damage to bicycles. Residents may report non-urgent street maintenance problems to the City using the Ask Mountain View website.

Neighborhood Traffic Management Program

Adopted in 1996, the Mountain View Neighborhood Traffic Management Program (NTMP) established a mechanism for residents and property owners to obtain relief from traffic-related concerns, namely speeding and excessive traffic volumes. The Program receives funding each fiscal year to apply towards projects that primarily reduce traffic speeding on local residential streets. Residents petition the City for traffic relief, and the City reviews the request vis-à-vis a traffic survey and neighborhood meetings. Once neighborhood and staff identify preferred traffic calming measures, staff strives to implement the traffic management strategy within six to nine months.

The NTMP utilities has a variety of tools to manage traffic on residential streets, generally involving speed and warning signs, turn restriction signs, speed humps, narrow median islands, chokers and bulb-outs, landscaping, traffic circles, forced channelization, one-way entrances/exits, one-way chicanes (or weaving streets which decrease vehicle speeds and

dissuade through traffic) and woonerfs (or all-purpose streets without formal spatial delineations for autos, bicycles and pedestrians).

2.4 Encouragement Programs

The following describes some of the encouragement-related programs hosted by the City of Mountain View and regional bicycle-related organizations.

2.4.1 Bike Month

The City has been acknowledging bike month with a proclamation since 2009. The 2014 proclamation emphasized the importance of bicycling for fitness, recreation, transportation, education, and encouragement. The Mountain View Library celebrated Bike Month 2014 by hosting bike skills classes, a theft prevention seminar, and a book bag giveaway.

2.4.2 Bike to Work Day

Bike to Work Day is an annual region wide event typically held on the third Thursday in May. The City encourages residents and employees to bicycle by participating in Bike to Work Day and supports school district programs. The City's Bike to Work Day activities include the Mayor's annual Bike Month proclamation, bike skills classes sponsored by the City Library, City Manager/City Council led bike ride and energizer stations throughout the City handing out snacks, water and literature educating bicyclists about local bikeways. The City's B/PAC annually hosts the energizer station at the Mountain View Transit Center.

2.4.3 Bay Area Bike Share Program

The City of Mountain View is one of five Bay Area cities participating in the Bay Area Bike Share Pilot Program. There are seven bike share stations (70 bikes) located in the City of Mountain View. Four additional stations (40 bikes) are in the process of being planned.

2.4.4 Silicon Valley Bicycle Coalition

The Silicon Valley Bicycle Coalition (SVBC) in an advocacy organization dedicated to increasing bicycling in Santa Clara and San Mateo Counties through education, encouragement, and community. SVBC hosts a number of events to promote bicycling, including Bike to Work Day, Bike to Shop Day, Bicycle Friendly Workplace, and Valet Bike Parking at local events. SVBC is not affiliated with the City of Mountain View. The organization's programs and events help bolster bicycling education and encouragement in the City.

2.5 Education Programs

2.5.1 Library Drop-In Bike Clinic

The Mountain View Public Library hosts a drop-in bike clinic on the third Friday of every month. Bicyclists of all ages are welcome to use tools to work on their bikes, learn about bike maintenance, and get assistance and advice with general bike mechanical issues.

2.5.2 Safe Routes to School (SRTS) Program

In 2007, the City was awarded a three-year, $300,000 SRTS non-infrastructure State grant, with particular emphasis on education and encouragement. The program sponsored workshops, bike rodeos (bicycle safety clinic), walking school buses, and other programs to incentivize walking and bicycling to school. Over the years, both the absolute number and the proportion of students walking and bicycling to school have risen. The program has created "Suggested Safe Routes to School" maps, created a database chronicling the transportation habits of students and parents based on on-site surveillance, instituted "Walkin' Wednesdays" and "Bikin' Fridays", established a website promoting program goals, continued existing parent workshops, and other age-appropriate promotions.

2.5.3 Suggested Routes to Schools / Vehicle Emissions Reductions Based at Schools (VERBS)

Vehicle Emissions Reductions Based at Schools (VERBS) is a federally funded grant program administered by MTC and VTA for Santa Clara County. The VERBS Program is unique in that it recognizes the importance of developing performance metrics to gauge the environmental and air quality impacts of increased walking, bicycling, and carpooling to school. The VERBS Program has the following main objectives:

- To facilitate the planning, development, and implementation of a project and/or activity that will reduce traffic, fuel consumption, and air pollution in the vicinity of schools.
- To reduce traffic related injuries and fatalities to school children.
- To enable and encourage children, including those with disabilities, to walk and bicycle to school.
- To make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age.

The City was awarded two VERBS grants totaling $1,000,000 ($500,000 in 2011 and $500,000 in 2014) from the MTC/VTA to partner with local schools to develop and implement non-infrastructure projects to promote walking, bicycling and carpooling to school. The current VERBS Program provides age-appropriate educational programs for grades K-12 students in all public and private schools in the City, as well as Los Altos High School.

2.5.4 Trail Safety Days

The City's Community Services Department sponsors Trail Safety Days to educate the public about Stevens Creek Trail etiquette. Stevens Creek Trail is a shared-use trail enjoyed by bicyclists, walkers, joggers and in-line skaters. Bike bells and informational cards reminding trail users of common safety practices are distributed twice each year.

2.5.5 Police Department Education Programs

The Mountain View Police Department periodically holds general information workshops at all schools in Mountain View to educate children about different safety-related topics. Part of the program includes discussion of bicycle safety, including:

- How to safely operate a bicycle.
- Rules of the road.
- The importance of a proper fitting bike helmet.

This program reaches approximately 600 children per year and is expected to continue.

2.5.6 City Website

The Mountain View website posts information about bicycling and pedestrians in the ***Getting Around Mountain View*** webpage to educate the community about existing facilities and programs. The webpage includes information regarding:

- Local bike lanes/trails,
- Bike lockers/storage,
- B/PAC and Bicycle Transportation Plan,
- Web links to Bay Area Bike Share Program, and
- Other bicycling resources and maps.

2.6 Enforcement Programs

2.6.1 Police Department Bicycle Unit

The City of Mountain View Police Department enforces bicycle-related moving and parking violations. The Mountain View Police Department has a unit that patrols the community and the City's special events and festivals on Police Department-issued bicycles. Each team member received specialized training in advanced bike riding and in conducting law enforcement duties from a bicycle. According to the Police Department, the unit is an effective education and enforcement tool. All Mountain View Police Officers, whether they are on the bicycle enforcement team or not, are trained to enforce bicycle-related Vehicle Code violations. The Mountain View Police have an active social media presence, where they post podcasts and articles about bicycle safety, theft prevention, and more.

2.7 Evaluation Programs

Evaluation programs measure and evaluate the impact of projects, policies and programs. Typical evaluation programs range from a simple annual comparison of US Census Journey to Work data to bicycle counts and community surveys. Bicycle counts and community surveys are methods to evaluate the effects of specific bicycle improvement projects; they also function as way to measure progress towards reaching a City's sustainability goals. The data collected from the efforts listed below was used to inform data collection methods for the BTP Update.

The **Mountain View Pedestrian Master Plan (2012)** conducted pedestrian and bicycle counts at 17 intersections throughout the City. The counts gathered data on volume and gender. The Plan recommends that future surveys include categories to distinguish between adults and children, identifying pedestrian/bicycle direction of travel, and improved volunteer training for

conducting in-person counts. The purpose of the survey was to establish a baseline measurement of pedestrian volumes against which to compare future counts.

The **VERBS Program**, described above, conducts quarterly counts on the number of students walking and biking to local schools, including elementary, middle, and high schools. Information is also posted on the City's website. This data is used to measure student bicycle use in the City of Mountain View.

The **Community Service Department** conducted user counts on the Stevens Creek Trail and Permanente Creek Trail in 2012 and 2013. The counts tallied the number and gender of bicyclists, pedestrians, and other users in 15 minute intervals at different points along the trails. The counts were conducted from 8:30 AM to 10:30 AM and 3:30 PM to 5:30 PM.

Bicycle counts were conducted as part of this Bicycle Transportation Update planning process, and are summarized in Chapter 4. This count effort is intended to become the baseline of a benchmarking efforts, continuing on an annual basis to measure and evaluate projects, policies and programs.

2.7.1 Bicycle Friendly Community

Mountain View was designated a Silver-Level Bicycle Friendly Community in 2012 by the League of American Bicyclists as an upgrade from the Bronze-Level award the City held since 2004. The Silver-Level award recognizes the City's commitment to improving conditions for bicycling through investment in bicycling promotion, education programs, infrastructure and pro-bicycling policies. Mountain View is one of only 340 communities across the country to be designated as a Bicycle Friendly Community.

3 Policy and Plan Review

The City's Bicycle Transportation Plan Update is influenced by a number of existing plans, policies and programs that support safe, high quality bicycle environments and encourage greater bicycle mode shares for all types of trips. The Bicycle Transportation Plan Update builds on and translates these documents and initiatives into recommendations for future bicycle-related improvements.

City of Mountain View land use and transportation development are guided by a variety of plans with varying scopes. The General Plan guides future development and sets a foundation for sustainable growth. Plans, such as this Bicycle Transportation Plan Update, emphasize a particular planning initiative that influences the City's growth. Mountain View has many (30+) Precise Plans establishing land use and design standards for focused geographic areas of the City. Currently, the City approved Precise Plans for three of the five General Plan 2030 Change Areas – parts of the City where the most significant changes are planned include El Camino Real, San Antonio, North Bay Shore, East Whisman, and Moffett. Below are the list of plans and policy resources that were considered in the updating of this Plan. Figure3-1 shows proposed bikeways and corridors and areas currently under study.

Table 3-1 Plans and Policies

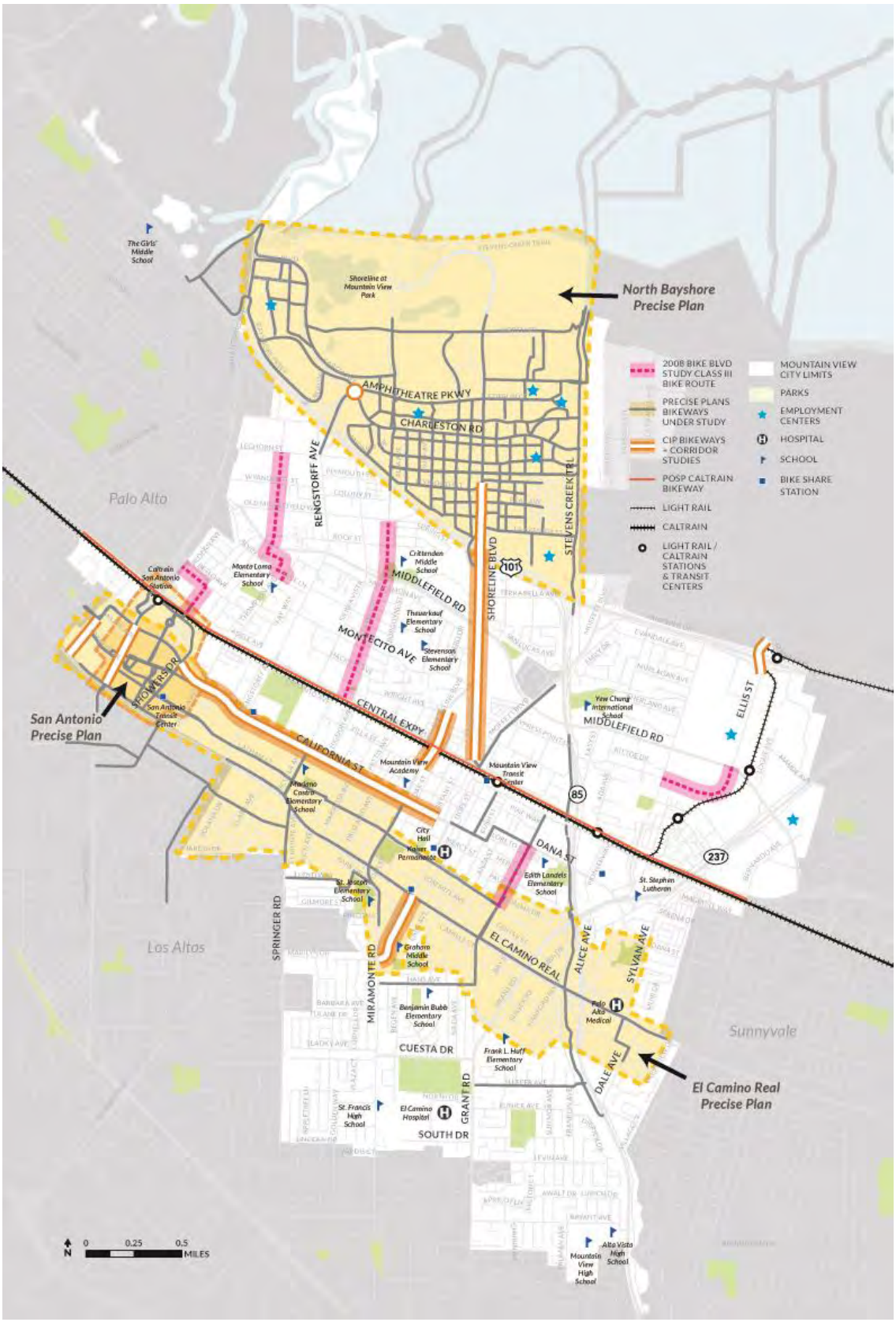
Local
Mountain View 2030 General Plan
Mountain View City Code
Mountain View Capital Improvement Program
San Antonio Precise Plan (2014)
El Camino Real Precise Plan (2014)
North Bayshore Precise Plan (2014)
East Whisman Precise Plan
County
Santa Clara County General Plan (1994)
Valley Transportation Authority: Valley Transportation Plan 2040
Countywide Bicycle Plan (2008)
VTA Bicycle Expenditure Program
VTA Bicycle Technical Guidelines

Regional
MTC Regional Bicycle Plan (2009)
San Francisco Bay Trail Gap Analysis (2005)
Caltrain Bicycle Access and Parking Plan (2008)
Grand Boulevard Initiative
State
State Assembly Bill 32: Global Warming Solutions (2006)
State Assembly Bill 1358: Complete Streets (2008)
State Senate Bill 375: Sustainable Communities (2009)
State Assembly Bill 1193: Bikeways (2014)
State Assembly Bill 1371: Vehicles: bicycles: Passing Distance (2013)
California Manual on Uniform Traffic Control Devices (2012)
California Highway Design Manual (2012)
Caltrans Design Flexibility in Multimodal Design
California Vehicle Code
California Government Code §65302 (Complete Streets)
California Green Building Standards Code (2013)
California Active Transportation Program
Federal
US Department of Transportation Policy on Bicycle and Pedestrian Accommodation Regulations and Recommendation
Manual on Uniform Traffic Control Devices
American Association of State Highway and Transportation Officials – Guide of the Development of Bicycle Facilities

Appendix C reviews relevant goals policies, programs and standards from each of these documents that will effect implementation of the BTP update. The review is organized by City, County, Regional and State documents and policies. A clear understanding of the planning and policy context enables Mountain View to create an actionable Bicycle Transportation Plan Update that fulfills the plans and policies adopted by Council and partner funding agencies.

One of the main objectives of the Bike Plan process is to coordinate and refine the City's bikeways that are being proposed as part of the development of three Precise Plans, various corridor studies, as well as one's identified in the City's Capital Improvement Project list. Figure 3-1 overlays the map of the existing bikeway network with proposed bikeways that are currently under study. This composite map allows the BTP Update to examine improvements to the City's bikeway network in a holistic and strategic way.

Figure 3-1 Bikeways Proposed and Under Study



4 Needs Assessment

The needs of Mountain View bicyclists are diverse; they depend on individual level of experience, confidence, age, trip type and many other factors. To understand the City of Mountain View's bicycle needs, this chapter examines the following:

- Types of bicyclists and typical trip purposes;
- Trip attractors and generators to identify potential bicycle trip origins and destinations.
- Travel mode choice and typical travel time to understand the current and potential rates of bicycling;
- Bicycle-related collisions to understand locations likely in need of bicycle related improvements;
- Existing gaps in the bicycle network to inform potential future network development; and
- Summarizes community input gathered from community surveys and a workshop.

4.1 Types of Bicyclists

The BTP Update seeks to address the needs of all bicyclists and potential bicyclists and therefore it is important to understand the needs and preferences of all types of bicyclists. Needs and preferences vary between skill levels and their trip types. In addition, the propensity to bicycle varies from person to person, providing insight into potential increases in bicycling rates. The public can be classified into four categories related to bicycling. These categories are shown in Figure 4-1.

Figure 4-1 Four Types of Bicyclists[1]

WHAT TYPE OF BICYCLIST ARE YOU?

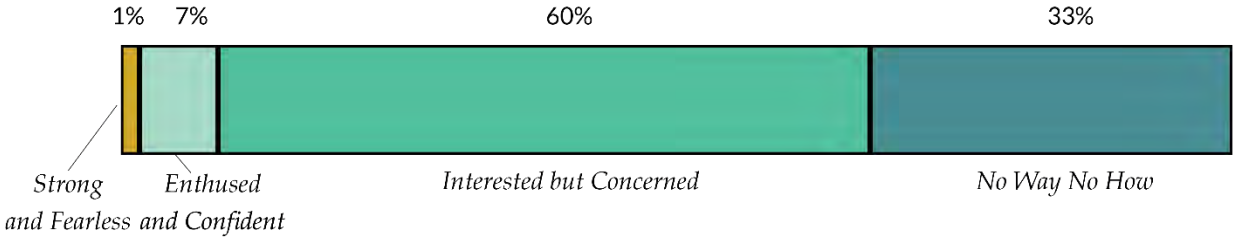
A survey conducted in Portland, OR classified four types of cyclists and discerned that approximately 60% of any given population is "interested but concerned" about bicycling. In other words, this population would like to bicycle and are able to bicycle, but their safety concerns, specifically bicycling in close proximity to automobile traffic, prevents them from bicycling more often or at all.

Strong & Fearless: *I will bike wherever, whenever*

Enthused and Confident: *I feel comfortable biking, especially on bike paths and streets with bike lanes*

Interested but Concerned: *I'd like to bike, but my safety concerns prevent me from biking more often*

No Way No How: *I'm not interested in bicycling because of topography, inability, or lack of interest*



The needs of bicyclists also vary between trip purposes. For example, people who bicycle for sport recreational purposes may prefer long and unsignalized roadways, while bicyclists who ride with their children to school may prefer direct roadways with lower vehicular volumes and speeds. This Plan considers these differences and develops a set of recommended bikeway network implementation to serve all user types.

An effective bicycle network accommodates bicyclists of all abilities. Casual bicyclists generally prefer roadways with low traffic volumes and low speeds. They also prefer paths that are physically separated from roadways. Because experienced bicyclists typically ride to destinations or to achieve a goal, they generally choose the most direct route, which may include roadways with or without bike lanes. Bicyclists of all abilities and purposes ride every day in Mountain View. Parents bicycle with their children to school, people bicycle to work, community members bicycle to transit stations, and recreational bicyclists ride on extended bicycle trips.

4.2 Bicycle Attractors and Generators

4.2.1 Parks and City Facilities

The City of Mountain View has 39 parks within its borders that offer a wide range of both passive and active recreation. The two largest parks are Shoreline at Mountain View Park and

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1 Dill, Jennifer. Understanding and measuring bicycling behavior: Implications for urban planning, health, and research. Active Living Research – Robert Wood Johnson Foundation (RWJF), Principal Investigator, 2004-2006.

Stevens Creek Trail. The City's collection of parks are key destinations for cyclists of all ages and abilities.

Shoreline at Mountain View

Shoreline at Mountain View Park is located in the northern part of the City and includes a golf course, bike rentals at the boathouse, a 50-acre lake and the Rengstorff House, a historic Victorian mansion. The park includes 10 miles of trails, both paved and unpaved, including portions of the San Francisco Bay Trail. Visitors can rent bicycles from the Shoreline Lake Aquatic Center.

Stevens Creek Trail

Stevens Creek Trail is a linear park that stretches from Shoreline at Mountain View to Dale Avenue and Heatherstone Way. The Trail is approximately five miles long and includes a paved shared-use path for pedestrians and bicyclists. Due to the nature of Stevens Creek Trail being a wildlife corridor with sensitive habitat, the trail is not built as a main commute corridor. Rather, it is intended to support more passive recreation. The trail, like all other City Park facilities, is open from dawn to dusk.

Permanente Creek Trail

The Permanente Creek Trail is a multi-use trail that extends from Shoreline At Mountain View over Highway 101, under Old Middlefield Road and currently ends at Rock Street. The Permanente Creek Trail is anticipated to extend to Middlefield Road in the future and the City continues to work with the Santa Clara Valley Water District and Mountain View Whisman School District to review design and site plans.

Hetch Hetchy Trail

The Hetch-Hetchy Trail creates a neighborhood bicycle/pedestrian connection from the Middlefield Light Rail Station to the Stevens Creek Trail. The Hetch-Hetchy Trail also provides off-street bicycle and pedestrian commuter access to the Ellis-Middlefield business area and off-street recreation access to the Stevens Creek Trail and open-space facilities connected to the trail, including Whisman Park, Creekside Park, Landels School and Park and Shoreline At Mountain View. The trail is built along the Santa Clara Valley Water District's channel.

Other City facilities that serve as bicycle trip attractors and/or generators include:

- Mountain View Public Library
- Mountain View Center for Performing Arts
- Senior Center
- Child Care Center
- Teen Center
- City Hall
- Community Center

4.2.2 Schools

Children younger than driving age are a large segment of existing and future bicyclists. Mountain View students attend schools governed by the Mountain View-Whisman School District, Los Altos School District, and/or the Mountain View-Los Altos Union High School District. Mountain View is also home to a number of private schools. Table 4-1 lists the schools within Mountain View, or in adjacent communities as noted, where Mountain View residents attend.

Table 4-1 Schools in Mountain View

Elementary	Location
Elementary School	
Benjamin Bubb Elementary School	525 Hans Avenue
Mariano Castro Elementary School	505 Escuela Avenue
Frank L. Huff Elementary School	253 Martens Avenue
Edith Landels Elementary School	115 West Dana Street
Monta Loma Elementary School	460 Thompson Avenue
Theuerkauf Elementary School	1625 San Luis Avenue
Stevenson Elementary School	750-B San Pierre Way
Springer Elementary	1120 Rose Avenue
Yew Chung International School of Silicon Valley (Private)	310 Easy Street
St. Joseph's Elementary School (Private)	1120 Miramonte Ave
Middle School	
Crittenden Middle School	1701 Rock Street
Graham Middle School	1175 Castro Street
Waldorf School of the Peninsula Middle and High School (Private)	180 North Rengstorff Avenue
High School	
Alta Vista High School	1325 Bryant Avenue
Mountain View High School	3535 Truman Avenue
Los Altos High School (located in City of Los Altos)	201 Almond Ave, Los Altos
Saint Frances High School (Private)	1885 Miramonte Avenue
Mountain View Academy (Private)	360 S. Shoreline Blvd
College	
Carnegie Mellon University, Silicon Valley Campus (Private)	Moffett Field

4.2.3 Retail Centers

The City of Mountain View has three major retail shopping areas. Additional shopping areas are located throughout the City, including those along on Grant and Charleston Roads and on Rengstorff Avenue and Shoreline Boulevard.

San Antonio Shopping Center

The San Antonio Shopping Center is an outdoor shopping mall located on El Camino Real and San Antonio Road. The Shopping Center includes large and small retail shops and food outlets. The Center is also home to the San Antonio

Transit Center, which provides transit connections to VTA bus lines and Stanford's Marguerite shuttle. The San Antonio Caltrain station is within a five minute walk.

Downtown Castro Street

Castro Street is Mountain View's commercial downtown core. Mountain View's Civic Center includes its Public Library, City Hall, and Center for Performing Arts, and a range of retail, dining, and commercial services. The Downtown Transit Center is located at the northern end of Castro Street at Evelyn Avenue. Refer to Chapter 2 for more information about Downtown bicycle parking and Chapter 3 for more information of bike accommodations at transit facilities.

El Camino Real

El Camino Real is a mixed-use corridor that runs through Mountain View and connects to Palo Alto, Los Altos and Sunnyvale. In addition to being a major transportation corridor, it is home to a wide variety of shopping and commercial uses.

4.2.4 Top Employers

As of 2014, approximately 27,000 people are employed by Mountain View's top ten employers. The total City daytime population is 117,000, 17,000 more than 2003-2004 estimates. Table 4-2 lists the City's top ten employers, their location, and number of employees. This Plan's recommendations consider large employer locations.

Table 4-2: Top 10 Employers (2014)

Employer	Address	Number of Employees
Google, Inc.	1600 Amphitheatre Pkwy Mountain View, CA 94043	11,332
Symantec/Verisign	350 Ellis St Mountain View, CA 94043	3,444
LinkedIn	2029 Stierlin Ct Mountain View, CA 94043	3,000
El Camino Hospital	2500 Grant Rd Mountain View, CA 94040	2,630
Intuit Corporation	2632 Marine Way Mountain View, CA 94043	1,707
Microsoft Corporation	1065 La Avenida St Mountain View, CA 94043	1,700
Palo Alto Medical Foundation	370 Distel Circle Los Altos, CA 91442	1,034
Synopsys, Inc.	700 E Middlefield Rd Mountain View, CA 94043	1,031
City of Mountain View	500 Castro St Mountain View, CA 9404	568
Omnicell	590 E Middlefield Rd Mountain View, CA 94043	500
Total		**26,946**

Source: City of Mountain View Comprehensive Annual Financial Report (June 30, 2014)

4.2.5 Transit

Public transit riders often face the "first mile, last mile" dilemma of how to connect their home and destination to their transit stop. For instance, a transit bus may take a passenger to within a mile of their employment site, but that might be outside the range of their walking capability or tolerance. Providing bicycle racks on buses, allowing bikes on/in rail cars, and bicycle parking at transit stops ensure that bicycling is a complementary solution to the transit connectivity issue.

Approximately 4.4 percent of Mountain View's working population report taking transit to work daily. Two public transit agencies operate within the City: Caltrain, a commuter rail system that runs from San Francisco to Gilroy, and the Santa Clara Valley Transportation Authority (VTA).

Caltrain operates two stations in Mountain View: Downtown Mountain View Station and the San Antonio Station. Out of Caltrain's 29 stations, the Downtown Mountain View Station has the third highest number of average weekday riders (4,274), or 8.2% of total average weekday ridership. Similarly, the Downtown Mountain View Station has the third highest station for average weekday bicycle ridership, behind Palo Alto and San Francisco. The average weekday passengers with bicycles at the Mountain View Station is 520, or 12% of the total number of Mountain View Caltrain station riders.

The City has two primary transit hubs, the Downtown Transit Center and the San Antonio Transit Center. The Downtown Transit Center provides connections to VTA light rail, bus lines, Caltrain, and Caltrain shuttles. The Downtown Transit Center has 23 bicycle racks, 116 bicycle lockers, a shared access bike storage shed, and a Bay Area Bike Share Station. The San Antonio Caltrain station has an average weekday ridership of 730 passengers, or 1.39% of the total average weekday ridership for the entire corridor. Bicycle boarding data was not available for the San Antonio station.[2] The San Antonio Caltrain station has 18 bike racks, 38 bike lockers, and a Bay Area Bike Share station. The station has transit connections to VTA bus lines, Caltrain shuttles, and the Stanford Marguerite shuttle.

4.3 Commuter Travel

Monitoring the number of commuter bicyclists in the City provides a way to track the use of bicycle facilities. As bicycle facilities are built and education and encouragement programs are implemented, commuter travel data can be revisited to monitor changes in bicycling rates. The proportion of Mountain View residents that bicycle to work is about 6.5%, which is higher than Santa Clara County, the State of California, and the United States as a whole (Table 4-3).

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[2] *February 2014 Caltrain Annual Passenger Counts*

Table 4-3: Work Commute Mode Share by Geography

Mode	Mountain View	Los Altos	Palo Alto	San Francisco	Santa Clara County	California	United States
Drove Alone	72.70%	78.50%	64.80%	36.70%	76.30%	73.30%	76.40%
Carpooled	8.80%	5.30%	6.30%	7.30%	10.30%	11.00%	9.60%
Public Transportation	5.10%	2.00%	6.10%	32.50%	3.80%	5.20%	5.10%
Walked	2.30%	3.10%	5.10%	10.20%	2.00%	2.70%	2.80%
Bicycled	**6.50%**	**3.20%**	**9.10%**	**3.70%**	**1.90%**	**1.10%**	**0.60%**
Taxi, Motorcycle, Other	1.60%	0.20%	0.50%	2.50%	1.30%	1.30%	1.20%
Worked from Home	3.10%	7.60%	8.10%	7.10%	4.50%	5.30%	4.30%

Source: U.S. Census Bureau, 2011-2013 (3-year estimates) American Community Survey

Review of travel time to work is important to estimate the number of *potential* bicycle commuters. Generally, a commute time of 15 minutes or less is equivalent to a 30 minute bicycle commute, assuming flat topography and light to moderate traffic. In Mountain View, approximately 28 percent of the workforce that drives or takes transit has a commute of 15 minutes or less. Examples from communities nationwide have demonstrated that it is possible for Mountain View to shift a portion of the 28 percent of the 15 minute or less commuters to bicycling. Table 4-4 compares average Mountain View commute times with Santa Clara County, California, and the United States.

Table 4-4: Travel Time to Work

Travel Time to Work	Mountian View	Santa Clara County	California	United States
Less than 15 minutes	28%	48%	21%	26%
15 to 29 minutes	36%	36%	43%	49%
30 to 44 minutes	14%	15%	16%	13%
45 to 59 minutes	8%	8%	7%	4%
60 minutes or more	8%	11%	7%	4%

Source: U.S. Census Bureau, 2010-2012 (3-year estimates) American Community Survey

4.4 Estimated Commuter and Utilitarian Bicyclists

The US Census only collects the primary mode of travel to work; it does not consider those who use a bicycle as part of their commute, for recreation, or to run errands. Alta Planning + Design has developed a bicycle model that estimates bicycle usage based on available empirical data to encapsulate general bicycle demand.

For the purposes of this BTP Update, the model uses Mountain View specific data from the US Census American Community Survey (ACS) and National Safe Routes to School survey. The calculation steps are outlined below.

Bicycle to work mode share:

- Number of bicycle commuters, derived from the ACS.
- Work at home bicycle mode share.
- Number of those who work from home and likely bicycle, derived from assumption that five percent of those who work at home make at least one bicycle trip daily.

Bicycle to school mode share:

- Number of students biking to school, derived from multiplying the K-8 student population by the national bike to school average rate of two percent.

Number of those who bike to transit:

- Number of people who bicycle to Caltrain or VTA Stations, assuming that five percent of transit patrons use bicycles to access the station and/or their destination.

As shown on

Table 4-5, there are an estimated 4,900 existing daily bicycle commuter who live in Mountain View, who make a total of 9,800 bicycle trips. This is an order-of-magnitude estimate based on available American Community Survey data and does not include recreational trips, nor does it include trips made by people who live in other cities and work in Mountain View.

Table 4-5: Existing Bicycling Demand (Estimated)

Variable	Figure	Source
Existing study area population	76,478	2013 ACS, B01003 3-Year Estimates
Existing employed population	41,802	2013 ACS, B08301 3-Year Estimates
Existing bike-to-work mode share	6.50%	2013 ACS, B08301 3-Year Estimates
Existing number of bike-to-work commuters	2,717	Employed persons * by bike-to-work mode share
Existing work-at-home mode share	3.10%	2013 ACS, B08301 3-Year Estimates

Variable	Figure	Source
Existing number of work-at-home bike commuters	65	Assumes 5% of population working at home makes at least one daily bicycle trip
Existing transit-to-work mode share	5.10%	2013 ACS, B08301 3-Year Estimates
Existing transit bicycle commuters	107	Employed persons multiplied by transit mode share. Assumes 5% of transit riders access transit by bicycle
Existing school children, ages 5-18 (grades K-12th)	10,759	2013 ACS, S0101 3-Year Estimates
Existing school children bicycling mode share	14.0%	Mountain View VERBS Bike to School Counts (Elementary, Middle and High School average)
Existing school children bike commuters	1,506	School children population multiplied by school children bike mode share
Existing number of college students in study area	4,983	2013 ACS, S1401 3-Year Estimates
Existing estimated college bicycling mode share	10.0%	Review of bicycle commute share in seven university communities (source: National Bicycling & Walking Study, FHWA, Case Study No. 1, 1995).
Existing college bike commuters	498	College student population multiplied by college student bicycling mode share
Existing total number of bike commuters	4,893	Total bike-to-work, school, college and utilitarian bike trips. Does not include recreation.
Total daily bicycling trips	9,786	Total bicycle commuters x 2 (for round trips)

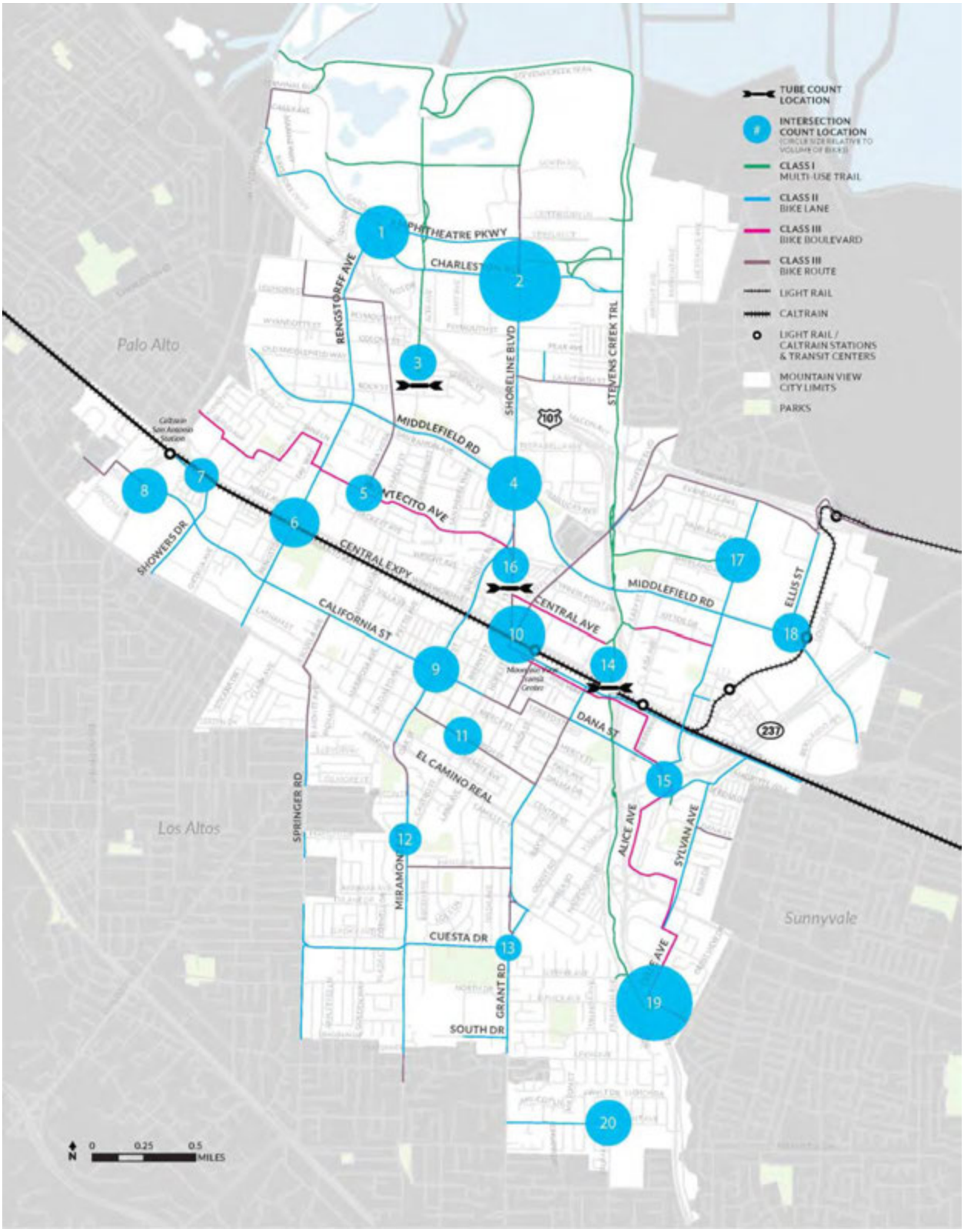
4.5 Bicycle Counts

For the purpose of this BTP update, bicycle turning movement counts were conducted at 17 intersections throughout the city during the peak AM (7:00 - 9:00 AM) and PM (4:00 - 6:00 PM) periods in May 2014, when most people commute to school or work. Simultaneously, tube counts were conducted at three additional locations during a seven-day period to observe the fluctuation in activity over the course of the day and throughout the week.

Figure 4-2 shows the count locations and the total number of bicyclists traveling through the intersections during the AM and PM peak periods.

This count data was used to identify the intersections that experience the highest volume of bicyclists in today's existing conditions. The North Shoreline Boulevard and Charleston Road intersection (Intersection #2) had the highest number of total bicyclists; 209 in the AM peak and 420 in the PM peak for a total of 629 bicyclists during the commute periods. Heatherstone Way and the entrance to the Stevens Creek Trail had the second highest number of bicyclists, 547 between the AM and PM commute periods. These baseline counts can be used to measure future bicycle volume trends.

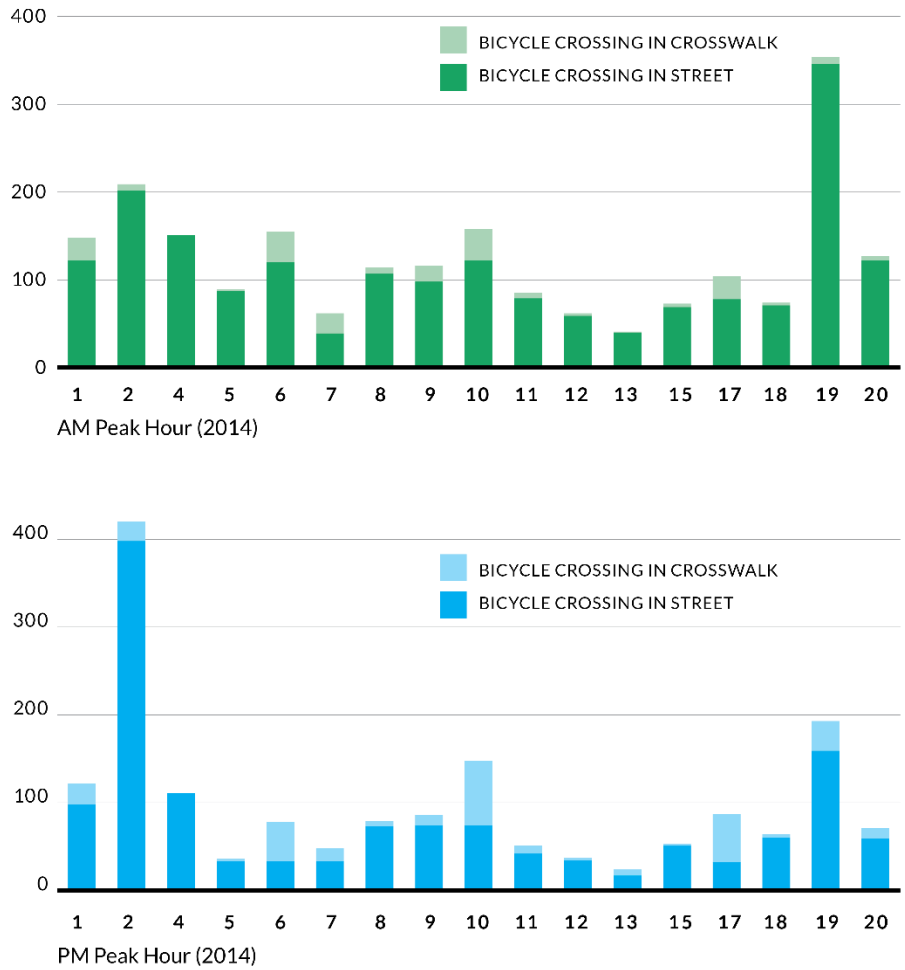
Figure 4-2. Bicycle Counts Map (2014)



The size of the circle is relative to the bicycle volumes traveling through the intersection.

The two charts below show the number of bicyclists traveling through the intersections on the street and the number of bicyclists who use the crosswalk to cross an intersection. In all cases, the majority of bicyclists use the roadway to cross an intersection. However, there are a few intersections with particularly higher proportions of bicyclists who cross within the crosswalk, including the three intersections that cross Central Expressway: #6. North Rengstorff Avenue, #7. Mayfield Avenue and #10. Castro Street. Intersection #1 Amphitheatre Parkway and Charleston Road and Intersection #17 Whisman Road and the Hetch Hetchy Trail also have a higher number of bicyclists crossing within the crosswalk. The Mountain View City Code states that "no person shall ride a bicycle upon any sidewalk in the business district" (Sec. 19.51). Unless the sidewalk is classified as a multi-use path, bicyclists are encouraged to bike on the roadway. When bicyclists travel on the sidewalk or the crosswalk, their behavior may be a response to roadway conditions they perceive as uncomfortable. The crosswalk crossing data can be considered a proxy for intersections that require additional observation and analysis.

Figure 4-3 Bicycle Intersection Counts



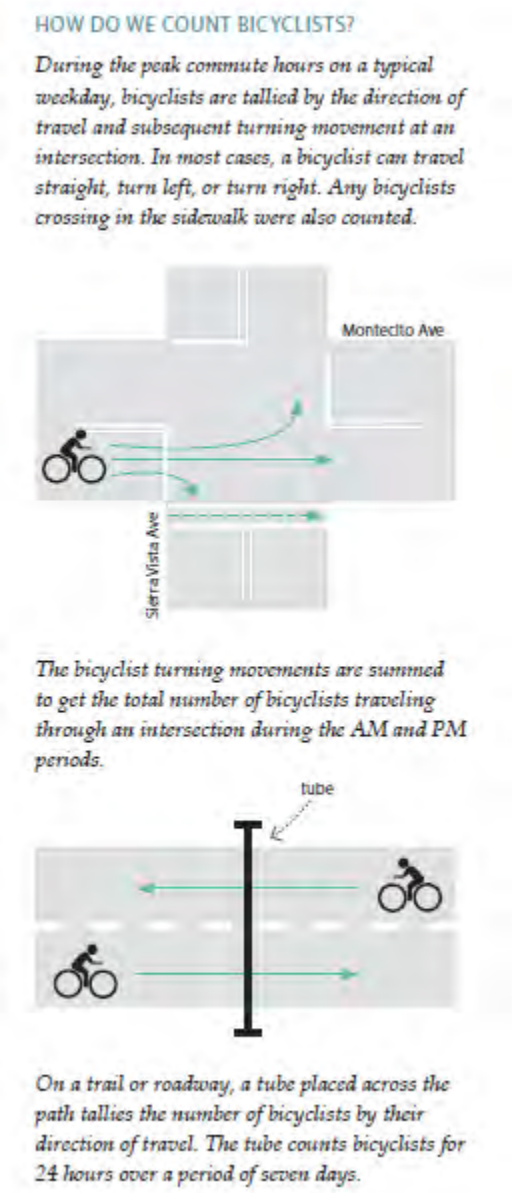
Locations #3, 14 and 16 were tube counts and excluded from this chart and are in Figure 4-5.

Intersections

1. Amphitheatre Parkway and Charleston Road
2. North Shoreline Boulevard and Charleston Road
3. North Shoreline Boulevard and Middlefield Road
4. Montecito Avenue and Sierra Vista Avenue
5. Central Expressway and North Rengstorff Avenue
6. Central Expressway and Mayfield Avenue
7. Antonio Road and California Street
8. Shoreline Boulevard and California Street
9. Castro Street and Central Expressway
10. Castro Street and Church Street
11. Miramonte Avenue and Castro Street
12. Grant Road and Cuestra Drive
13. East Dana Street and Whisman Road
14. Whisman Road and Hetch Hetchy Aqueduct
15. Ellis Street and East Middlefield Road
16. Heatherstone Way and Stevens Creek Trail
17. Truman Avenue and Bryant Avenue

Part of understanding the need for bikeway improvements is examining the current use of Mountain View's trails system as well as low-volume automobile streets. Bicycle tube counts were taken in May 2014 at trailheads to Stevens Creek Trail and Permanente Creek Trail as well as on Stierlin Road near the intersection of Central Avenue. These tube counts establish a baseline of existing use and will allow the City to measure the increase of bicycle use over time due through the implementation of the Bike Plan's projects, programs, and policy changes.

Figure 4-4 Bicycle Counting Methodology



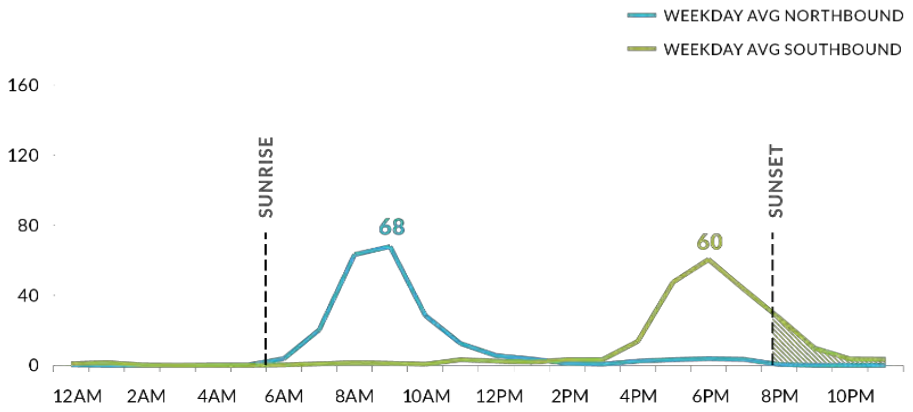
Class I bike paths in Mountain View include a section of the Bay Trail, Stevens Creek Trail, Permanente Creek Trail, and the Hetch Hetchy Trail. The Mountain View Community Services Department is responsible for the operations and maintenance of the City's trails network. The Stevens Creek Trail and portions of the Permanente Creek Trail are considered to be environmentally sensitive habitat and therefore are unilluminated. Per City Code 38.15, all trails are closed between dusk to dawn.

A tube count on Stierlin Road near the intersection of Central Avenue was also selected to obtain bicycle counts because there is currently an informal pedestrian/bicycle connection between Stierlin Road and Central Avenue. This area may experience a significant increase in bicycle and pedestrian activity in the future as the planned improvements associated with a private development project at 100 Moffett Blvd and the Shoreline Boulevard. Transportation Corridor Study are implemented. Once the improvements have been implemented, the City can measure the change in bicycle use along Stierlin Road.

Figure 4-5 shows the number of bicyclists traveling northbound and southbound on the Stevens Creek Trail, the Permanente Creek Trail and Stierlin Road. All three locations have AM and PM commute peaks. The trails are officially closed a half an hour after sunset, however the tube counts taken in May 2014 show bicyclists using the trails after dark and, in the case of Permanente Creek Trail, before dawn.

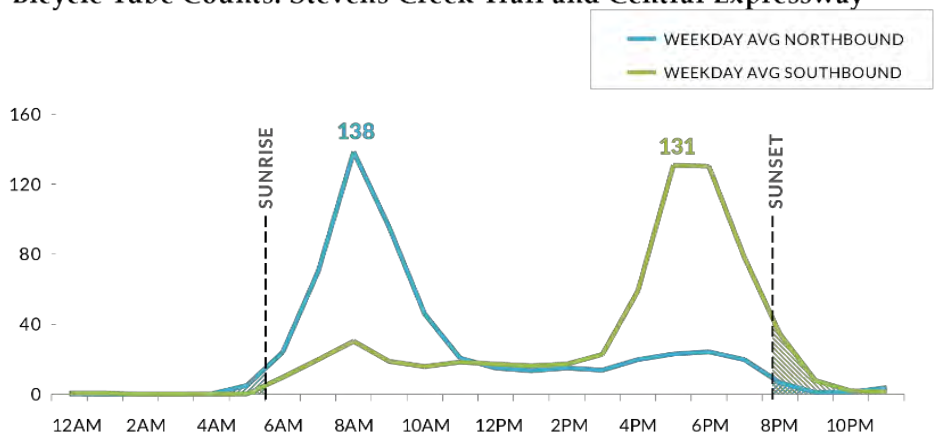
Figure 4-5 Bicycle Tube Counts

Bicycle Tube Counts: Permanent Creek Trail and Rock Street



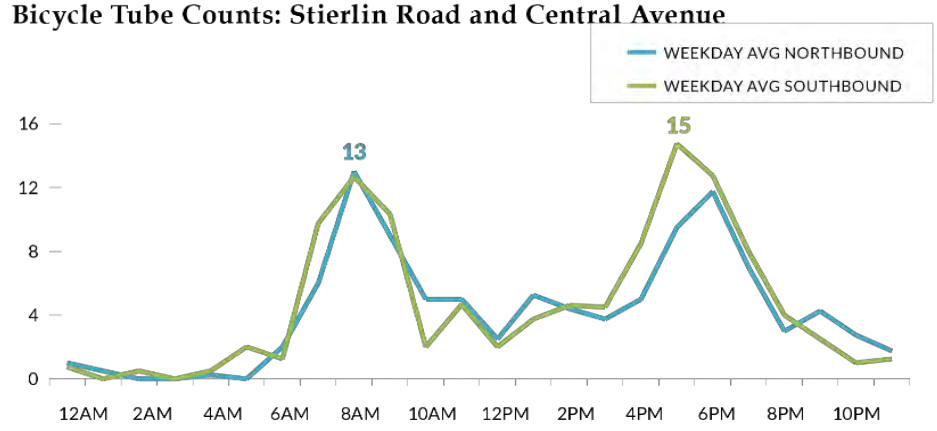
Sunrise: 5:59am
Sunset: 8:11pm
May 2014

Bicycle Tube Counts: Stevens Creek Trail and Central Expressway



Sunrise: 5:59am
Sunset: 8:11pm
May 2014

Bicycle Tube Counts: Stierlin Road and Central Avenue



4.6 Bicycle Collisions

Bicycle collision records are maintained by the City of Mountain View Police Department and posted on the City's website.[3] To gain a better understanding of where bicycle-related collisions have occurred in Mountain View and the nature of the collisions, Police Department data from the past five years (2009 -2013) has been preliminarily analyzed and mapped. The location of the 2009-2013 bicycle collisions can be seen in Figure 4-7.

Preliminary analysis of bicycle related collisions reveals that bicycle collisions have decreased from 45 bicycle-related collisions in 2009 to 27 collisions in 2013 (Refer to Figure 4-7). Of the 193 bicycle-related collisions that occurred from 2009 to 2013, 165 (85%) were collisions between a bicycle and a car. Of those collisions, 75 (45%) were determined to be the fault of the motorist, 69 (42%) were determined to be the fault of the cyclist, and the fault of the remaining 21 (13%) collisions was undetermined.

The intersections with the most reported bicycle-related collisions between 2009 to 2013 occurred near the following intersections:

- Central Expressway and Rengstorff Avenue
- El Camino Real and Sylvan Avenue
- Shoreline Boulevard and Villa Street
- California Street and San Antonio Road
- California Street and Oak Street

Two of the five locations are intersections along Central Expressway and El Camino Real. While Central Expressway is in the Santa Clara County's jurisdiction and El Camino Real is in the California State's jurisdiction, the City has jurisdiction of the side street approaches at these intersections. While collision data is sometimes incomplete and does not capture a complete picture of the circumstances, including collision causation; analyzing bicycle collision data helps inform the City of possible engineering or education needs. This helps to establish potential areas that can be considered for recommended improvements in the BTP Update (see Chapter 5 Recommendations). The City has also begun pursuing bicycle-related improvements and policies in the above listed areas through the City's El Camino Real Precise Plan, San Antonio Precise Plan, and California Street Complete Streets Study.

[3] The City of Mountain View has been collecting data on bicycle-related collision injuries and fatalities since 2009.

Figure 4-6 Bicycle Collisions and Parties at Fault (2009-2013)

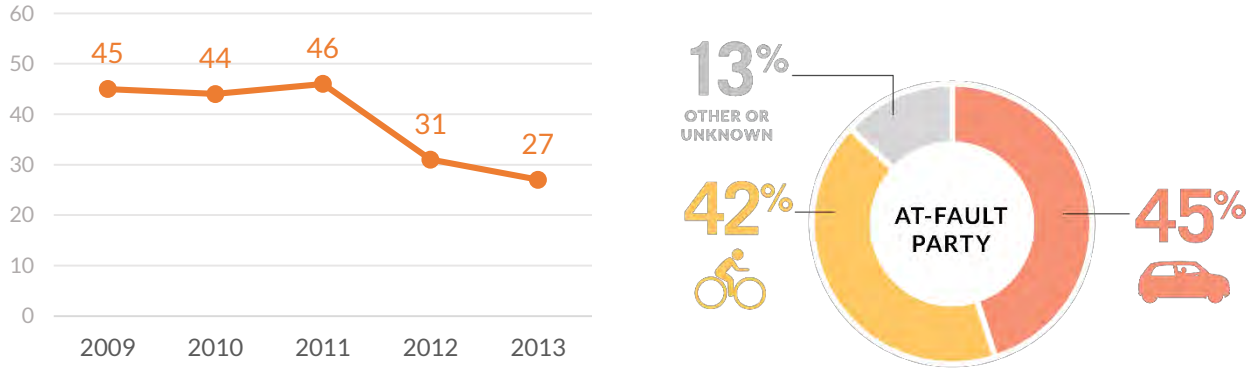


Figure 4-7. Collision Map (2009-2013)

4.7 Low Stress Connectivity Gaps

One of the most significant barriers to bicycling is that the network, or segments of the network, exceed a bicyclist's tolerance for traffic stress. In other words, a bicyclist who feels comfortable riding on the Stevens Creek Trail may not feel comfortable bicycling on street where bicyclists interact with traffic, which can induce a higher-stress environment. As such, a recreational bicyclist who uses Stevens Creek Trail may not bike to school, work, or the grocery store. Low stress segments include Class I separated paths and streets with low traffic volumes, low traffic speeds, and bike facilities such as a cycletrack or bike boulevard treatments.

In Mountain View, Class I and designated bicycle boulevard segments of its Class III bicycle facilities can be viewed as generally low stress.

However, field observations revealed that the Class III bicycle boulevard segments lack the traffic calming and consistent way finding and facility markings needed to define bicycle boulevards as low-stress facilities. Furthermore, the existing bicycle boulevards can become high stress when they intersect with high volume streets. The Class I paths are popular routes for both recreational and commuter bicycling, but sometimes become crowded when bikes and pedestrians share the path. The City's low stress bicycle network is shown in Figure 4-10.

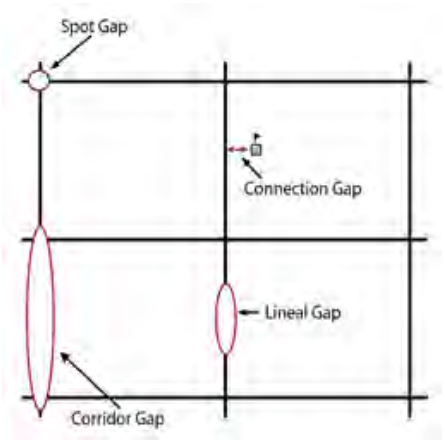
4.7.1 Gap Types

An otherwise low-stress facility can have high-stress gaps. Below is a discussion of gap types in a bikeway network.

Spot Gaps

Spot gaps refer to point-specific locations lacking dedicated bicycle facilities or other treatments to accommodate safe and comfortable bicycle travel. Spot gaps primarily include intersections and other vehicle/bicycle conflict areas posing challenges for riders. Examples include bike lanes on a major street "dropping" to make way for right turn lanes at intersection, or a lack of intersection crossing treatments for bicyclists on a bikeway as they cross a major street.

Figure 4-8: Bikeway Gap Types



Connection Gaps

Connection gaps are missing segments (1/4 mile long or less) on a clearly-defined and otherwise well-connected bikeway. Major barriers standing between bicycle destinations and clearly defined routes also represent connection gaps. Examples include bike lanes on a major

street "dropping" for several blocks to make way for on-street parking; a discontinuous off-street path; or a freeway standing between a major bikeway and a school.

Lineal Gaps

Similar to connection gaps, lineal gaps are 1/4 mile to one-mile long missing link segments on a clearly defined and otherwise well-connected bikeway.

Corridor Gaps

On clearly-defined and otherwise well-connected bikeways, corridor gaps are missing links longer than one mile. These gaps will sometimes encompass an entire street corridor where bicycle facilities are desired but do not currently exist.

System Gaps

Larger geographic areas (e.g., a neighborhood or business district) where few or no bikeways exist are identified as system gaps. System gaps exist in areas where a minimum of two intersecting bikeways would be required to achieve the target network density. Gaps typically exist where physical or other constraints impede bicycle network development.

Quality Gaps

Quality gaps are links of an existing bikeway that are deficient or have operational shortcomings. For example a quality gap on an existing Class II bike lane may be a link where the bike lane shares space with parked cars, and/or doesn't meet Caltrans standards.

4.7.2 Gap Analysis Findings

Identification of network gaps within the Mountain View bicycle system is a two-step process that utilizes both objective, quantifiable data contained in the City GIS data files and real world qualitative data based on team field visits and feedback from public comment. By conducting a two-pronged analysis using complementary processes the team developed a more robust picture of existing conditions and reduced potential weaknesses of both qualitative and quantitative analysis methods described below:

- *Quantitative* analysis conducted with GIS is objective, systematic and considered the whole city without bias. This analysis can identify gaps including geographic areas without network coverage and Class III routes that cross arterial without a traffic signal. This analysis is only as detailed as the available data inputs and will not capture details such as narrow bike lanes or intersections where the bike lane drops and then resumes.
- *Qualitative* analysis is based on individual experiences of the bike network and is best used to identify detailed on-the-ground conditions that are not represented within the GIS data. Robust qualitative analysis is dependent on vast project participation from a diverse cross section of the community and detailed personal knowledge of the city from the participants and for this reason may not provide equal geographic coverage across the entire area.

The Network Gap Analysis findings are shown in Figure 4-9. Latham Street, Castro Street, Truman Avenue, Bryant Avenue and the southern extension of Stevens Creek Trail are identified as corridor gaps. Lineal gaps include Rock Street, Farley Street and other streets that connect existing bikeways. Connection gaps include Easy Street, which would connect Middlefield Road to a Stevens Creek Trail entrance, and other shorter segments.

Figure 4-9 Network Gap Analysis

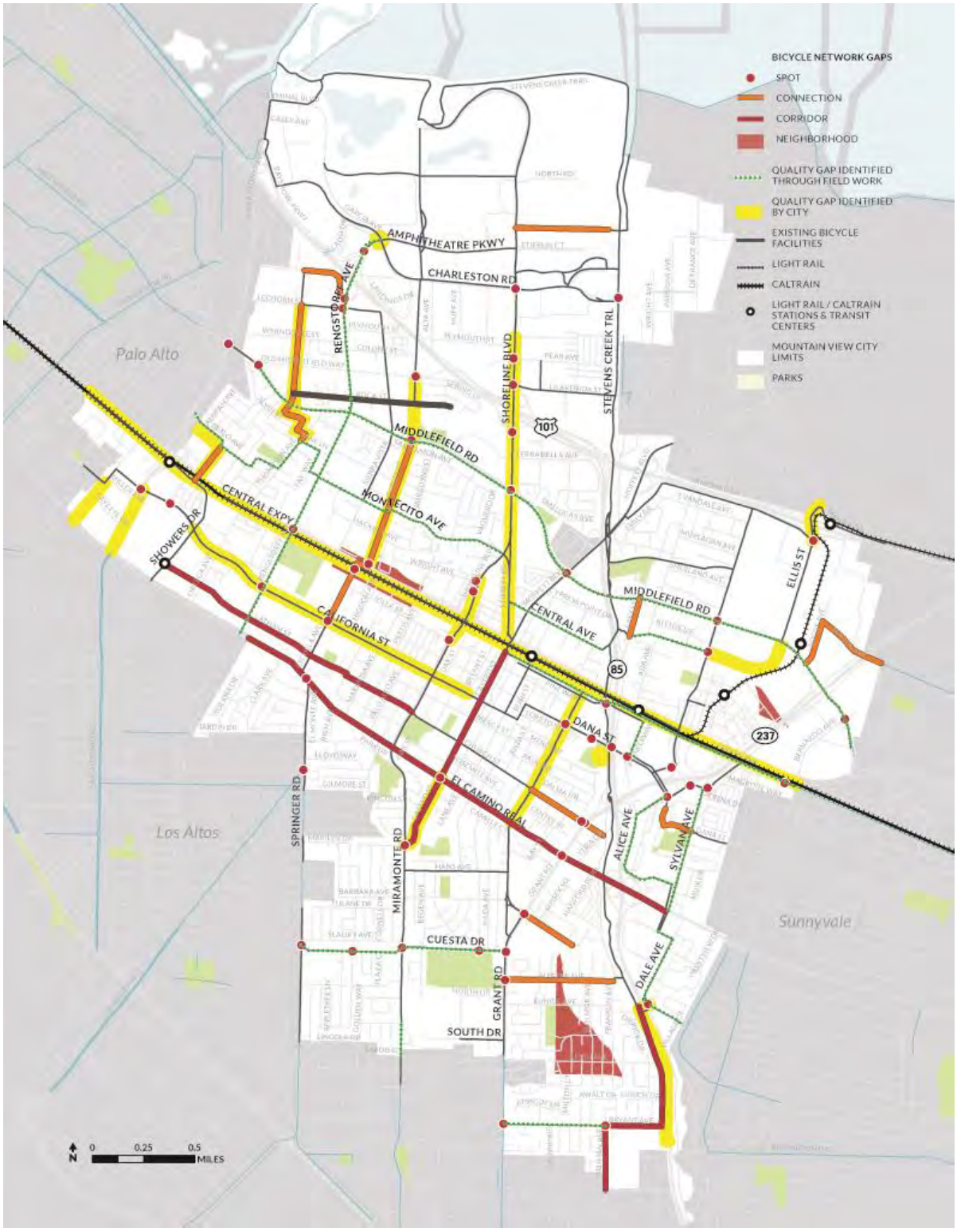
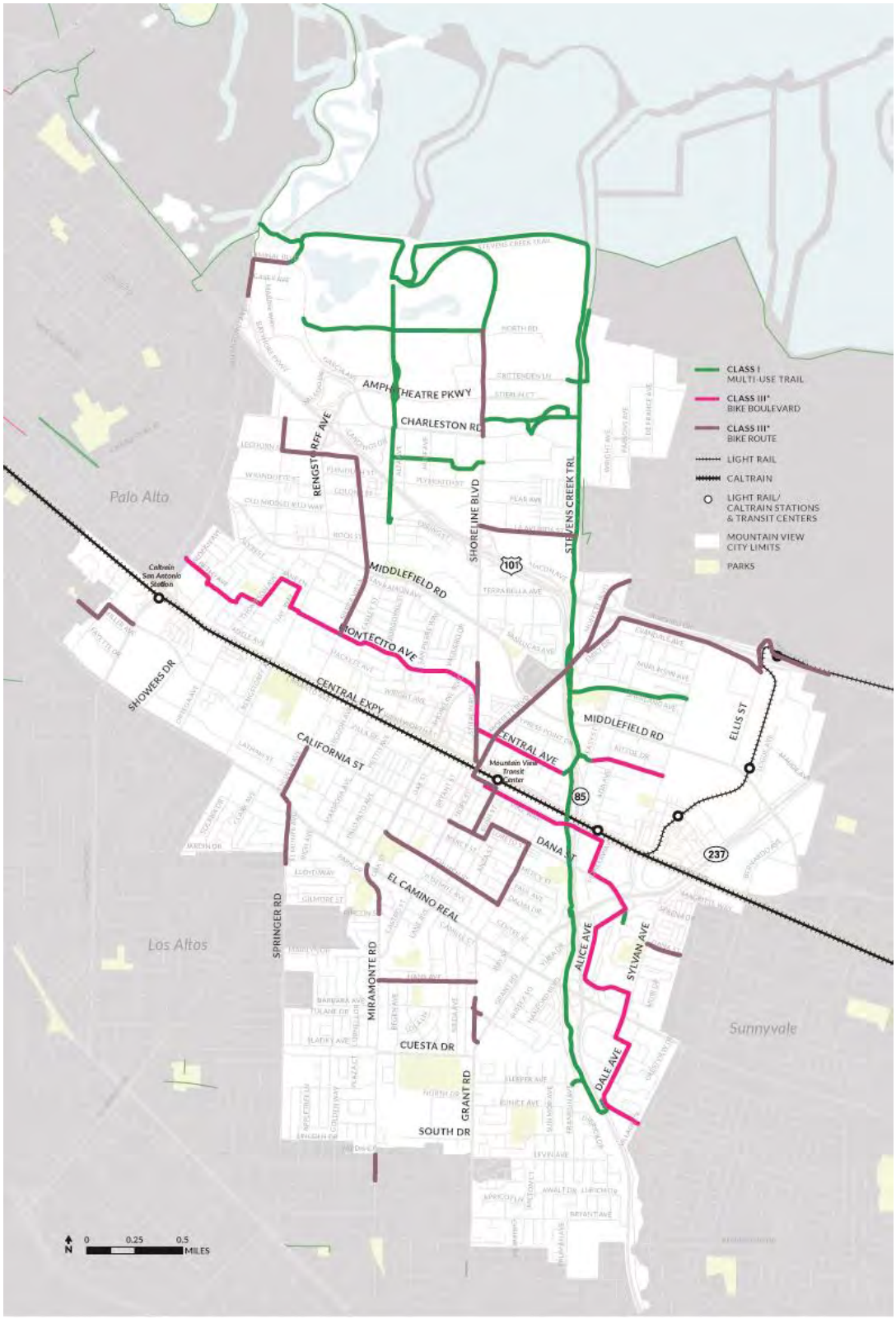


Figure 4-10. Low Stress Bicycle Connectivity Gap Map



**Mountain View's existing Class III Bike Boulevards and Class III Bike Routes currently do not meet all of the criteria of a low stress facility. However, with improvements, they have the potential of becoming low stress facilities.*

4.8 Community Identified Needs

The public outreach process for the Bicycle Transportation Plan Update included multiple online surveys, a text survey, a public workshop, and meetings with Mountain View advisory committees and commissions. The following section summarizes the public outreach program. Details of the meetings and surveys are presented in Appendix D.

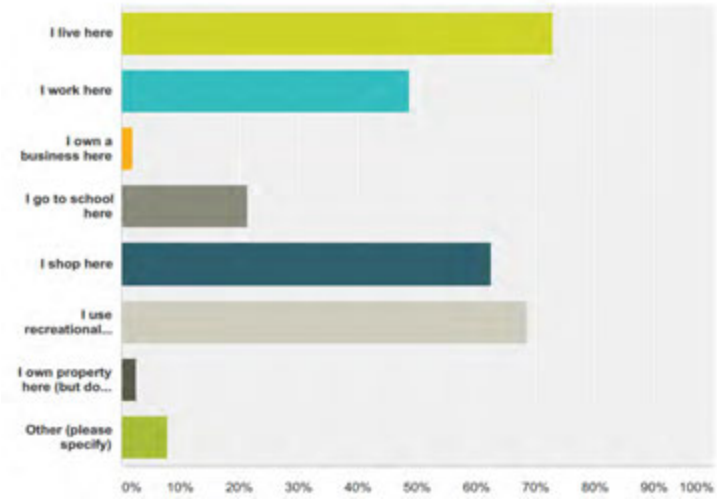
4.8.1 Community Surveys

Online User Survey

The online user survey was advertised to community members using online and print media. The purpose of the survey was to solicit feedback from residents and employees who live, work, or play in the City. The survey was open from August 15, 2014 to October 15, 2014 and received responses from a total of 732 participants. Below is a summary of findings from the survey.

Connection to Mountain View
More than half of the respondents live, shop, or use the recreational facilities in Mountain View. Approximately 70 percent either work or go to school in the city. A number of residents also reported that their children go to school in Mountain View.

Figure 4-11 Connection to Mountain View



Bicycle Ridership

Of the survey respondents, over one-third ride a bike to work or school each work day. 10 percent incorporate bicycling as part of their daily commute such as to and from transit at least once a week. 28 percent of respondents ride a bike to restaurants at least once a week. Additionally, more than 50 percent use a bicycle to shop or run errands at least once a week.

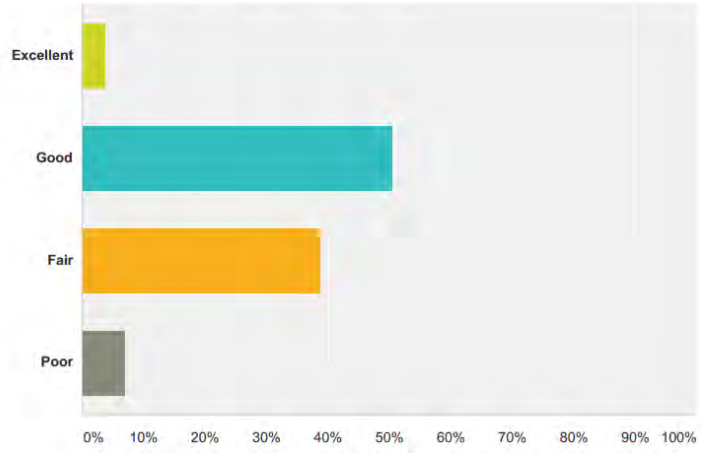
Figure 4-12 Bicycle Ridership

	0	1	2	3	4	5	6	7	Total
To work	42.27% 287	7.07% 48	7.66% 52	8.10% 55	8.39% 57	24.89% 169	0.88% 6	0.74% 5	679
To school	74.23% 504	2.06% 14	3.24% 22	3.68% 25	1.62% 11	13.99% 95	0.88% 6	0.29% 2	679
For recreation	31.08% 211	34.32% 233	18.26% 124	7.81% 53	2.36% 16	3.53% 24	1.33% 9	1.33% 9	679
To shopping/errands	48.60% 330	26.22% 178	12.52% 85	6.92% 47	3.09% 21	1.03% 7	0.74% 5	0.88% 6	679
To restaurants/bars	71.58% 486	19.73% 134	5.01% 34	2.36% 16	0.59% 4	0.44% 3	0.00% 0	0.29% 2	679
To a gym or recreation center	80.12% 544	8.10% 55	5.89% 40	3.83% 26	0.74% 5	0.74% 5	0.15% 1	0.44% 3	679
To parks or trails	39.32% 267	32.99% 224	12.67% 86	5.74% 39	2.95% 20	4.42% 30	1.03% 7	0.88% 6	679
To houses of friends or family	53.31% 362	27.25% 185	11.05% 75	4.42% 30	1.62% 11	1.33% 9	0.00% 0	1.03% 7	679
To/from transit (bicycling is part of the trip)	77.03% 523	10.31% 70	2.80% 19	3.83% 26	0.59% 4	4.27% 29	0.74% 5	0.44% 3	679

Current Bicycle Facility Conditions

Nearly 90 percent of survey respondents rate the bicycle conditions around Mountain View between "fair" and "good" (on a four-part scale). Only 4 percent of the respondents rate the conditions as "excellent" which means that nearly all survey participants believe there is room for improvement.

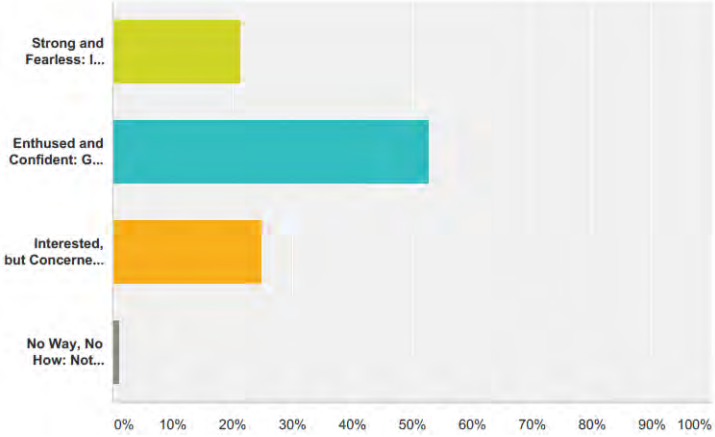
Figure 4-13 Current Bikeway Conditions



Types of Bicyclists

Over 20 percent of survey respondents identified as Strong and Fearless bicyclists. More than 50 percent identified as Enthused and Confident bicyclists. Approximately 25 percent identified as Interested, but Concerned bicyclists, and a small percentage identified as No Way, No How. The percentage of respondents identifying as Strong and Fearless and Enthused and Confident is higher than the Portland survey (Figure 4-1) because the Mountain View survey respondents self-selected to take the survey. As such, the survey is biased towards bicyclist respondents than non-bicyclists.

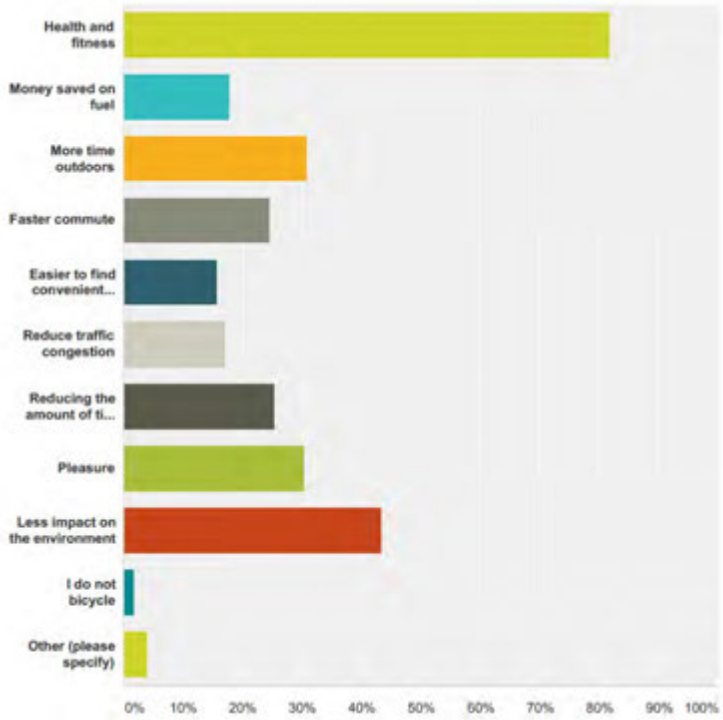
Figure 4-14 Types of Bicyclists in Mountain View



The Appeal of Bicycling

The survey asked participants to provide the top three reasons why bicycling is appealing to them. Health and fitness was chosen more than 80 percent of the time; reducing environmental impacts was chosen 40 percent of the time; both pleasure and spending more time outdoors were selected 30 percent of the time; and both reducing traffic congestion and saving money on fuel were chosen 25 percent of the time.

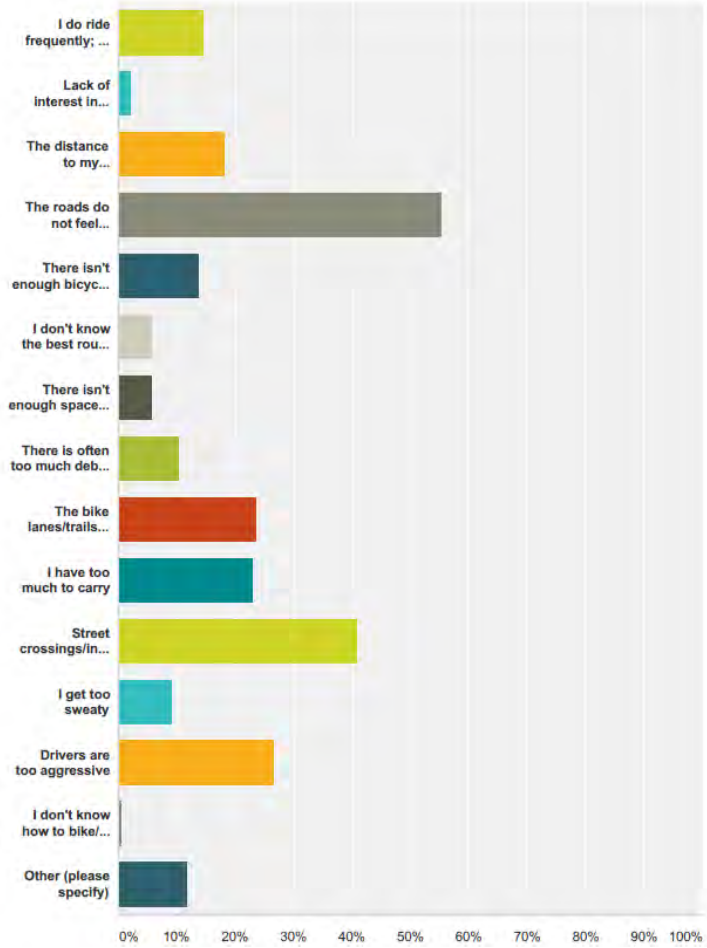
Figure 4-15 Why Bicyclists Bike



Barriers to Bicycling

The survey asked to identify top three obstacles or concerns that prevent from bicycling. By far, the largest obstacle to bicycling in Mountain View is a perception that the roads do not feel safe.

Figure 4-16 Barriers to Bicycling



Suggested Improvements

There were many suggested improvements to the Mountain View bicycle network that would encourage more bicyclists. 90 percent said they would likely or very likely feel safer if Mountain View installed buffered bike lanes or off-street paths or if the intersections were improved. 88 percent agree that

Figure 4-17 Suggested Improvements

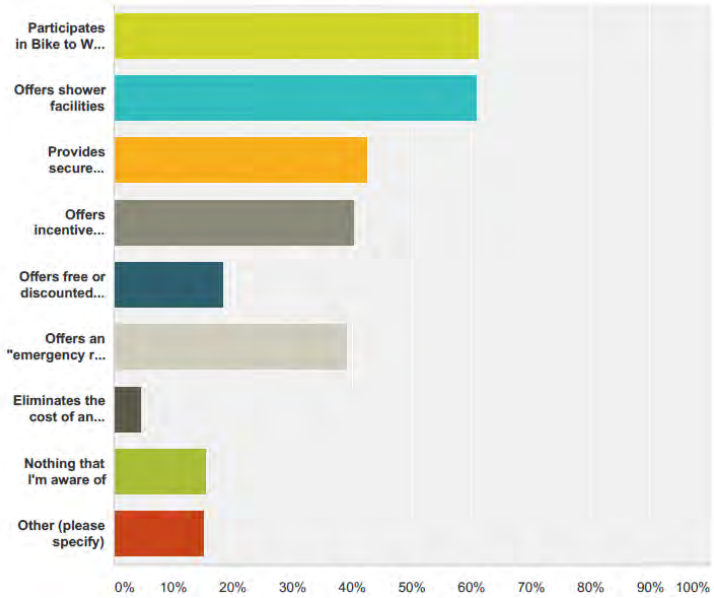
	Very Likely	Likely	Unlikely	Very Unlikely	Total
Item 1. Directional and wayfinding signage for bicyclists	12.32% 75	31.69% 193	39.74% 242	16.26% 99	609
Item 2. Bicycle Boulevard - shared, low-speed streets	35.06% 216	40.75% 251	19.64% 121	4.55% 28	616
Item 3. Striped bike lanes	31.60% 195	51.54% 318	14.42% 89	2.43% 15	617
Item 4. Buffered bike lanes	57.35% 355	33.28% 206	7.27% 45	2.10% 13	619
Item 5. Cycle tracks - bike lanes physically separated by curb or parking	65.03% 398	23.04% 141	8.66% 53	3.27% 20	612
Item 6.Intersection improvements for bicyclists	57.33% 356	32.37% 201	8.37% 52	1.93% 12	621
Item 7. Off-street paths	68.01% 421	22.94% 142	7.11% 44	1.94% 12	619
Item 8. Better bicycle access to transit (e.g. parking)	18.81% 114	31.52% 191	35.81% 217	13.86% 84	606

cycle tracks are likely or very likely to encourage cyclists. Although the numbers are lower, it is important to note that 50 percent of the respondents believe that adding better access to transit, such as providing better bicycle parking at transit stations, would encourage them to ride their bikes more.

Employee Benefits

This survey question asked respondents to provide the various ways their employers encourage commuting by bicycle, if at all. 60 percent of employers participate in Bike to Work Day and/or offer shower facilities. 40 percent provide secure, long-term bicycle parking for employees who choose not to drive to work.

Figure 4-18 Employee Benefits



Preferred Bicycle Facilities

Survey participants were asked to identify the bicycle facility that may influence them to bike more often. The most frequently mentioned facilities are listed to the right.

- Buffered bike lanes
- Cycletracks
- Off-street paths
- Intersection improvements

Bicycle Destinations
The survey asked respondents to give a few destinations they would like to get to on their bicycle but can't due to barriers or lack of facilities. The list to the right includes the most frequently listed destinations.

- Downtown Mountain View
- El Camino Real
- San Antonio Shopping Center
- Mountain View Schools (Mountain View High School in particular)
- Mountain View Caltrain Stations
- Mountain View Light Rail Stations
- Farmer's Market (Caltrain Station)

Roadway Improvements
After desirable destinations, respondents were asked to give suggestions on roadways in Mountain View that need bicycle improvements. The list to the right includes the most listed roadways for improvements.

- El Camino Real
- Shoreline Boulevard
- San Antonio Road
- Grant Road
- Rengstorff Avenue
- California Avenue
- Middlefield Road
- Moffett Boulevard
- Charleston Road

Intersection Improvements
When asked which intersections need improvements, participants tended to identify the largest intersections in Mountain View. The reasoning behind many of the recommended improvements is listed to the right.

- Safety
- Cars changing lanes or turning without looking (or "not turning safely")
- Bike lanes ending
- High vehicle speeds
- Heavy traffic
- Poor visibility
- Signals not detecting bicycles
- Roadway debris

Bicycle Parking Along with roadway and intersection improvements, respondents were asked to suggest locations where more bicycle parking is needed. Many of the same bicycle destinations listed previously are again listed here.	• Downtown Mountain View/Castro Street • Caltrain/Sunday Farmer's Market • Schools • Libraries • Shopping centers • Parks
Streets in Most Need of Improvements Survey respondents were asked to list the three roadway corridors in most need of bicycle improvements in Mountain View. The most frequently mentioned streets are listed to the right.	• Castro Street • El Camino Real • Shoreline Boulevard • San Antonio Boulevard

Online Business Survey

Individuals who own or manage a business in Mountain View had the option of taking the Online Business Survey. The purpose of the Business Survey was to solicit feedback on how businesses support bicycling in Mountain View. Thirteen individuals participated in the Business Survey. Below is a summary of the responses.

- Five of the respondents manage or own a Community/Retail Business
- Five of the respondents manage or own a Professional Service
- One of the respondents manages or owns an Internet/Software Business
- One of the respondents manages or owns a Non-Profit

How does your business support employees who bike to work?

Half of the businesses participate in Bike to Work Month/Day, 30% offer incentive programs to employees who bike to work, but 40% of businesses do not provide any incentive.

How does your business support customers or clients who bike to your business?

Half of the businesses do not provide any support for customers or clients who bike to their business. 20% of the respondents provide short-term bike parking and engage in community planning processes, and 10% offer promotions.

Customer and Client Feedback

The business owners/managers wrote that they have heard from clients and/or customers about the need for more bike racks and bike parking in Mountain View, particularly on El Camino Real. Customers also requested the option to lock their bike in close proximity to the business in question. Customers also noted being uncomfortable with riding on some bike routes and the need for more bike lanes.

Business Owner/Manager Feedback

The business owners/managers noted that they'd also like more secure bike parking, particularly in commercial areas. They are concerned with bike theft.

Text Survey

Members of the public were invited to take a text survey to provide input on bicycling conditions in Mountain View. The text survey was advertised at the Downtown Transit Center and on social media. Individuals could participate in the text survey by texting a local number, then answering five questions. The purpose of the text survey was to solicit input from individuals who commute into Mountain View. The text survey received responses from 177 participants. The details of the survey are provided in Appendix D. Below is a brief summary of the responses.

Members of the public were asked to identify the most bike-friendly facilities and the least bike-friendly in Mountain View. The most common bike-friendly facility listed was Stevens Creek Trail. Participants liked Stevens Creek Trail for its separation from traffic and continuous path. Participants liked other streets with clearly marked bike lanes separated from traffic and without obstruction from parked cars. Low-volume residential streets were also identified as preferred routes. The most frequently mentioned bike-friendly facilities included:

- Stevens Creek Trail
- Middlefield Road
- California Street
- Shoreline Boulevard
- Miramonte Avenue
- Residential Streets
- Cuesta Drive
- Evelyn Avenue

The most common least bike-friendly facility listed was El Camino Real. El Camino Real was identified as a least-bicycle friendly street for its lack of bike lanes, heavy traffic, and high traffic speeds. Other arterial roadways, such as Central Expressway, Shoreline Boulevard, and San

Antonio Road were identified for heavy traffic, high speeds, and unfriendly intersections. The most frequently mentioned least-friendly bicycle facilities included:

- El Camino Real
- Castro Street
- San Antonio Boulevard
- Central Expressway
- Shoreline Boulevard
- California Street

Biggest Concerns

Participants were asked to identify their biggest concerns with bicycling in Mountain View. Safety was the most common concern. Below is a summary of the common concerns.

- Safety/Getting hit by a car
- Lack of bike parking
- Traffic
- Right-turning cars (right hooks)
- Getting "doored"
- Lack of bicycle-detection at signals
- Driver behavior/Distracted driving
- Speeding cars
- Difficult to see bikes
- Lack of education about rules of the road
- Lack of continuous bike lanes

Bicycle Improvements

When asked what bicycle improvements they'd like to see in Mountain View, a few common themes emerged from the participant responses.

- More bike lanes
- Clearly marked bike lanes
- Separated/protected bike lanes (either buffered or cycletracks)
- Improved bicycle boulevards
- Wider bike lanes
- Green painted bike lanes
- Safer intersection crossings

Online Mapping Survey

An online mapping survey allowed individuals to provide location-specific feedback for bicycling issues and opportunities in Mountain View. Approximately 200 comments were submitted to the online mapping survey. Participants identified locations with bikeway gaps, intersection concerns, traffic concerns, signal concerns, maintenance concerns, and more. These locations and comments are shown in Appendix D.

4.8.2 Public Meetings and Workshop

The purpose of the public meetings series and Community Workshop #1 was to introduce the BTP Update process to the public and solicit feedback on existing issues and opportunities. This information was used to inform potential bikeway projects and priorities in Mountain View.

Community Workshop #1, September 15, 2014

Approximately 45 people attended the first Community Workshop. Workshop attendees provided input on the following to improve the bicycling environment in the city:

- Policies
- Projects
- Programs
- Vision and Goals

North Santa Clara County Joint Cities Meeting

On August 5, 2014, the City of Mountain View hosted a meeting with staff from the cities of Palo Alto, Sunnyvale, and Los Altos to identify existing bicycle infrastructure and network; barriers, proposed projects, and regional connection opportunities.

Mountain View Youth Advisory Committee

A presentation was given to the Mountain View Youth Advisory Committee (YAC) on October 6, 2014. The purpose of the presentation was to introduce the BTP Update to the YAC and solicit input on issues and opportunities. The YAC was asked to provide suggestions on how the BTP Update could support the bike mobility needs of Mountain View's youth. Below is a list that summarizes some of the major concerns that emerged from the discussion.

- Students expressed concerns about feeling safe while biking with traffic. They bike on the sidewalk if a bike lane ends or doesn't exist.
- Students enjoy riding in packs because it is social and makes them feel safer.
- The streets near the Mountain View High School can feel chaotic and students expressed desire for improved bike lanes and safer driving.

Mountain View Senior Advisory Committee

The Mountain View Senior Advisory Committee (SAC) received a presentation on October 15, 2014. The purpose of the presentation was to introduce the BTP Update to the SAC and solicit input regarding how the BTP Update could to support the bike mobility needs of Mountain View's senior citizens. Below is a list that summarizes some of the major concerns that emerged from the discussion.

- Concern with width of bike lanes to accommodate wider bicycles (such as adult tricycles) and slower riders.
- Concern with distracted roadways users (drivers, bicyclists and pedestrians).
- Desire for more continuous, low-stress bikeway network, particularly to Shoreline at Mountain View Park.

Mountain View Parks and Recreation Commission

A presentation was provided to the Mountain View Parks and Recreation Commission (PRC) on October 8, 2014. The purpose of the presentation was to introduce the BTP Update to the PRC and solicit input on issues and opportunities. The PRC was asked to provide input on bicycle issues and opportunities specific to the parks and recreation needs in Mountain View.. Below is a list that summarizes some of the major needs/concerns that emerged from the discussion.

- Pedestrians and cyclists compete for space on the trails throughout the City. Provide low-stress bicycle facilities as alternate routes to trails.
- Provide safe routes to parks and community centers.
- Coordinate Plan recommendations with the 2014 Parks and Open Space Plan.
- Address intercity gaps in the regional bicycle network.
- Improve bicycle signage.

Mountain View Whisman School District Advisory Committee

A presentation was given to the Mountain View Whisman School District Advisory Committee (DAC) meeting on December 2, 2014. The purpose of the presentation was to introduce the BTP Update to the DAC and solicit input on issues and opportunities. The DAC was asked to provide input regarding how the BTP Update could address the bike mobility needs of students. Below is a list that summarizes some of the major needs/concerns that emerged from the discussion.

- Desire for more separation between automobiles and bicycles.
- Concern about potential circulation conflicts between fast commuter cyclists and slower-paced student cyclists on Stevens Creek Trail. Request for signage to increase awareness of speed limit in school zones.
- Expand encouragement programs with bicycle donations to students, free bicycle repairs, Carbon Fewer Fridays.
- Enforce maintenance of adjacent landscaping so vegetation doesn't obscure visibility at intersections, driveways, and trail crossings.
- Enforce 15 mph speed limit in school zones.

4.9 Summary of Bicyclist Needs

When layered together, the results of the gap analysis, public input and collision analysis show the areas of greatest need for bicycle improvements in Mountain View. The heat map shown in Figure 4-19 is a summation of the bicycle-related collisions from 2009-2013, the location-specific community input, and the gap analysis. This map helped inform and prioritize the list of bicycle recommendations and improvements.

Figure 4-19 Heat Map of Bicyclist Needs in Mountain View

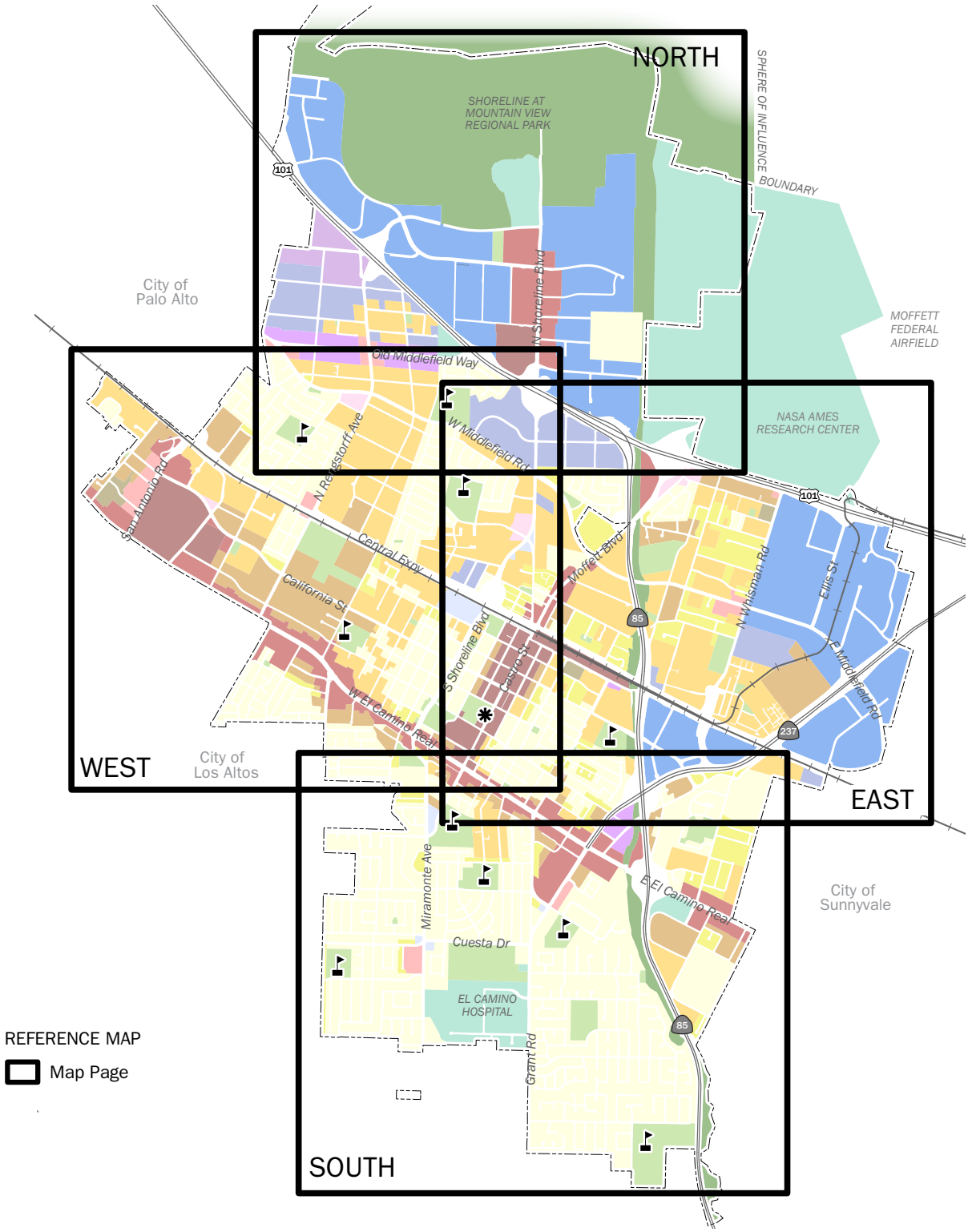
Based on the needs assessment conducted for the BTP Update, the following have been identified as opportunities for improvements to Mountain View's bicycle network:

- Complete spot and corridor gaps in the on-street network;
- Identify opportunities for buffered or protected bikeways;
- Enhance intersection crossings for cyclists;
- Improve existing on-street bikeways that are currently too narrow or share road space with parked cars;
- Consider alternative, parallel routes to trail facilities;
- Explore alternative treatments and/or routes for on-street bikeways that currently cross over or under highways;
- Expand bicycle wayfinding signage, especially for directions to trailheads, Downtown Mountain View, and transit stops;
- Improve and add to existing bicycle boulevard network;
- Increase short- and long-term bicycle parking;
- Identify continuous and complete low-stress bikeway network; and
- Enhance bicycle education.

Appendix B

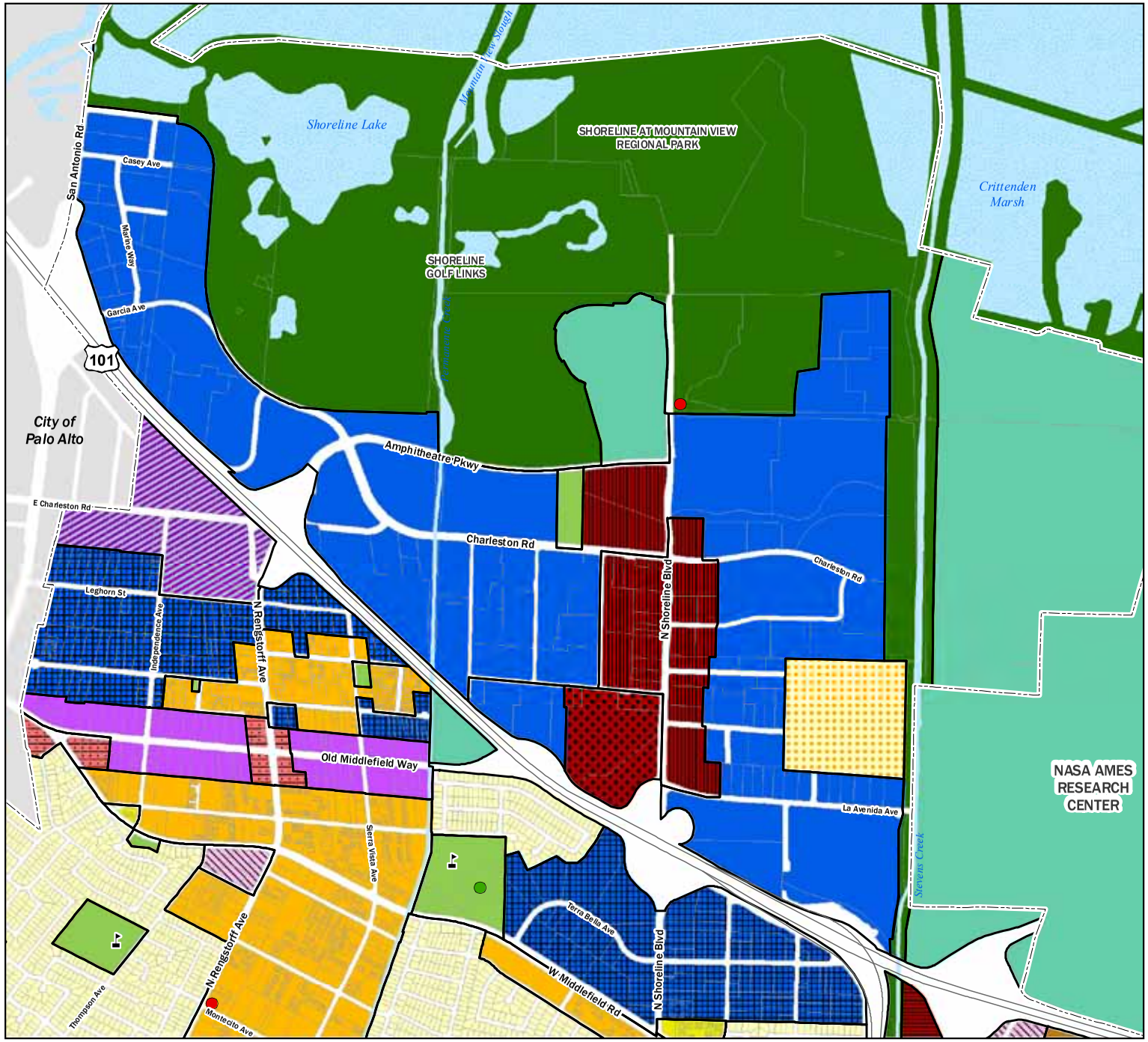
City of Mountain View Land Use Maps

General Plan Land Use Maps



GENERAL PLAN LAND USE MAP

North



Land Use Designations

Residential
- Low Density Residential
- Medium Low Density Residential
- Medium Density Residential
- Medium High Density Residential
- High Density Residential
- Mobile Home Park

Commercial
- Neighborhood Commercial
- General Commercial
- Industrial / Regional Commercial

Office / Industrial
- Office
- General Industrial
- High-Intensity Office

Mixed-Use
- Neighborhood Mixed-Use
- General Mixed-Use
- Mixed-Use Corridor
- North Bayshore Mixed-Use
- Mixed-Use Center
- Downtown Mixed-Use

Public / Institutional
- Parks, Schools & City Facilities
- Regional Park
- Institutional

Public Facilities
- City Operations & Administration
- Transit Station
- Community Facility
- Fire Station
- School
- City Hall

- City Limits
- Parcels
- Water Bodies
- Freeways
- Rail
- Creeks

The Land Use Map is one of several General Plan diagrams that affect development. The General Plan text is also an integral part of the City's land use plan and must also be consulted.
The City of Mountain View is neither liable nor responsible for use of this map beyond its intended purposes.

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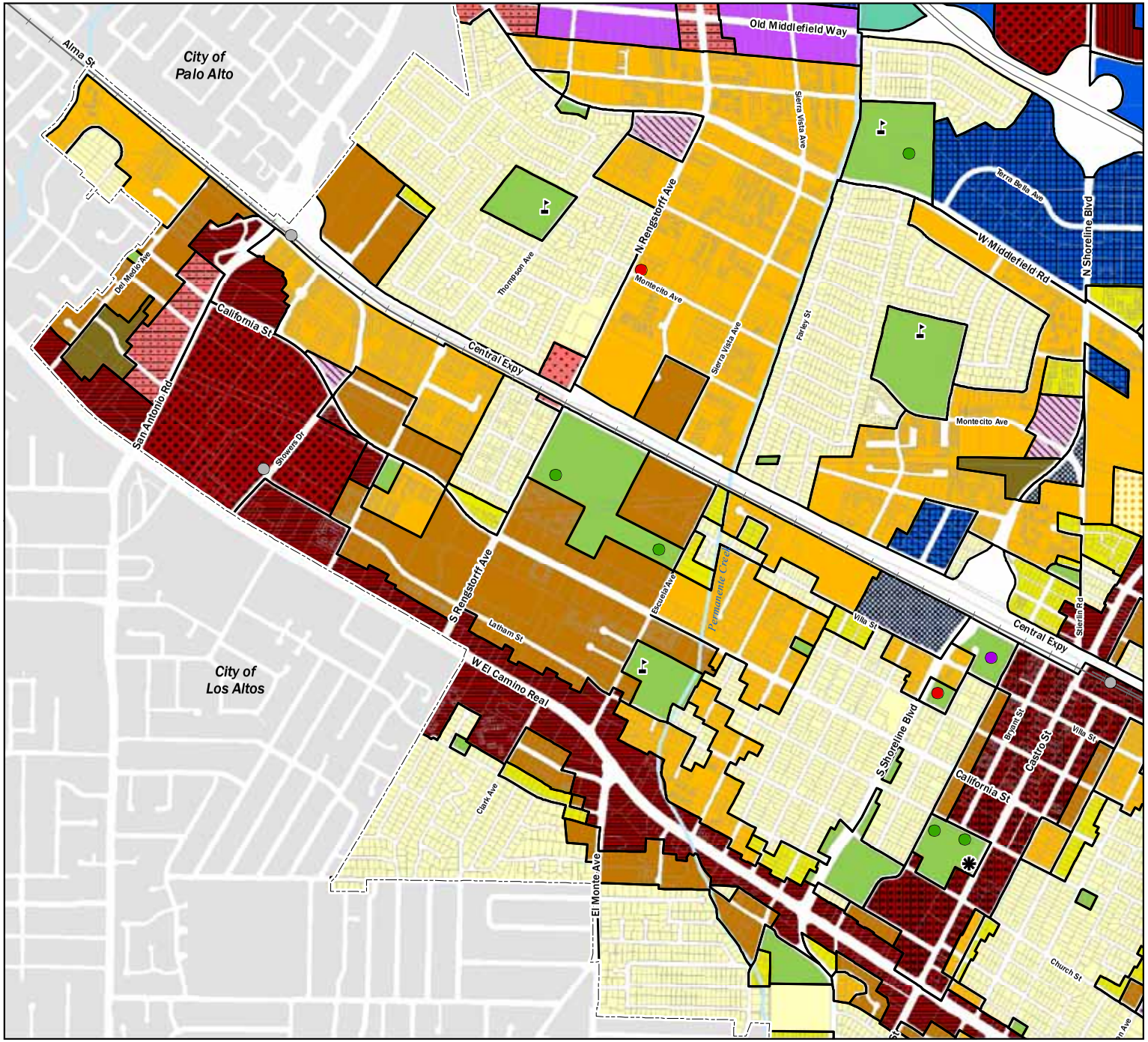
GENERAL PLAN LAND USE MAP

West



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- High Density Residential
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Office / Industrial
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- High-Intensity Office

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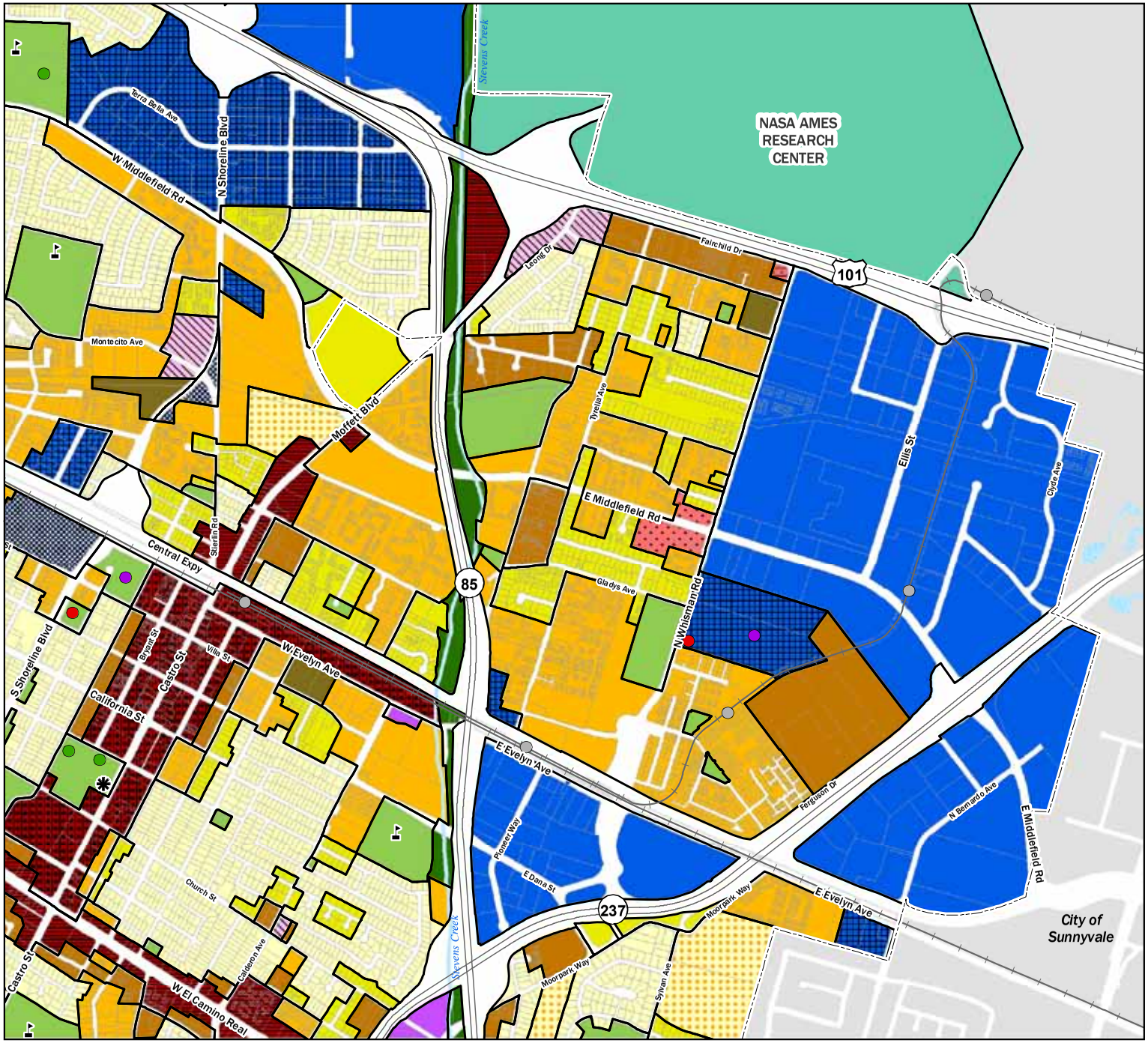
GENERAL PLAN LAND USE MAP

East



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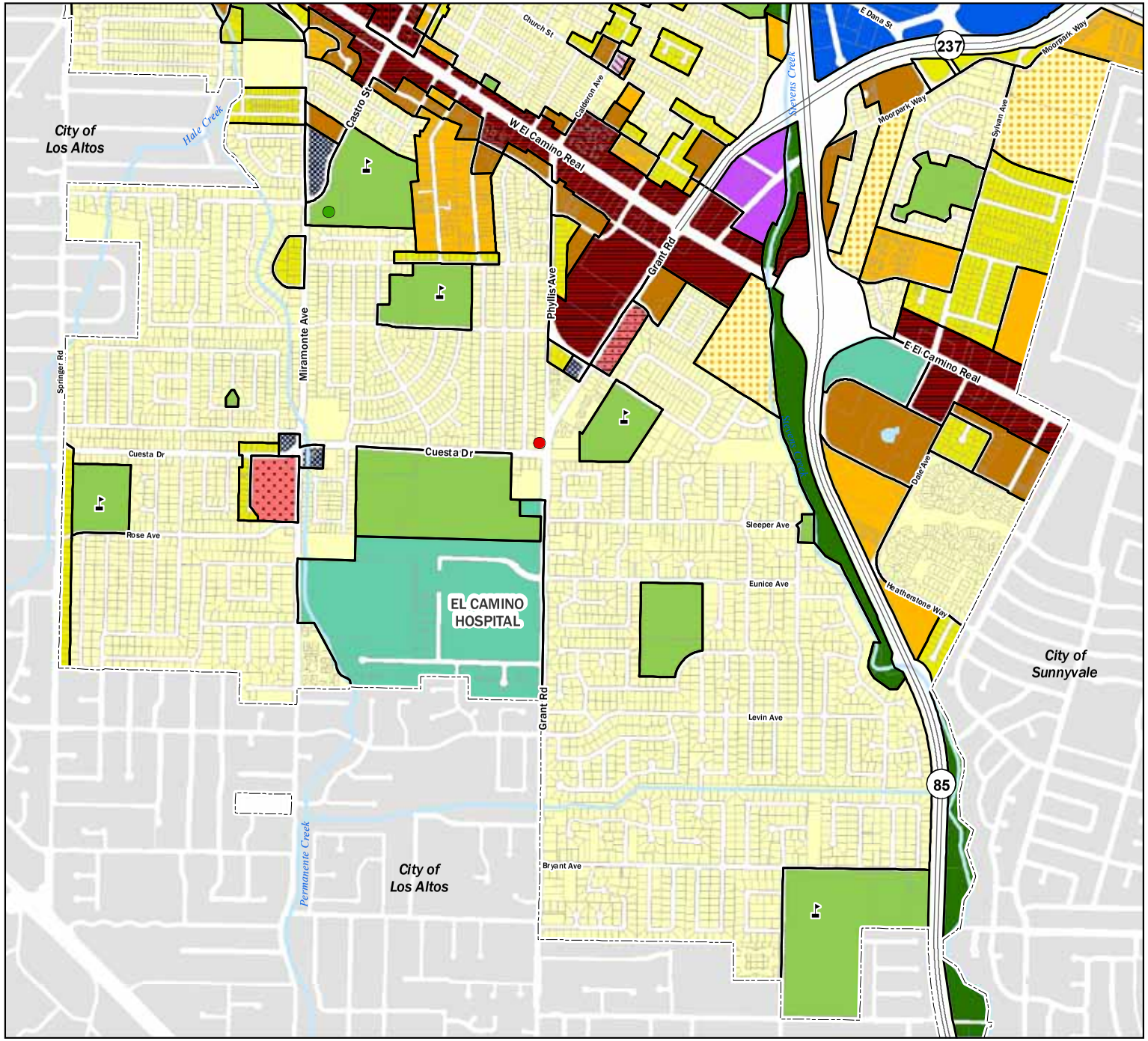
GENERAL PLAN LAND USE MAP

South



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Appendix C

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City of Mountain View

Mountain View 2030 General Plan

On July 10, 2012, the City Council adopted the 2030 General Plan, a comprehensive update to the City's 1992 General Plan. The 2030 General Plan is the guiding document for the City's physical development. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The General Plan is the foundation for zoning regulations, subdivisions and public works plans. It also addresses other issues related to the City's physical environment, such as noise and safety. A list of the General Plan 2030 components most applicable to bicycling is provided below.

Mobility Policies

GOAL MOB-1: Streets that safely accommodate all transportation modes and persons of all abilities.

> **MOB 1.2:** *Accommodating all modes*. Plan, design and construct new transportation improvement projects to safely accommodate the needs of pedestrians, bicyclists, transit riders, motorists and persons of all abilities.
>
> **MOB 1.3:** *Pedestrian and bicycle placemaking*. Promote pedestrian and bicycle improvements that improve connectivity between neighborhoods, provide opportunities for distinctive neighborhood features and foster a greater sense of community.

GOAL MOB-3: A safe and comfortable pedestrian network for people of all ages and abilities at all times.

> **MOB 3.3:** *Pedestrian and bicycle crossings***.** Enhance pedestrian and bicycle crossings at key locations across physical barriers.
>
> **MOB 3.5:** *Walking and bicycling outreach.* Actively engage the community in promoting walking and bicycling through education, encouragement and outreach on improvement projects and programs.

GOAL MOB-4: A comprehensive and well-used bicycle network that comfortably accommodates bicyclists of all ages and skill levels

MOB 4.1: *Bicycle network*. Improve faculties and eliminate gaps along the bicycle network to connect destinations across the city.

MOB 4.2: *Planning for bicycles*. Use planning processes to identify or carry out improved bicycle connections and bicycle parking.

MOB 4.3: *Public bicycle parking*. Increase the amount of well-maintained, publically accessible bicycle parking and storage throughout the city.

MOB 4.4: *Bicycle parking standards*. Maintain bicycle parking standards and guidelines for bicycle parking and storage in convenient places in private development to enhance the bicycle network.

MOB 4.5: *Promoting safety*. Educate bicyclists and motorists on bicycle safety.

GOAL MOB-6: Safe and convenient pedestrian and bicycling access to schools for all children.

MOB 6.2: *Prioritizing projects*. Ensure that bicycle and pedestrian safety improvements include projects to enhance safe accessibility to schools.

MOB 6.4: *Education*. Support education programs that promote safe walking and bicycling to schools.

GOAL MOB-11: Well-maintained transportation infrastructure.

MOB 11.1: Funding. Ensure sustainable funding levels for maintaining all city transportation infrastructure.

MOB 11.2: Prioritized existing facilities. Prioritize maintenance and enhancement of existing facilities over expansion.

MOB 11.3: Facility types. Maintain and enhance walking, bicycling and transit-related facilities to address community needs.

MOB 11.4: Life-cycle costs. Examine life-cycle costs when comparing project alternatives in order to make the best use of limited City resources.

Parks and Open Space Policies

GOAL POS-2: Parks and public facilities equitably distributed throughout the community and accessible to residents and employees.

POS 2.3: *Pedestrian and bicycle access*. Improve pedestrian and bicycle access to parks, and create new connections to parks to minimize pedestrian and bicycle travel distances.

GOAL POS-6: An integrated system of multi-use trails connecting to key local and regional destinations and amenities.

POS 6.1: *Citywide network of pathways.* Develop a citywide network of pedestrian and bicycle pathways to connect neighborhoods, employment centers, open space resources and major destinations within the city.

Mountain View City Code

The Mountain View City Code includes provisions enacted by the City Council to maintain a healthy, safe and clean environment, carry out established land use policy and preserve the quality-of-life in the community. A brief summary of bicycle-related Code provisions is provided below.

CHAPTER 19 MOTOR VEHICLES AND TRAFFIC

SEC. 19.2. Application of chapter to bicycle riders and drivers of animals. Every person riding a bicycle or riding or driving an animal upon the highway shall be granted all the rights and shall be subject to all the duties applicable to the driver of a vehicle by this chapter, except those provisions which, by their very nature, can have no application. *(Ord. No. 175.587, 1/25/60.)*

SEC. 19.51. Riding bicycles on sidewalks prohibited. No person shall ride a bicycle upon any sidewalk in the business district. *(Ord. No. 175.587, 1/25/60.)*

SEC. 19.52. Method of riding upon roadways. The rider of any bicycle on the roadway shall ride as nearly as practicable to the right-hand curb or edge of the roadway. *(Ord. No. 175.587, 1/25/60.)*

SEC. 19.54. Use of roller skates, in-line skates, skateboards, bicycles and coasters in business districts or any city-owned parking structures. No person shall skate with roller skates or in-line roller skates, or propel any coaster-brake wagons or vehicles or skateboards or ride bicycles upon and along any sidewalk in any business district or in any city-owned parking structure, except riding a bicycle is allowed in city-owned parking structures for the limited purpose of accessing bicycle parking. *(Ord. No. 175.587, 1/25/60; Ord No. 12.92, 5/12/92.)*

SEC. 19.57. Bicycle parking spaces (e). The city traffic engineer is hereby authorized to designate and establish bicycle parking spaces for use at such places and during such times as he may deem suitable and necessary. The city traffic engineer may also authorize the placing of bicycle parking racks in the spaces so designated. When official signs or markings restricting parking to bicycles only are in place, bicycles shall be parked only in such places, and no person shall park or stand any vehicle other than a bicycle or other two-wheeled vehicle in such a space. It shall further be unlawful to park any bicycle on any sidewalk except as hereinabove specified. *(Ord. No. 175.587, 1/25/60.)*

CHAPTER 36. ZONING

SEC. 36.32. Purpose (d). Encourage the use of alternative modes of transportation by providing for safe, adequate and convenient bicycle and carpool parking. […]

SEC. 36.32.50. Required number of parking spaces. Each land use shall provide the minimum number of off-street parking spaces required by this section.

Uses not listed. Land uses not specifically listed by the following subsection B below shall provide parking as required by the zoning administrator. In determining appropriate off-street parking requirements, the zoning administrator shall use the requirements of subsection B below as a general guide in determining the minimum number of off-street parking spaces necessary to avoid undue interference with public use of streets and alleys.

Parking requirements by land use. The following minimum number of parking spaces shall be provided for each use:

Table 0-1 Mountain View City Code Required Bicycle Parking Spaces

Land Use Type	Vehicle Spaces Required	Bicycle Spaces Required
Manufacturing and General Industrial		
Manufacturing and industrial, general	1 space for each 250 sq. ft. of gross floor area plus 1 space for each vehicle operated in connection with each on-site use	5 percent of vehicle spaces
Recycling facilities	Space shall be provided for the anticipated peak load of customers to circulate, park and deposit recyclable materials. If the facility is open to the public, an on-site parking area shall be provided for a minimum of 10 customers at any one time	None
	One employee parking space shall be provided on-site for each commercial vehicle operated by the processing center	5 percent of vehicle spaces
Recreation, Education, Public Assembly Uses		
Child day care		
Centers	1 space for each employee, plus 1 space for every 15 children for visitor parking and drop-off areas	2 percent of vehicle spaces
Large family care homes	1 space for each employee	
Churches, mortuaries	1 space for each 170 sq. ft. of gross floor area	5 percent of vehicle spaces for churches; 2 spaces for mortuaries
Indoor recreation and fitness centers		

Land Use Type	Vehicle Spaces Required		Bicycle Spaces Required
Arcades	1 space for each 200 sq. ft. of gross floor area		5 percent of vehicle spaces
Bowling alleys	Parking study required		
Dance halls	Parking study required		None
Health/fitness clubs	1 space for each 200 sq. ft. of gross floor area		5 percent of vehicle spaces
Libraries and museums	Parking study required		5 percent of vehicle spaces
Membership organizations	1 space for every 3.5 fixed seats		5 percent of vehicle spaces
Pool and billiard rooms	2.5 spaces for each table		5 percent of vehicle spaces
Schools	Parking study required		Parking study required
Studios for dance, art, etc.	1 space for each 2 students		5 percent of vehicle spaces
Tennis/racquetball courts	Parking study required		5 percent of vehicle spaces
Theaters and meeting halls	1 space for every 3.5 fixed seats		5 percent of vehicle spaces
Residential Uses			
Companion units	1 space per bedroom		None
(See Section 36.12.60			
Multi-family dwellings	Studio unit	1.5 spaces per unit, 1 space shall be covered	1 space per unit (refer to Section 36.32.85.a.1)
	1-bedroom unit less than or equal to 650 square feet	1.5 spaces per unit; 1 space shall be covered	
	1-bedroom unit greater than 650 square feet	2 spaces per unit. 1 space shall be covered.	
	2-bedrooms or more	2 spaces per unit, 1 space shall be covered.	

Land Use Type	Vehicle Spaces Required		Bicycle Spaces Required
	Guest	15 percent of the parking spaces required for the project shall be conveniently located for guest parking. The zoning administrator may increase the parking requirement to 2.3 spaces per unit if needed to ensure adequate guest spaces	1 space per 10 units
Rooming and boarding houses	Parking study required		Parking study required
Senior congregate care housing	1.15 spaces per unit; half the spaces shall be covered		2 percent of vehicle spaces
Senior care facility	Parking study required		Parking study required
Single-family housing and each dwelling unit in a duplex	2 spaces, 1 of which shall be covered		None
(See Section 36.10.15 - Single-Family; See Section 36.10.50 for unit in duplex)			
Single-room occupancies	1 space per dwelling unit; plus 1 for every nonresident employee. Reduction of up to 0.50 space per unit may be granted through the conditional use permit process		1 space per 10 units
Small-lot, single-family developments	2 spaces, one of which shall be covered, and 0.50 guest space per unit		None
Townhouse developments	Per unit	2 spaces, one shall be covered.	1 space per unit
	Guest	Guest parking shall equal in total an additional 0.6 space for each unit, for an aggregate ratio of 2.6 spaces for each unit.	
Rowhouse developments	Studio unit	1.5 spaces per unit, 1 space shall be covered.	1 space per unit
	1-bedroom or more	2 covered spaces.	
	Guest	Guest parking shall equal in total an additional 0.3 space for each unit.	
Retail Trade			
Auto, mobile home, vehicle and parts sale	1 space for each 450 sq. ft. of gross floor area for showroom and office, plus 1 space for each 2,000 sq. ft. of outdoor display area, plus 1 space for each 500 sq. ft. of gross floor area for vehicle repair, plus 1 space for each 300 sq. ft. of gross floor area for the parts department		5 percent of vehicle spaces

Land Use Type	Vehicle Spaces Required	Bicycle Spaces Required
Furniture, furnishings and home equipment stores	1 space for each 600 sq. ft. of gross floor area	5 percent of vehicle spaces
Plant nurseries	Parking study required	Parking study required
Restaurants, cafés, bars, other eating/drinking places		
Take-out only	1 space for each 180 sq. ft. of gross floor area	
Fast food (counter service)	1 space for each 100 sq. ft.; minimum 25 spaces	5 percent of vehicle spaces
Table service	1 space for each 2.5 seats or 1 space for each 100 sq. ft. of gross floor area, whichever is greater	
Outdoor seating	1 space for each 2.5 seats	
Retail stores		
General merchandise	1 space for each 180 sq. ft. of gross floor area	5 percent of vehicle spaces
Warehouse retail	Parking study required	Parking study required
Service stations	1 space for each 180 sq. ft. of gross floor area	None
Shopping centers	1 space for each 250 sq. ft. of gross floor area	5 percent of vehicle spaces
Service uses		
Animal service establishment	1 space for each 200 sq. ft. of gross floor area	2 percent of vehicle spaces
Banks and financial services	1 space for each 300 sq. ft. of gross floor area, plus one space per ATM	5 percent of vehicle spaces
Hotels and motels	1 space for each guest room, plus 1 space for each 2 employees, plus as required for ancillary uses	2 percent of vehicle spaces
Medical services	Clinic, offices, labs, under 20,000 sq. ft.	1 space for each 150 sq. ft. of gross floor area
Clinics, offices, labs, greater than 20,000 square feet	1 space for each 225 sq. ft. of gross floor area	2 percent of vehicle spaces

Land Use Type	Vehicle Spaces Required	Bicycle Spaces Required
Extended care	1 space for each 3 beds, plus 1 space for each employee	
Hospitals	1 space for each patient bed	
Offices, administrative, corporate, research and development	1 space for each 300 sq. ft. of gross floor area	5 percent of vehicle spaces
Personal services	1 space for each 180 sq. ft. of gross floor area	5 percent of vehicle spaces
Vehicle washing	Parking study required	None
Repair and maintenance—vehicle		
Lube-n-tune	2 spaces per service bay	None
Repair garage	5 spaces, plus 1 space for each 200 sq. ft. of gross floor area	None
Storage, personal storage facilities	1 space for each 2,000 sq. ft. of gross floor area plus 2 spaces for any resident manager	None
Warehousing and data centers	1 space for each 500 sq. ft. of gross floor area plus 1 space for each company vehicle	5 percent of vehicle spaces

SEC. 36.32.85. Bicycle parking facilities. Bicycle parking facilities shall be provided in compliance with this section and the Bicycle Parking Guidelines provided by the community development department.

Classification of Bicycle Parking Facilities

Class I facilities. Intended for long-term parking (e.g., for employees); protects against theft of entire bicycle and of its components and accessories. The facility shall also protect the bicycles from inclement weather, including wind-driven rain. Three (3) design alternatives for Class I facilities are as follows:

a. **Bicycle locker.** A fully enclosed, weather-resistant space accessible only by the owner or operator of the bicycle. Bicycle lockers may be premanufactured or designed for individual sites. All bicycle lockers shall be fitted with key locking mechanisms. This is the preferred Class I facility;
b. **Restricted access.** Class III bicycle parking facilities located within an interior locked room or locked enclosure accessible by key only to the owners or operators of the bicycles parked within. The maximum capacity of each restricted room or enclosure shall be ten (10) bicycles; and
c. **Enclosed cages.** An exterior enclosure for individual bicycles, where contents are visible from the sides but the top is covered, and which can be securely locked by a user-provided lock. This type of facility is only to be used for retail and service uses and multiple-family development.

d. **Other.** Class I facilities other than lockers, restricted access rooms or enclosed cages, but providing the same level of security, may be approved by the zoning administrator. A written building management policy of permitting bicycles to be stored in private offices or multi-family dwellings (including apartments, townhomes and condominiums), or in designated areas within the structure where adequate security is provided, may be approved by the zoning administrator as an alternative to Class I facilities.

Class II and Class III facilities. Intended for short term parking (e.g., for shoppers, visitors). A stationary object to which the user can lock the frame and both wheels. Should be protected from weather whenever possible. The zoning administrator may require either a Class II or Class III facility depending on where the facilities are to be located.

Class II. Class II facilities are designed so that the lock is protected from physical assault and therefore the facility need not be within constant visual range. A Class II rack shall accept padlocks and high security, U-shaped locks.

Class III. Class III facilities are less secure and, therefore, shall be within constant visual range of persons within the adjacent structure or located in well-traveled pedestrian areas.

Bicycle parking design standards:

a. **Clearance.** Class I(b), Class II and Class III facilities shall provide at least a twenty-four (24) inch clearance from the centerline of each adjacent bicycle, and at least eighteen (18) inches from walls or other obstructions;
b. **Aisle.** An aisle or other space shall be provided for bicycles to enter and leave the facility. This aisle shall have a width of at least five (5) feet to the front or the rear of a standard six (6) foot bicycle parked in the facility;
c. **Building entrance—Class I.** Class I facilities at employment sites shall be located near the structure entrances used by employees;
d. **Building entrance—Class II and III.** Class II or Class III facilities intended for customers or visitors shall be located near the main structure used by the public;
e. **Paving.** Paving of bicycle parking areas is required;
f. **Convenience.** Convenient access to bicycle parking facilities shall be provided. Where access is via a sidewalk or pathway, curb ramps shall be installed where appropriate;
g. **Lighting.** Lighting shall be provided in all bicycle parking areas. In both exterior and interior locations, lighting of not less than one (1) foot candle of illumination at ground level shall be provided; and
h. **Review.** The zoning administrator shall have the authority to review the design of all bicycle parking facilities required by this section with respect to safety, security and convenience. The zoning administrator shall consider the bicycle parking guidelines in determining the type, location and design of bicycle parking facilities.

Number and type of bicycle spaces required. The following standards shall apply:

a. **Number of** bicycle parking spaces. The number of bicycle parking spaces required is determined by Section 36.32.50 (Required Parking Spaces); and
b. **Class of** bicycle **parking spaces.** The zoning administrator may require that a certain percentage of the spaces be Class I, Class II or Class III depending on the potential users. The zoning administrator shall use the Bicycle Parking Guidelines in determining the appropriate proportions of each class.

Showers and changing room standards. Two (2) employee shower and changing room facilities, one each for male and female employees, shall be provided for any new structure constructed or for any addition to or enlargement of, any existing structure requiring over two hundred (200) employee parking spaces. This requirement is applicable to industrial, research and development, corporate office and similar high-employment businesses. The floor area used for shower and changing rooms shall not be included in the calculations for floor area ratio limits. *(Ord. No. 18.13, § 1, 12/10/13)*

SEC. 36.32.90. Nonconforming parking areas. Any automobile or bicycle parking facilities lawfully existing on the effective date of this ordinance shall be "grandfathered" and may continue pursuant to Section 36.06.65, Continuing existing uses, of this chapter except that parking required for additions and expansions of existing buildings and changes in land use shall comply with all provisions of this article. *(Ord. No. 18.13, § 1, 12/10/13)*

Chapter 38 Regulation the Use of City Parks and Other City Facilities
SEC. 38.9. Prohibited activities in parks or facilities. The following activities are prohibited in any park or recreational facility:

f. […] Operating or riding a motorcycle, moped, motorbike, motorized bicycle, motorized scooter or any other vehicle on any path or walkway in a park or facility. This section does not apply to wheelchairs and other devices for the disabled or vehicles in the service of the city parks or facility. This section shall not apply to the use of an electric personal assistive mobility device (EPAMD) on any city trail or walkway within a city park or facility.
g. Stopping, parking, riding or driving any horse or other animal, or propelling or parking any bicycle, unicycle, skateboard, roller skates, roller blades or other wheeled apparatus elsewhere than on the areas designated for those uses or upon the lawn or landscaped areas of a park or facility. This section does not apply to wheelchairs and other devices for the disabled or vehicles in the service of the city parks or facilities.
h. Operating, riding or propelling a vehicle, bicycle or other wheeled apparatus on a bike path or walkway at a speed greater than is reasonable and prudent under the conditions then existing. […]
x. Skating with roller skates, in-line skating or propelling any wagon, scooter or vehicle, skateboard, bicycle or other wheeled apparatus, except wheelchairs or other apparatus for the disabled, upon any city-owned tennis court.

SEC. 38.18. Special provisions for Shoreline at Mountain View. In addition to the general provisions set forth in Sec. 38.1 through 38.19 inclusive, the following provisions shall also apply only to Shoreline at Mountain View Park:

g. […] Bicycle riders, hikers and joggers shall be limited in the use of all premises to the prepared trails and boardwalks designated for such purposes. Skateboards shall be prohibited in Shoreline at Mountain View Park. […]

SEC. 38.105. Use of roller skates, in-line roller skates, skateboards, **bicycles** and coasters on the City Hall Plaza, in the city-owned parking structure at City Hall or on the outdoor amphitheater area adjacent to the Center for the Performing Arts at City Hall. No person shall skate with roller skates or in-line roller skates or propel any coaster-brake wagons or vehicles or skateboards, or ride bicycles on the City Hall Plaza, in the city-owned parking structure at City Hall or on the outdoor amphitheater area adjacent to the Center for the Performing Arts at City Hall, except riding a bicycle is allowed in the city-owned parking structure at City Hall for the limited purpose of accessing bicycle parking." *(Ord. No. 6.14, § 1, 4/22/14.)*

School Zone Speed Limit

In January 2014, the City of Mountain View established a 15 mile per hour (MPH) and extended 25 MPH school zone speed limit around public and private schools. The 15 MPH speed limit is established when children are present in zones up to 500 feet from school grounds. The 25 MPH speed limit is established when children are present in zones up to 1,000 feet from school grounds. Sixteen streets meet the basic criteria for the 15 MPH zones and one street meets the criteria for an extended 25 MPH school zone: Hans Avenue, Barbara Avenue, Martens Avenue, Escuela Avenue, Latham Street, Thompson Avenue, Rose Avenue, San Luis Avenue, San Pierre Way, Montecito Avenue, Rock Street, Mountain View Avenue, Dana Street, Easy Street, Bryan Avenue, and Truman Avenue.

Mountain View Capital Improvement Program

The Mountain View Capital Improvement Program (CIP) is an annually adopted plan that identifies capital projects funding priorities for the City.

City of Mountain View Parks and Open Space Plan

The Parks and Open Space Plan (POSP) represents a review of parks and open space needs throughout the City as well as within each neighborhood Planning Area. The POSP offers both a long-range vision and an evaluation of current needs based on new development and future parks and open space projects. The Plan also prioritizes Planning Areas that are most in need of additional open space. The last update of the POSP was adopted by the City Council in 2014. The current POSP is a periodic update and intended to ensure the POSP remains relevant and responsive to the changing needs of the community. Key recommendations of the POSP that relate to the BTP Update include:

- Improve access to parks, trails, and pathways through safe street crossings and other techniques;

- Continue developing a City-wide network of trails and pathways to connect neighborhoods to each other and to open space resources, trails, and transit centers; and
- Look for opportunities to develop an east-west trail corridor.

San Antonio Precise Plan

The San Antonio Precise Plan (SAPP) implements the goals and policies set forth in the City of Mountain View 2030 General Plan (General Plan) for the San Antonio Precise Plan Area (SAPP Area). Using input gathered through a separate San Antonio visioning process and during the Precise Plan process, the SAPP provides guiding principles, policies, development criteria and implementation strategies to coordinate future private development and public improvements given the unique opportunities and characteristics of the SAPP Area. The SAPP is a regulatory document guiding how future development in the SAPP Area will achieve the General Plan vision to transform the existing regional commercial area into a mixed-use core within a broader existing residential neighborhood, taking into account the area's proximity to transit services and location along two of the most heavily traveled corridors in the City: El Camino Real and San Antonio Road. It identifies California Street, Latham Street, Showers Drive, Pacchetti Way and new internal street corridors as primary bicycle routes. The SAPP was adopted by City Council in December 2014.

El Camino Real Precise Plan

The purpose of this Precise Plan is to provide a roadmap for future changes and investment to the El Camino Real corridor. These changes will transform its auto-oriented character into a vibrant, multi-modal and revitalized area, providing gathering spaces and key destinations, a new mix of uses and improvements promoting safety and comfort. The El Camino Real Precise Plan contains guidance for this change in the form of standards and guidelines for new development, direction for potential street improvements, and implementation actions. The El Camino Real Precise Plan was adopted by City Council in November 2014. The El Camino Real Precise Plan proposes the following bicycle facilities:

- El Camino Real bicycle facilities (buffered bike lanes, cycletrack, or other facilities) between Calderon Avenue and the Sunnyvale/Mountain View border;
- Prioritized bicycle crossings of El Camino Real, and continuation of bicycle facilities on either side of El Camino Real;
- Additional bicycle lanes or cycletrack on El Camino Real based on specific criteria;
- El Camino Real bikeshare stations;
- A parallel Bicycle Boulevard treatments, such as Latham Street and Church Street; and
- Bicycle parking facilities at Village Centers and Neighborhood Corners.

North Bayshore Precise Plan

The North Bayshore Precise Plan is based on the bold vision set forth in the 2030 General Plan. In November 2014, City Council adopted the North Bayshore Precise Plan that will guide change and investment in regard to land use, sustainability, habitat preservation, economic development, and

mobility. The North Bayshore Precise Plan includes transportation improvements to support an additional 3,500 pedestrian and bicycle trips in and out of the Precise Plan area during the peak period. Improvements include North Bayshore cycletracks and green streets, Shoreline Boulevard cycletrack and a bike/pedestrian bridge over US 101.

East Whisman Precise Plan

City of Mountain View will amend the existing Whisman Station Priority Development Area (PDA) to include the East Whisman area. The proposed PDA boundaries include US 101 Freeway to the north, the city limits to the east, Central Expressway to the south, and Whisman Road to the west. The amendment will develop an East Whisman Precise Plan, with the following key objectives: (1) increase employment near transit, (2) improve ridership and accessibility to transit, and (3) provide more jobs in close proximity to existing residential neighborhoods. The City is also funding an East Whisman infrastructure plan, including transit-related improvements, to accommodate new or expanded infrastructure needs in the area.[1] The East Whisman Precise Plan is scheduled to be completed in 2016.

South Whisman Precise Plan

In April 2009, the City Council adopted the South Whisman Precise Plan (Precise Plan) for approximately 38-acres of land bounded by Ferguson Drive and Highway 237 to the east, office properties fronting East Middlefield Road to the north, the Whisman Station residential neighborhood to the south, and the light rail transit line tracks to the west. The purpose of the Precise Plan is to establish a comprehensive framework of development objectives, standards, and design guidelines for a new residential neighborhood and public park.

The Precise Plan envisions a walkable neighborhood with convenient access to transit, parks, and services. A centrally located public park will become the primary focal point of the development and be shared by South Whisman residents and the surrounding community. All new streets will be public streets designed in a traditional interconnected grid pattern to provide multiple connections and routes for vehicles, bicyclists, and pedestrians. The Precise Plan includes a mix of housing types and densities, and public and private open spaces located in close proximity to the Whisman Light Rail Station.

Shoreline Boulevard Transportation Corridor Study

The purpose of the Shoreline Boulevard Transportation Corridor Study (Corridor Study) was to determine the feasibility of, and develop a conceptual design for, integrated transit, bicycle, and pedestrian facilities in the Shoreline Boulevard Corridor from the Downtown Transit Center to North Bayshore (in support of the commute mode shift targets). In November 2014, City Council approved the proposed conceptual plan for the Shoreline Boulevard Transportation Corridor improvements. Key components of the recommended package of Corridor improvements:

- Construction of a new bicycle/pedestrian bridge and connecting cycle track over U.S. Route 101.

[1] VTA Committee for Transit Accessibility Committee, June 11, 2014

- Enhancements to existing bicycle facilities on the U.S. Route 101 overpass.
- Improvements to the intersection at Shoreline Boulevard/Terra Bella Avenue, including a new scramble phase for bicyclists and pedestrians.
- New protected intersection features at the Shoreline Boulevard and Middlefield Road intersection.
- Construction of a center-running, reversible transit lane on Shoreline Boulevard from Middlefield Road to Plymouth Avenue.
- Installation of one-way cycle tracks on Shoreline Boulevard from Stierlin Road to Terra Bella Avenue, including a protected bicycle lane with vehicle access to the Buddhist Temple via the Stierlin Road slip lane.
- New protected intersection features at the Montecito Avenue and Shoreline Boulevard intersection.
- New bicycle lanes on Stierlin Road, with additional pedestrian and traffic calming features.
- Intersection improvements to enhance safety and accessibility at the Castro Street/ Moffett Boulevard/Central Expressway intersection.
- Pedestrian and bicycle access improvements, plus loading and operational changes for shuttles, at the Mountain View Transit Center.

County of Santa Clara

General Plan (1994)

The General Plan includes policies that support bicycling throughout the County and cities in the County. It encourages coordination with local and regional agencies in completing a connected bikeways network. The Santa Clara County General Plan was last adopted in 1994. The most relevant section of the General Plan is the Circulation Element, which is currently being updated and is expected to be adopted by summer of 2015.

Transportation Policies

C-TR 6: Increase the proximity between housing and major employment areas to reduce commute distances and automobile-dependency by encouraging developers to provide pedestrian and bicycle paths that connect housing and employment sites so as to encourage walking and bicycling.

C-TR 8: Urban design concepts and site development standards which facilitate use of transit and other travel alternatives should be adopted and implemented by local jurisdictions, to provide adequate pedestrian and bicycle pathways and facilities, both on and between individual sites.

C-TR 22: The use of existing railroad rights-of-way for transit and alternative transportation (i.e., bicyclists and pedestrians) should be encouraged.

C-TR 34: Bicycling and walking should be encouraged and facilitated as energy conserving, non-polluting alternatives to automobile travel.

C-TR 35: A bicycle transit system should be provided that is safe and convenient for the user and which will provide for the travel needs of bicyclists.

C-TR 36: Facilities should be provided to make bicycle and pedestrian travel more safe, direct, convenient and pleasant for commuting and other trips to activity centers and to support the use of other commute alternatives.

C-TR 37: All available funding options, including ISTEA funds, should be pursued for bicycle and pedestrian facility improvements.

Transportation Implementation Policies

C-TR(i) 16: Continue to develop convenient and effective transit alternatives, HOV, bicycle, and pedestrian facilities to provide the infrastructure TDM programs require to succeed.

C-TR(i) 29: Build attractive transit facilities, such as: passenger waiting shelters, major transit transfer stations, park and ride facilities, bicycle storage facilities at major transit stops and expand passenger facilities to support new routes (park-and-ride lots, bus shelters). (Implementers: County Transit District, Employers, Developers)

C-TR(i) 31: Add bike racks to bus routes where heavy passenger loads prohibit bringing bicycles on board the bus.

C-TR(i) 45: Continue to accommodate non-collapsible bicycles on Caltrain.

C-TR(i) 37: Continue to maintain and improve the width and quality of the surface of the right-hand portion of existing roads so that they are suitable for bicycle travel, regardless of whether or not bikeways are designated.

C-TR(i) 38: Provide secure bicycle storage facilities at employment sites, public transit stations and schools. (Implementers: Employers, County, Cities, Peninsula Commute Joint Powers Board, Schools)

C-TR(i) 39: Design all future roads, bridges, and transit vehicles and facilities to accommodate non-motorized travel. Incorporate bicycle and pedestrian facilities into future projects including:

- Development of new travel corridors such as rail transit and road projects.
- Development of non-transportation corridors including utilities and river/creek rights of way.
- Improvements to existing transportation corridors such as expressway, interchange, intersection and Commuter Lane projects.

C-TR(i) 40: Add and improve bicycle facilities on already existing roads, bridges and transit vehicles and within rail rights-of-way to accommodate non-motorized travel. (Implementers: Caltrans, County, Cities).

C-TR(i) 42: Maintain and implement the Santa Clara County Bicycle Plan and subregional bicycle network.

C-TR(i) 43: Provide for foot and bicycle travel across existing barriers, such as creeks, railroad tracks and freeways. (Implementers: Cities, County, State)

C-TR(i) 44: Establish and maintain bicycle advisory committees and confer with representatives of recognized bicycle clubs/associations for a "needs list" of necessary bicycle safety improvements. (Implementers: Cities, County)

C-TR(i) 46: Implement the County policy to maximize bicycle access on expressways.

C-TR(i) 47: Incorporate bicycle and pedestrian facilities (e.g., bicycle and pedestrian access routes, showers, secure bicycle storage facilities) in site designs.

Parks and Recreation Implementation Policies

C-PR 7: Opportunities for access to regional parks and public open space lands via public transit, hiking, bicycling, and equestrian trails should be provided. Until public transit service is available, additional parking should be provided where needed.

C-PR 49: Hiking, bicycling, and horseback riding trails should be provided along scenic roads where they can be provided safely and without significant adverse environmental impacts. Bicycling facilities should be provided by edge marked shoulders and improved surfaces on paths.

C-PR(i) 4: Provide public transit service to major regional parks, and develop hiking, bicycling, and equestrian trails to provide access to regional parks from the urban area to provide alternatives to private automobiles for access to recreation. (Implementers: County, Cities, Midpeninsula Regional Open Space District, State of California, Santa Clara Valley Water District)

Countywide Bicycle Plan (2008)

The purpose of this Bicycle Plan is to assemble in one document all the pertinent elements of past bicycle plans and working papers, identify the final cross-county bicycle corridor network, including gaps and needed projects, and include other elements to help local agencies responsible for projects to secure funding and plan effectively for the future. Relevant policies are listed below.

A. Transportation Planning and Programming

1) Plan and implement a seamless bicycle and pedestrian travel network that is continuous across city boundaries and county boundaries.

2) Include bicycle and pedestrian facilities in applicable transportation plans, programs, and studies.
3) Coordinate with other federal, state, regional, county and local agencies to, fund and implement bicycle projects in Santa Clara County.
4) Fully integrate bicycle access to and within the transit system.
5) Utilize multi-modal transportation demand models that are based on person-trips and that can forecast bicycle trips, pedestrian trips and transit trips in addition to motor vehicle trips.

B. Land Use / Transportation Integration

1) Encourage existing developments to provide bicycle/pedestrian connections to link neighborhoods and residential areas with schools, commercial services, employment centers, recreational areas and transit centers.
2) Encourage new developments to include bicycle and pedestrian facilities such as trails and bicycle lanes.
3) Encourage new developments to provide mobility for pedestrians and bicyclists by providing non-motorized connections and access ways such as cul-de-sac connections, pathways and other short-cuts to schools, transit centers and other adjacent destinations.
4) Ensure that existing bicycle facilities and access are maintained and preserved.

C. Local Ordinances and Guidelines

1) Provide policy guidance.
2) Establish guidelines that encourage:
    - bicycle parking ordinances
    - bicycle parking facilities
    - showers and commuter clothing lockers in new and renovated developments
    - mileage reimbursement when bicycles are used on official business when travel time is equivalent to an automobile trip
3) Encourage Transportation Demand Management programs to include bicycle and pedestrian components.

D. Design and Construction

1) Ensure that Member Agency construction or rehabilitation projects incorporate best practice for bicycle and pedestrian facilities when and where applicable
2) Implement proactive strategies to identify and remove obstacles and hazards to bicycle travel.
3) Consider roadway designs to enhance traffic safety.
4) Establish guidelines for and encourage the use of bicycle-safe and friendly roadway design.

E. Complementary Policies that Encourage Bicycling

1) Increase institutional encouragement of non-motorized travel within VTA
2) Encourage inter-jurisdictional cooperation in the development and implementation of non-motorized projects.
3) Promote bicycle planning and engineering training programs for Member Agency staff.

4) Promote Public Awareness through Education & Positive Enforcement Programs.

Valley Transportation Authority: Valley Transportation Plan 2040

The Valley Transportation Plan 2040 is Santa Clara County's long-range planning document that feeds into MTC's Regional Transportation Plan (RTP) 2040 and incorporates specific needs identified by the Valley Transportation Authority (VTA) and individual cities, including Mountain View. The VTP 2040 considers all travel modes and addresses the linkages between transportation and land use planning, air quality, and community livability. Consistent with MTC's RTP, the VTP 2040 includes projects and programs with anticipated funds and provides a framework for investments in transit and maintenance of the existing roadway network, including upgrades to bicycle and pedestrian facilities. VTA regularly updates the plan approximately every four years coinciding with the update of the RTP.

Bicycle Expenditure Program

The Bicycle Expenditure Program (BEP) was first adopted in 2000 by the VTA Board of Directors as the funding mechanism for countywide bicycle projects. Approximately every four years, VTA updates the BEP Project List, which is a list of bicycle projects that can be funded over the next 25 years within the constraints of anticipated bicycle funding. The BEP project list is incorporated into the Valley Transportation Plan 2040, Santa Clara County's Long Range Transportation Plan, as the bicycle element of that plan. The funds programmed towards BEP projects come from a combination of funding programs. As part of VTP 2040, VTA dedicated $808 million for 155 bicycle projects around the County.

VTA Bicycle Technical Guidelines

The Bicycle Technical Guidelines (BTG) was first adopted by the Santa Clara County Valley Transportation Authority (VTA) in 1999. In December 2007, and again in 2012, VTA significantly expanded and re-adopted the BTG. The BTG manual is a set of optimum standards and best practices for roadway and bikeway design. They are intended to help Member Agencies in providing optimal bicycle accommodation and ensuring that bicycle planning as well as roadway planning remains consistent countywide. The BTG is the complementary companion to the Countywide Bicycle Plan (CBP) and the Bicycle Expenditure Program (BEP) and should be used as a resource by both roadway and bikeway planners and designers.

Regional

Regional planning and policy documents are far-reaching, presenting policies for all jurisdictions in a region or specific recommendations for jurisdictions running through or adjacent to the City of Mountain View, e.g. Metropolitan Transportation Commission (MTC) and Caltrain. MTC is the federally designated regional transportation planning, coordinating and financing agency for the San Francisco Bay Area. The Association of Bay Area Governments (ABAG), made up of the nine counties surrounding the Bay, is the comprehensive planning agency for the region.

Regional Bicycle Plan (2009)

The Regional Bicycle Plan, produced by MTC, identifies regional bikeway connections in the San Francisco Bay Area and strategies to fill gaps in the regional bikeway network (RBN). The RBP's principle

goal is "to ensure that bicycling is a safe, convenient, and practical means of transportation and healthy recreation throughout the Bay Area, including in Priority Development Areas (PDAs); to reduce traffic congestion and risk of climate change; and to increase opportunities for physical activity to improve public health." The policies of the plan include directing local jurisdictions to collaborate with transit agencies to ensure bicyclists are accommodated within one mile of transit stations, adopt ordinances requiring new developments to include sheltered bicycle parking and end-of-trip accommodations, maintain Bicycle Advisory Committees and conduct bicycle surveys using the National Bicycle and Pedestrian Documentation Project. The most relevant policies are listed below.

Policy 1.1: Ensure that all transportation projects funded by MTC consider enhancement of bicycle transportation, consistent with MTC Resolution 3765, Caltrans Deputy Directive 64 R1, Assembly Concurrent Resolution 211 and the Complete Streets Act of 2008. **Policy 2.1:** Develop a cohesive system of regional bikeways that provide access to and among major activity centers, public transportation and recreation facilities.

Policy 2.2: Ensure that the RBN serves bicyclists with diverse ability levels who are bicycling for a range of transportation and recreational purposes.

Policy 2.5: Encourage coordination of cross jurisdictional bicycle way-finding signage.

Policy 3.3: Encourage local jurisdictions and other agencies and organizations to utilize MTC's online Safety Toolbox.

Policy 3.2: Support local government efforts to improve bicyclist safety by encouraging enforcement of the California Vehicle Code for motorists and cyclists alike. Examples include diversion training programs and reduced fines for errant cyclists so police officers will be more willing to cite them. (Diversion training allows motorists and cyclists who break traffic laws to avoid having citations documented in exchange for attending traffic safety classes.)

Policy 5.3: Foster collaboration between local jurisdictions and regional transit agencies to improve bicycle access to transit stations in the last mile surrounding each station. Improvements to ease, speed, convenience and safety of bicycle access, including by means of signage and bikeways, should be considered.

Policy 6.2: Encourage local jurisdictions to adopt ordinances requiring bicycle parking and storage and to offer incentives to employers that provide enclosed, sheltered bicycle parking for their employees and, when feasible, their customers.

Policy 6.3: Encourage local jurisdictions to provide shower and locker facilities, or to make arrangements for access to local health clubs, for all new developments and major redevelopments.

Policy 6.4: Continue to require cities and counties to form and maintain bicycle advisory committees, and to develop and update comprehensive bicycle plans, as a condition for receiving Transportation Development Act (TDA) funds.

Policy 8.7: Encourage jurisdictions to consider adopting California Environmental Quality Act (CEQA) standards that rigorously analyze project impacts to bicyclists and pedestrians.

San Francisco Bay Trail Gap Analysis (2005)

The San Francisco Bay Trail Gap Analysis Study is a continuation of the Bay Trail Plan (1989), which seeks to complete a continuous 500-mile regional hiking and bicycling trail around the San Francisco Bay. The following policies are from the Bay Trail Plan prepared by ABAG pursuant to SB100, which the Gap Analysis supports.

- Trail alignment policies reflect the goals of the Bay Trail program—to develop a continuous trail which highlights the wide variety of recreational and interpretive experiences offered by the diverse bay environment and is situated as close as feasible to the shoreline, within the constraints defined by other policies of the plan.
- Trail design policies underscore the importance of creating a trail which is accessible to the widest possible range of trail users and which is designed to respect the natural or built environments through which it passes. Minimum design guidelines for trail development are recommended for application by implementing agencies.
- Transportation access policies reflect the need for bicycle and pedestrian access on Bay Area toll bridges, in order to create a continuous trail and to permit cross-bay connections as alternative trail routes.
- Implementation policies define a structure for successful implementation of the Bay Trail, including mechanisms for continuing trail advocacy, oversight and management.

Caltrain Bicycle Access and Parking Plan (2008)

The Caltrain Bicycle Access and Parking Plan proposes improvements to the ten highest bicycle ridership stations in the system with the intent to increase the number of people that arrive at the stations by bicycle. The Mountain View Station is included in the stations assessed by the plan, which provides 141 bicycle parking spaces, including racks and locker spaces. The plan does not recommend more bicycle parking spaces, but the conversion of the racks to ones made of thinner metal and conversion of the keyed bicycle lockers to electronic lockers. The plan identifies limited bicycle access to the northbound platform and recommends improving bicycle access from southbound Castro Street/Moffett Blvd. It also recommends reconfiguring the parking lot fence at Bush Street, the Evelyn Avenue intersection, and Bush Street to allow bike/pedestrian access through the parking lot.

Grand Boulevard Initiative

The Grand Boulevard Initiative (GBI) is a collaborative effort between multiple cities, counties, local and regional agencies to transform El Camino Real, a 43-mile corridor along the San Francisco Peninsula, into a boulevard that connects walkable, people-friendly communities.[2] Representatives from the City of Mountain View sit on the GBI Task Force and the GBI Working Committee to ensure coordination between the GBI guiding principles and planning activity along El Camino Real. The GBI has ten guiding principles. Below are the principles that are most relevant to the Bike Plan Update.

- Strengthen pedestrian and bicycle connections with the corridor
- Reduce the distance between corridor crossings to improve connectivity with adjacent neighborhoods where appropriate.
- Provide pedestrian cut-through linkages to access parking lots, alleys and neighborhood routes between blocks, including additions to "Safe Route to Schools" paths.
- Design parallel access routes where needed to separate pedestrian and bike movements.
- Develop a balanced multimodal corridor to maintain and improve mobility of people and vehicles along the corridor

State

State planning and policy documents are the most far-reaching, presenting policies and goals for Regional Transportation Plans and Metropolitan Planning Organizations.

State Assembly Bill 32: Global Warming Solutions (2006)

The Global Warming Solutions Act sets discrete actions for California to reduce greenhouse gas emissions to 1990 levels by 2020, which represent a 25% reduction statewide. The California Air Resources Board, the agency responsible for implementing the Bill, drafted the AB 32 Climate Change Scoping Plan, which includes a set of actions aimed at reducing greenhouse gas emissions, including encouraging more bicycling and walking as a means of transportation.

State Assembly Bill 1358: Complete Streets (2008)

AB 1358 requires the legislative body of any City or County to, upon revision of a general plan or circulation element, ensure that streets accommodate all user types, e.g. pedestrians, bicyclists, transit riders, motorists, children, persons with disabilities and elderly persons. Beginning January 1, 2011, Cities and Counties must include accommodation of all street users in Circulation Element revisions.

[2] Grand Boulevard Initiative, Progress Report 2013

State Senate Bill 375: Sustainable Communities (2009)

Signed into law in 2008, SB 375 links land use planning with greenhouse gas emissions, first requiring the California Air Resources Board to set emission reduction goals for metropolitan planning organizations (MPO) (ABAG is the MPO for the Bay Area) and then requiring ABAG to develop a land use plan to meet that goal. ABAG must make transportation funding decisions consistent with their new plan, namely by developing a required Sustainable Communities Strategy (SCS) in the Regional Transportation Plan. The SCS must also be consistent with the Regional Housing Needs Assessment (RHNA) allocation. ABAG has already implemented a similar strategy with its Priority Development Areas (PDA), which works with local jurisdictions to concentrate housing around transit stations. The City of Mountain View compliance with ABAG's SCS and consequently SB 375 is setting minimum density and development standards when rezoning an area. Aspects relevant to this Citywide Bicycle Transportation Plan are listed below.

- Air Resources Board (ARB) creation of regional targets for greenhouse gas emissions reduction tied to land use.
- Regional planning agencies must create a plan, including a Sustainable Communities Strategy, to meet those targets.
- Regional transportation funding decisions must be consistent with this new plan.
- RHNA guiding local housing efforts that are informed by efficient use of the transportation system.

State Assembly Bill 1193: Bikeways (2014)

AB 1193 categorizes cycle tracks or separated bikeways as Class IV bikeways, requires the California Department of Transportation to establish minimum safety design criteria for each type of bikeway, and authorizes a local agency to utilize other minimum safety criteria for bikeways that meet specified conditions if adopted by resolution at a public meeting. The later provision allows local jurisdictions to choose alternative guidelines, such as the National Association of City transportation Officials (NACTO) Urban Bikeway Design Guide, if the California Department of Transportation does not adequately address local conditions.

State Assembly Bill 1371: Vehicles: Bicycles: Passing Distance (2013)

AB 1371 enacts the Three Feet for Safety Act, which requires the driver of a motor vehicle overtaking and passing a bicycle that is proceeding in the same direction on a highway to pass in compliance with specified requirements applicable to overtaking and passing a vehicle. The bill would prohibit, with specified exceptions, the driver of the motor vehicle that is overtaking or passing a bicycle proceeding in the same direction on a highway from passing at a distance of less than 3 feet between any part of the motor vehicle and any part of the bicycle or its operator. A violation of these provisions is punishable by a fine.

California Manual on Uniform Traffic Control Devices (2012)

This California Manual on Uniform Traffic Control Devices (California MUTCD) is published by the State of California Department of Transportation (Caltrans) and is issued to adopt uniform standards and specifications for all official traffic control devices in California, in accordance with Section 21400 of the California Vehicle Code. The California MUTCD uses a format similar to the national MUTCD. It incorporates FHWA's MUTCD in its entirety and explicitly shows which portions thereof are applicable or not applicable in California.

California Highway Design Manual (2012)

The California Highway Design Manual (HDM) provides detailed guidance related to planning and design of roadways, including bicycle and pedestrian facilities. Chapter 1000 Bicycle Transportation Design discusses bikeway planning and design.

Design Flexibility in Multimodal Design

On April 10, 2014, the Caltrans Chief of the Division of Design released a memorandum reaffirming its commitment to providing flexibility in design multimodal transportation systems. The Memorandum identifies the AASHTO Bike Guide and the NACTO Urban Bikeway Design Guide as valuable resources. By endorsing the NACTO Urban Bikeway Design Guide, Caltrans states that municipalities can use NACTO designs in projects, however the guidelines do not necessarily supersede the HDM or CAMUTCD. Caltrans staff and local agency staff should work together in selecting a final design solution.

California Vehicle Code

The California Vehicle Code (CVC) regulates many aspects of transportation within the state, particularly vehicle use and registration, and enumerates the powers and duties of the Department of Transportation (Caltrans). Division 11 of the code also provides the legal framework, or "rules of the road," for motor vehicles, bicycles, and pedestrians operating on public roadways in California.

CVC Section 21200 – 21212 deals specifically with bicycle use and establishes that all persons riding a bicycle are considered "vehicles," subject to most rules and regulations provided elsewhere in the Vehicle Code. This includes the right to access all state highways except where bicycles are specifically excluded by official signage for the safety of all users, and the obligation to signal at all turns.

California Government Code §65302 (Complete Streets)

California Assembly Bill (AB) 1358, also known as the Complete Streets Bill, amended the California Government Code §65302 to require that all major revisions to a city or county's Circulation Element include provisions for the accommodation of all roadway users including bicyclists and pedestrians. Accommodations include bikeways, sidewalks, crosswalks, and curb extensions. The Government Code §65302 reads:

(2) (A) Commencing January 1, 2011, upon any substantive revisions of the circulation element, the legislative body shall modify the circulation element to plan for a balanced, multimodal transportation

network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan.

(B) For purposes of this paragraph, 'users of streets, roads, and highways' means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

California Green Building Standards Code (2013)

Officially known as the CALGreen Code, this standard includes bicycle parking requirements for new developments which may be mandatory depending on the type of occupancy (Table 0-2).

Table 0-2: California Green Code Bicycle Parking Requirements

Category	Description
Bicycle Parking and Changing Rooms	Comply with sections 5.106.4.1 and 5.106.4.2; or meet local ordinance or meet the applicable local ordinance, whichever is stricter.
Short-Term Bicycle Parking	If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack. (Exception: Additions or alterations which add nine or less visitor vehicle parking spaces.)
Long-Term Bicycle Parking	For buildings with over 10 tenant-occupants or additions or alternations that add 10 or more vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicle parking spaces being added, with minimum of one space. Acceptable parking facilities shall be convenient from the street and may include: • Covered, lockable enclosures with permanently anchored racks for bicycles; • Lockable bicycle rooms with permanently anchored racks; or • Lockable, permanently anchored bicycle lockers.
Bicycle Parking for Public Schools: Short-Term	Provide permanently anchored bicycle racks within 200 feet of the student entrance, readily visible to passers-by, for 5 percent of the student population based on total occupant load of the campus with a minimum of one two-bike capacity rack.
Bicycle Parking for Public Schools: Long-Term	Provide secure bicycle parking for 5 percent of employees, based on the total number of motorized vehicle parking capacity in the staff parking lot, with a minimum of one space. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following: • Covered, lockable enclosures with permanently anchored racks for bicycles; • Lockable bicycle rooms with permanently anchored racks; or • Lockable, permanently anchored bicycle lockers.

California Active Transportation Program

The Active Transportation Program (ATP) is a consolidation of existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program focused on active transportation. The ATP was signed into legislation on September 26, 2013.

The purpose of ATP is to encourage increased use of active modes of transportation by achieving the following goals:

- Increase the proportion of trips accomplished by biking and walking,
- Increase safety and mobility for non-motorized users,
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas (GHG) reduction goals,
- Enhance public health,
- Ensure that disadvantaged communities fully share in the benefits of the program, and
- Provide a broad spectrum of projects to benefit many types of active transportation users.

Table 0-3 Active Transportation Program Funding Compliance List

Subject	ATP Compliance Checklist
Future Trip Estimates	The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.
Collision Report	The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.
Land Use Patterns	A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.
Existing and Propose Bikeways	A map and description of existing and proposed bicycle transportation facilities.
End-of-Trip Bicycle Parking	A map and description of existing and proposed end-of-trip bicycle parking facilities.
Bicycle Parking Policy	A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.

Subject	ATP Compliance Checklist
Bicycle Connections to other Modes	A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.
Pedestrian Connections to other Modes	A map and description of existing and proposed pedestrian facilities at major transit hubs. These must include, but are not limited to, rail and transit terminals, and ferry docks and landings.
Wayfinding	A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.
Maintenance	A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.
Education Programs	A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on accidents involving bicyclists and pedestrians.
Community Involvement	A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.
Regional Plan Coordination	A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.
Project List	A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.
Past Expenditures and Future Financial Needs	A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.
Implementation	A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.
Adoption Resolution	A resolution showing adoption of the plan by the city, county or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located.

Federal

US Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendation (3/2010)

This official United States Department of Transportation (DOT) Policy Statement reflects and clarifies the Department's support for the development of fully integrated active transportation networks, and emphasizes the multiple benefits of walking and bicycling. Although not associated with new or modified federal programs or guidelines, the statement does encourage specific actions for improving bicycling and walking conditions, including considering bicycling and walking as equals with other transportation modes, avoiding minimum standards for bicycle and pedestrian facilities, where feasible, in anticipation of future growth in demand, and collecting data on walking and biking trips.

Manual on Uniform Traffic Control Devices

The *Manual on Uniform Traffic Control Devices* (MUTCD), which is administered by the Federal Highway Administration (FHWA), is a compilation of national standards for all traffic control devices, including road markings, highway signs, and traffic signals. It is updated periodically to accommodate the nation's changing transportation needs and address new safety technologies, traffic control tools and traffic management techniques. The MUTCD, the most recent version of which was published in December 2009, includes a separate chapter (Chapter 9) on traffic control standards and guidelines specific to bicycle facilities.

American Association of State Highway and Transportation Officials - Guide for the Development of Bicycle Facilities

Although the principle design reference document published by the American Association of State Highway and Transportation Officials (AASHTO) is often considered A Policy on Geometric Design of Highways and Streets (5th Edition), the Guide for the Planning, Design, and Operation of Bicycle Facilities has emerged as the more relevant and defining publication for technical issues dealing with bicycle facilities. This document - first published in 1981, revised in 1999, and most recently in 2012 – is intended as a design resource for "proven and tested" national best practices in bicycle design. The latest edition provides bikeway type selection guidance, bike lane guidance, signal guidance, shared-use path guidance, and affirms lane diets and road diets.

Appendix Y

Draft Network, Spot, and Other City Planned Bikeway Improvement Recommendations

Table Y-1. Draft Network Improvement Recommendations

Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
Group A – Class I Paths						
A	Graham Middle School	Boranda Avenue	Graham Middle School	0.16	Class I	Add path to connect Boranda Avenue to Graham Middle School
A	Stevenson/ Theuerkauf School Path	Montecito Avenue	San Luis Avenue	0.27	Class I	Formalize existing path to connect students to Montecito Avenue
A	Towne Circle Sidewalk	Towne Circle	Leland Avenue	0.02	Class I	Expand existing sidewalk into a multi-use path connecting Towne Circle and Leland Avenue to create an alternative to California Street
A	Permanente Creek Trail	Rock Street	Central Expressway	0.81	Class I	Extend low-stress facility, improve north-south connectivity and connection to Crittenden Middle School
A	Martens-Yorkshire Path	Martens Avenue	Yorkshire Way	0.05	Class I	Formalize current informal, improve access to Stevens Creek Trail
A	Stevens Creek Trail*	Heatherstone Way	Mountain View High School	0.58	Class I	Extend Stevens Creek Trail to Mountain View High School to provide low-stress facility for student access

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Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
A	Landels Trail Pathway*	Landels School	Stevens Creek Trail	0.05	Class I	Provide access between Landels School and Stevens Creek Trail
Group B – Class II Bike Lanes						
B	Bryant Avenue	Grant Road	Stevens Creek Trail	0.78	Class II	Consider potential connections to Mountain View High School and Extension of Stevens Creek Trail
B	Cuesta Drive	Miramonte Avenue	Grant Road	0.51	Class II	Paint bike lane edge line to separate bicycle lane from parked vehicles. Spot improvement along the corridor
B	Fairchild Drive	North Whisman Road	Ellis Street	0.33	Class II	Add on-street advisory bike lanes, remove center line, to connect gap between Whisman Road and Ellis Street
B	Ferry Morse Way	Evelyn Avenue	South Whisman Road	0.15	Class II	Close gap between Evelyn and Whisman
B	Independence Avenue	Leghorn Street	Charleston Road	0.17	Class II	Consider removing one side of parking and adding bike lanes to create more bike-friendly facility
B	Martens Avenue	Grant Road	Yorkshire Way	0.29	Class II	Close gap between Grant Road and proposed Yorkshire Way path and bike boulevard connection to Stevens Creek Trail, connect to elementary school
B	West Dana Street	Calderon Avenue	Pioneer Way	0.34	Class II	Paint bike lane green to emphasize connection between bike boulevards
B	Sylvan Avenue	Rainbow Drive	Moorpark Way	0.63	Class II	Paint bike lane edge line to separate bicycle lane from parked vehicles

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Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
B	Evelyn Avenue	Castro Street	Hope Street	0.05	Class II	Close bike lane gap between Castro Street and Hope Street
B	Hans Avenue	Miramonte Avenue	Phyllis Avenue	0.51	Class II	Separate bicyclists from traffic
B	Leong Drive	Moffett Boulevard	Evandale Avenue	0.13	Class II	Consider removing one side of parking and adding bike lanes to increase bike-friendly facility
B	North Whisman Road	Fairchild Drive	East Middlefield Road	0.57	Class II	Delineate southbound bike lane from parking lane
B	West Middlefield Road	Old Middlefield Road	Central Expressway	3.80	Class II	Create full-time on-street bike lane, separated from parking with painted line. If infeasible, consider expanding parking restrictions to weekends and until 8pm on weekdays
B	South Drive	Solace Place	Hospital Drive	0.14	Class II	Improve existing Class II bike lane by painting edge line delineating bike lane and parking lane
B	Sylvan Avenue	El Camino Real	Rainbow Drive	0.14	Class II	Paint bike lane green to emphasize connection between bike boulevards, add bike lane edge line to separate bicycle lane from parked vehicles
B	The Americana	Continental Circle	El Camino Real	0.11	Class II	Paint bike lane green to emphasize connection between bike boulevards, add bike lane edge line to separate bicycle lane from parked vehicles
B	Whisman Station Drive	North Whisman Road	Central Expressway	0.16	Class II	Create connection to North Whisman Road from westbound Central Expressway

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Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
Group C – Class II Bike Lanes (Buffered)						
C	East Dana Street	Moorpark Way	West Dana Street	0.30	Class II Buffered	Separate bicycle lane from parked vehicles and traffic, provide low-stress connection between bicycle boulevards
C	Miramonte Avenue	Gest Drive	Sonia Way	1.15	Class II Buffered	Separate bicycle lane from parked vehicles and traffic
C	Charleston Road	San Antonio Road	North Rengstorff Avenue	0.57	Class II Buffered	Close regional gap between Palo Alto boundary and Rengstorff Avenue
C	Miramonte Avenue	Sonia Way	El Camino Real	0.22	Class II Buffered	Close the gap on Miramonte Road to ECR
C	Moffett Boulevard	Central Expressway	Clark Road	1.26	Class II Buffered	Upgrade existing bike route to separate bikes from 35 MPH traffic, provide diagonal connection to Moffett Field and Stevens Creek Trail
C	Rengstorff Avenue	El Camino Real	Amphitheatre Parkway	2.01	Class II Buffered	Upgrade existing Class II bike lane that shares space with the parking lane, buffer to separate bicyclists from fast moving, high volume traffic
C	North Whisman Road	East Middlefield Road	East Evelyn Avenue	0.60	Class II Buffered	Widen bike lane and separate bicycle lane from traffic
Group D – Class III Bike Routes						
D	Franklin Avenue/ Dierick Drive/ Lubich Drive	Sleeper Avenue	Bryant Avenue	0.89	Class III	Create connection between Stevens Creek Trail and Mountain View High School

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Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
D	South Drive	Hospital Drive	Stevens Creek Trail	0.16	Class III	Close future gap between South Drive bike lane and future Permanente Creek Trail
D	Castro Street	Evelyn Avenue	El Camino Real	0.67	Class III	Close corridor gap and provide direct access to downtown business district
D	Rock Street	North Rengstorff Avenue	Camp Avenue	0.47	Class III	Establish connection to Permanente Creek Trail and Crittenden Middle School
D	Sleeper Avenue	Grant Road	Stevens Creek Trail	0.52	Class III	Close gap between Grant Road and Stevens Creek Trail
D	Yorkshire Way	Sleeper Avenue	Martens Avenue	0.12	Class III	Create connection between proposed Class I connection and Sleeper Avenue Bike Boulevard
D	Boranda Avenue	Hans Avenue	Graham Middle School	0.08	Class III	Connect between proposed Graham Middle School path and Hans Avenue
D	Foxborough Drive	Path *(connecting Foxborough Drive to Moorpark Way)*	Glenborough Drive	0.11	Class III	Connect between path and Sylvan Park, and closes gap to Dana Street
D	Glenborough Drive	Foxborough Drive	Sylvan Avenue	0.14	Class III	Connect between path (connecting Foxborough Drive to Moorpark Way) and Sylvan Park, and closes gap to Dana Street
D	Marilyn Drive	Miramonte Avenue	Springer Road	0.49	Class III	Create east-west connection between Springer and Miramonte Roads in a limited roadway network
D	Meadow Lane/ Barbara Avenue/ Fordham Way/ Spencer Way	Marilyn Drive	Lincoln Drive	1.19	Class III	Create residential north-south alternative to Miramonte Drive and Springer Road
D	Pacific Drive	Whisman Station Drive	North Whisman Road	0.30	Class III	Connect North Whisman Road to Whisman Light Rail station

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Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
Group East – Class III Bike Boulevards						
E	Alice Avenue	Alice Avenue	Moorpark Way	0.27	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Bush Street	California Street	West Dana Street	0.09	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	California Street	Castro Street	Bush Street	0.21	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Central Avenue	Stierlin Road	Stevens Creek Trail	0.51	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Church Street	Calderon Avenue	Shoreline Boulevard	0.84	Class III Bike Boulevard	Create a low-stress east-west alternative to California Street
E	Fairchild Drive	Leong Drive	North Whisman Road	0.56	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Farley Street	West Middlefield Road	Central Expressway	0.63	Class III Bike Boulevard	Create north-south low-stress connection to Crittenden Middle School and other bikeways
E	Gladys Avenue	North Whisman Road	Easy Street	0.39	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Heatherstone Way	South Knickerbocker Drive	Dale Avenue	0.24	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed

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Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
E	Latham Street	South Shoreline Boulevard	Escuela Avenue	0.57	Class III Bike Boulevard	Create a low-stress east-west alternative to California Street
E	Latham Street	Showers Drive	Escuela Avenue	0.69	Class III Bike Boulevard	Create a low-stress east-west alternative to California Street
E	Montecito Avenue	Shoreline Boulevard	Rengstorff Avenue	0.99	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Rainbow Drive	Sylvan Avenue	Alice Avenue	0.27	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Nita Avenue/ Whitney Drive/ Thompson Avenue/Jane Lane	Rengstorff Avenue	San Antonio Road	1.01	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Sierra Vista Avenue	Montecito Avenue	Leghorn Street	0.94	Class III Bike Boulevard	Create north-south low-stress connection between other proposed bike boulevards
E	View Street	California Street	Evelyn Avenue	0.27	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	West Dana Street	Bush Street	Calderon Avenue	0.21	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Continental Circle	Dale Avenue	The Americana	0.08	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Dale Avenue	Heatherstone Way	Continental Circle	0.33	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed

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Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
E	Mayfield Avenue-Whisman Road Bike Boulevard Extension	Gladys Avenue	Ellis Street	0.42	Class III Bike Boulevard	Part of the 2008 proposed bike boulevard study, Create a connection between Gladys Avenue and Ellis Street
E	Evelyn Avenue	Hope Street	Pioneer Way	0.70	Class III Bike Boulevard	Reclassify Class III Bike Boulevard Designation - this link is suitable as a Class II on-street bike lane
E	Leghorn Street	Sierra Vista	Independence Avenue	0.38	Class III Bike Boulevard	Create low-stress facility connection to commercial area, connect other low-stress facilities
E	Mayfield Avenue	Whitney Drive	Central Expressway	0.17	Class III Bike Boulevard	Close gap between existing Bike Boulevard on Whitney Drive to San Antonio Caltrain Station
E	Moorpark Way	Alice Avenue	East Dana Street	0.18	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Pioneer Way	East Dana Street	East Evelyn Avenue	0.19	Class III Bike Boulevard	Upgrade to formal Bike Boulevard with sharrows, improved wayfinding, and traffic calming measures as needed
E	Nita Avenue/ Dell Avenue/ Victory Avenue	Nita Avenue	Middlefield Road	0.40	Class III Bike Boulevard	Continue the bike boulevard route from San Antonio Caltrain Station to Middlefield Road
E	Rock Street	West Middlefield Road	Camp Avenue	0.82	Class III Bike Boulevard	Continue proposed Bike Boulevard from San Antonio Station to Permanente Creek Trail and Crittenden Middle School
Group F – Class IV Cycle Track						
F	Truman Avenue	Oak Avenue	Bryant Avenue	0.31	Class IV	To improve connection to school, consider expanding east sidewalk into a shared-use path or adding a two-way Class IV cycle track

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Group	Location	Start	End	Mileage	Recommended Improvement	Needs Addressed
Other						
N/A	Stevens Creek Trail Access Points	N/A	N/A	N/A	Stevens Creek Trail Bicycle and Pedestrian Access Study	Identify wayfinding and access improvements to Stevens Creek Trail access points throughout Mountain View

** Project has been noted in unscheduled and unfunded list of projects considered for Mountain View Capital Improvement Program*

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Table Y-2. Draft Spot Improvement Recommendations

Location Number	Location	Secondary Street	Recommended Improvement [1, 2]	Needs Addressed
1	Fordham Way	Cuesta Drive	Bike crossing and turning improvements	Improve unsignalized intersection for proposed new bicycle route
2	Rengstorff Avenue	Central Expressway	Bicycle marking improvements	Improve bicycle wayfinding and facilities at busy intersection
3	Phyllis Avenue*	Grant Road	Bike crossing and turning improvements	Improve wayfinding and turning movement at intersection of existing bikeways
4	Castro Street*	Miramonte Avenue	Bicycle detection	Alert signal to presence of bicycles
5	Cuesta Drive	Miramonte Avenue	Bicycle marking improvements	Create a more bike-friendly intersection on existing bikeway
6	Springer Road	Cuesta Drive	Bicycle marking improvements	Create a more bike-friendly intersection on existing bikeway
7	Villa Street	Bush Street	Bicycle detection	Alert signal to presence of bicycles
8	Grant Road	Bryant Avenue	Bike crossing and turning improvements	Improve bicycle movement for students traveling to/from Mountain View High School
9	Shoreline Boulevard	Pear Avenue	Bike crossing and turning improvements	Create a more bike-friendly intersection on existing bikeway
10	Shoreline Boulevard	Villa Street	Bicycle marking improvements	Create a more bike-friendly intersection on existing bikeway for bicyclists turning onto Villa Street*
11	Sleeper Avenue	Grant Road	Bike crossing and turning improvements	Create a more bike-friendly intersection of existing and proposed bikeway that connect to Stevens Creek Trail

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Location Number	Location	Secondary Street	Recommended Improvement [1, 2]	Needs Addressed
12	Bonita Avenue	Cuesta Drive	Bike crossing and turning improvements	Create a more bike-friendly intersection for access to park
13	Castro Street*	El Camino Real	Bike crossing and turning improvements	Create a more bike-friendly intersection of proposed bikeway at a busy intersection
14	Grant Road	Cuesta Drive	Bicycle crossing and turning improvements; Bicycle marking improvements	Create a more bike-friendly intersection on existing bikeway
15	Bryant Avenue	Truman Avenue	Mountain View High School Access Study	Identify priority bicycle and pedestrian access routes for students during peak school commute hours
16	Dana Street	Calderon Avenue	Bicycle detection	Alert signal to presence of bicycles
17	California Street	Castro Street	Bicycle detection	Alert signal to presence of bicycles
18	Moffett Boulevard	Middlefield Road	Bicycle crossing and turning improvements; Bicycle detection	Create a more bike-friendly intersection on existing bikeway
19	Rengstorff Avenue	Rock Street	Bicycle marking improvements	Create a more bike-friendly intersection of existing and proposed bikeway
20	Rengstorff Avenue	Crisanto Avenue	Bicycle marking improvements	Create a more bike-friendly intersection on existing bikeway
21	Rengstorff Avenue	101 ramps (all)	Bicycle crossing and turning improvements; Bicycle marking improvements	Coordinate with Caltrans to create a more bike-friendly experience across busy interchange ramps
22	Whisman Road	Middlefield Road	Bicycle crossing and turning improvements; Bicycle detection	Create a more bike-friendly intersection on existing bikeway

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Location Number	Location	Secondary Street	Recommended Improvement [1, 2]	Needs Addressed
23	Farley Street	Middlefield Road	Bicycle crossing and turning improvements	Create a more bike-friendly intersection at intersection of existing and proposed bikeway
24	Evelyn Avenue	Hope Street	Bicycle detection; Bicycle marking improvements	Create a more bike-friendly intersection on existing bikeway in front of Downtown Transit Center
25	Evelyn Avenue	Castro Street	Bicycle crossing and turning improvements	Create a more bike-friendly intersection at intersection of existing and proposed bikeway
26	Evelyn Avenue	Bernardo Avenue	Bicycle marking improvements	Coordinate with City of Sunnyvale to create a more bike-friendly intersection on existing bikeway
27	Middlefield Road	Old Middlefield Road	Bicycle crossing and turning improvements	Create a more bike-friendly intersection on existing bikeway
28	Moorpark Way	Sylvan Avenue	Bicycle marking improvements	Alert motorists to the presence of bicyclists in the bend on Moorpark Way
29	Farley Street	Central Expressway	Bicycle detection	Alert signal to presence of bicycles
30	East Dana Street	Moorpark Way	Bicycle crossing and turning improvements	Create a more bike-friendly intersection on existing bikeway
31	South Whisman Road	Ferry Morse Way	Bicycle crossing and turning improvements; Bicycle marking improvements	Create a more bike-friendly intersection on existing bikeway
32	El Monte Avenue	Springer Road	Bicycle crossing and turning improvements	Create a more bike-friendly intersection on existing bikeway at a unique intersection
33	Rengstorff Avenue	Middlefield Road	Bicycle crossing and turning improvements; Bicycle marking improvements	Create a more bike-friendly intersection on existing bikeway

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Location Number	Location	Secondary Street	Recommended Improvement [1, 2]	Needs Addressed
34	North Whisman Road	Gladys Avenue	Bicycle crossing and turning improvements	Create a more bike-friendly intersection on existing bikeway
35	Montecito Avenue	Sierra Vista Avenue	Bicycle crossing and turning improvements	Create a more bike-friendly intersection on existing bikeway
36	West Middlefield Road	Victory Avenue	Bicycle crossing and turning improvements	Create a connection between proposed bike boulevards on Victory Avenue and Rock Street

1. ***Bicycle marking improvements*** *may include, but are not limited to: extending the bike facility to the intersection, adding intersection crossing markings, and green striping in conflict/merge zones.*
2. ***Bicycle crossing and turning*** *improvements may include, but are not limited to: adding two-stage left-turn queue boxes to facilitate left turns without using the left-turn lane, bicycle signal phase, median refuge, advanced warning signs, HAWK signal.*

* ***Part of current Capital Improvement Program***

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Table Y-3: Other City Bikeway Improvements Proposed

Location	Plan or Study	Start	End	Proposed Improvement	Mileage
Escuela Avenue	California Street/Escuela Avenue Modifications	Latham Street	Villa Street	To be determined	0.38
Shoreline Boulevard	California Street/Escuela Avenue Modifications	El Camino Real	Montecito Avenue	To be determined	1.09
California Street	California Street/Escuela Avenue Modifications	Showers Drive	Bryant Street	To be determined	1.65
Castro Street	CIP - Castro Street Modifications (#14-36)	El Camino Real	Miramonte Road	Class II	0.38
Ellis Street	CIP - NASA Ames Bayshore Light Rail Pedestrian Access Modifications (#09-029)	Fairchild Drive	Manila Drive	Class II	0.19
Ellis Street	CIP - NASA Ames Bayshore Light Rail Pedestrian Access Modifications (#09-029)	Fairchild Drive	Manila Drive	Class I	0.19
Permanente Creek Trail	CIP - Permanente Creek Trail Crossing (#15-37)	Amphitheatre Parkway	N/A	Class I	0.06
Shoreline Boulevard	CIP - Shoreline Boulevard Pathway (#15-32)	Villa Street	Wright Avenue	Class I	0.33
Calderon Avenue	El Camino Real Precise Plan	Church Street	El Camino Real	Class II	0.19
East El Camino Real	El Camino Real Precise Plan	Calderon Avenue	Dale Avenue	Class II	0.99
El Camino Real	El Camino Real Precise Plan	El Monte Avenue	Calderon Avenue	To be determined	1.16
El Camino Real	El Camino Real Precise Plan	City limit	Escuela Avenue	To be determined	0.31
El Camino Real/El Monte Avenue	El Camino Real Precise Plan	Escuela Avenue	Pilgrim Avenue	Class II	0.33
Latham Street	El Camino Real Precise Plan	San Antonio Road	Calderon Avenue	Class III	2.38

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Location	Plan or Study	Start	End	Proposed Improvement	Mileage
Miramonte Avenue	El Camino Real Precise Plan	El Camino Real	Harpster Drive	Class II	0.28
Alta Avenue	North Bayshore Precise Plan	Charleston Road	US Route 101	Class II	0.32
Amphitheatre Parkway	North Bayshore Precise Plan	US Route 101	North Shoreline Boulevard	Class I or IV	0.85
Armand Avenue	North Bayshore Precise Plan	Villa Drive	La Avenida Street	Class III	0.08
Bayshore Parkway	North Bayshore Precise Plan	Garcia Avenue	Amphitheatre Parkway	Class II	0.62
Broderick Way	North Bayshore Precise Plan	Terminal Boulevard	Casey Avenue	Class III	0.09
Casey Avenue	North Bayshore Precise Plan	San Antonio Road	Broderick Way	Class III	0.19
Charleston Road	North Bayshore Precise Plan	San Antonio Road	Shorebird Way	Class I or IV	2.54
Coast Avenue	North Bayshore Precise Plan	Marine Way	N/A	Class II	0.11
Huff Avenue	North Bayshore Precise Plan	Charleston Road	Alta Avenue	Class III	0.40
Inigo Way	North Bayshore Precise Plan	Pear Avenue	La Avenida Street	Class III	0.14
Joaquin Road	North Bayshore Precise Plan	Amphitheatre Parkway	Pear Avenue	Class II	0.53
La Avenida Street	North Bayshore Precise Plan	Shoreline Boulevard	Stevens Creek Trail	Class II	0.52
Landings Drive Loop	North Bayshore Precise Plan	Charleston Road	Charleston Road	Class II	0.48

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Location	Plan or Study	Start	End	Proposed Improvement	Mileage
Macon Avenue	North Bayshore Precise Plan	La Avenida Street	US Route 101	Class III	0.14
Marine Way	North Bayshore Precise Plan	Casey Avenue	Garcia Avenue	Class III	0.31
Pear Avenue	North Bayshore Precise Plan	North Shoreline Boulevard	Armand Avenue	Class III	0.31
Plymouth Street/Space Park Way	North Bayshore Precise Plan	Landings Drive	Armand Avenue	Class II	0.99
Shoreline Boulevard	North Bayshore Precise Plan	Shorebird Way	San Leandro Avenue	Class I or IV	0.66
Shoreline Boulevard/Shorebird Way	North Bayshore Precise Plan	North Road	Shorebird Way/Charleston	Class I or IV	1.14
Stierlin Court/Crittenden Lane Loop	North Bayshore Precise Plan	North Shoreline Boulevard	North Shoreline Boulevard	Class II	0.86
Caltrain ROW	Parks and Open Space Plan	Palo Alto border	Sunnyvale border	Class I	3.95
Permanente Creek Trail	Parks and Open Space Plan	Rock Street	Los Altos border	Class I	2.64
California Street	San Antonio Precise Plan	San Antonio Road	Ortega Avenue	Class II	0.52
Fayette Drive	San Antonio Precise Plan	Miller Avenue	Pacchetti Way	Class III	0.49
Latham Street	San Antonio Precise Plan	Showers Drive	Baywood Court	Class III	0.28
Miller Avenue	San Antonio Precise Plan	Del Medio Avenue	San Antonio Road	Class III	0.18
New Street	San Antonio Precise Plan	El Camino Real	Showers Drive	Class III	0.34

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Location	Plan or Study	Start	End	Proposed Improvement	Mileage
New Street	San Antonio Precise Plan	Fayette Drive	Ortega Avenue	Class I	0.53
Ortega Avenue	San Antonio Precise Plan	California Street	Latham Street	Class III	0.17
Pacchetti Drive	San Antonio Precise Plan	Showers Drive	San Antonio Shopping Center	Class II	0.34
San Antonio Circle	San Antonio Precise Plan	San Antonio Road	Showers Drive	Class III	0.23
Showers Drive	San Antonio Precise Plan	Latham Street	California Street	Class II	0.85
San Antonio Road	405 San Antonio Road, Phase II Project/San Antonio Precise Plan	El Camino Real	California Street	Class II	To be determined
Shoreline Boulevard	Shoreline Boulevard Transportation Corridor Study[1]	Stierlin Road	Terra Bella Avenue	Class IV	To be determined
Stierlin Road	Shoreline Boulevard Transportation Corridor Study	Central Expressway	Shoreline Boulevard	Class II	To be determined
Shoreline Boulevard	Shoreline Boulevard Transportation Corridor Study	To be determined	To be determined	Class II	To be determined
Shoreline Boulevard	Shoreline Boulevard Transportation Corridor Study	Stierlin Road	Plymouth Street	Class IV	To be determined
Shoreline Boulevard/Middlefield Road	Shoreline Boulevard Transportation Corridor Study	N/A	N/A	Protected Intersection Improvements	N/A
Shoreline Boulevard/Stierlin Road/Montecito Avenue	Shoreline Boulevard Transportation Corridor Study	N/A	N/A	Protected Intersection Improvements	N/A
Shoreline Boulevard/Terra Bella Avenue	Shoreline Boulevard Transportation Corridor Study	N/A	N/A	Protected Intersection Improvements	N/A

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Location	Plan or Study	Start	End	Proposed Improvement	Mileage
Shoreline Boulevard	Shoreline Boulevard Transportation Corridor Study	South of US Route 101	North of US Route 101	Bicycle/Pedestrian Bridge	To be determined
Shoreline Boulevard	Shoreline Boulevard Transportation Corridor Study	Stierlin Road	Terra Bella Avenue	Class IV	To be determined
Shoreline Boulevard	Shoreline Boulevard Transportation Corridor Study	La Avenida Street	Space Park Way	Class IV	To be determined
Middlefield Road/Shoreline Boulevard	Shoreline Boulevard Transportation Corridor Study	N/A	N/A	Class II Enhancements on Middlefield Road	N/A
Shoreline Boulevard/Stierlin Road	Shoreline Boulevard Transportation Corridor Study	N/A	N/A	Slip Ramp	To be determined
Stierlin Road	Shoreline Boulevard Transportation Corridor Study	Moffett Boulevard	Montecito Avenue	Class II	To be determined
Castro Street/Moffett Boulevard/Central Expressway Intersection	Shoreline Boulevard Transportation Corridor Study	N/A	N/A	Intersection Improvements	N/A

1 Shoreline Boulevard Transportation Corridor Study proposed improvements are conceptual only. Specific mileage and other design details to be determined.

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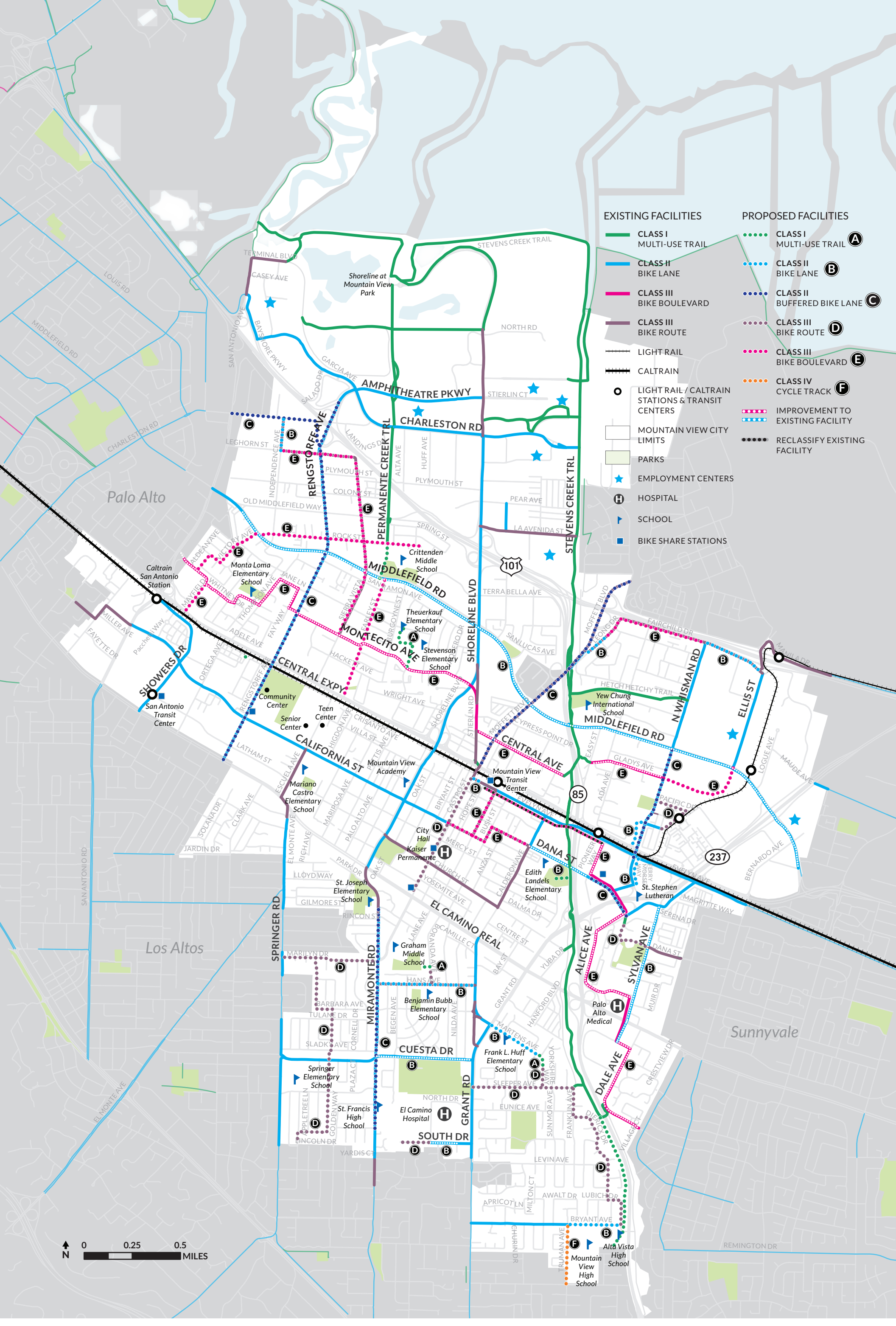
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CLASS II BIKE LANE
CLASS III BIKE BOULEVARD
CLASS III BIKE ROUTE
LIGHT RAIL
CALTRAIN
LIGHT RAIL / CALTRAIN STATIONS & TRANSIT CENTERS
MOUNTAIN VIEW CITY LIMITS
PARKS
EMPLOYMENT CENTERS
HOSPITAL
SCHOOL
BIKE SHARE STATIONS
PROPOSED FACILITIES
CLASS I MULTI-USE TRAIL A
CLASS II BIKE LANE B
CLASS II BUFFERED BIKE LANE C
CLASS III BIKE ROUTE D
CLASS III BIKE BOULEVARD E
CLASS IV CYCLE TRACK F
IMPROVEMENT TO EXISTING FACILITY
RECLASSIFY EXISTING FACILITY
Palo Alto
Los Altos
Sunnyvale
Shoreline at Mountain View Park
STEVENS CREEK TRAIL
AMPHITHEATRE PKWY
CHARLESTON RD
RENGSTORFF AVE
PERMANENTE CREEK TRL
STEVENS CREEK TRL
MIDDLEFIELD RD
MONTECITO AVE
SHORELINE BLVD
CENTRAL EXPY
SHOWERS DR
CALIFORNIA ST
CENTRAL AVE
N WHISMAN RD
ELLIS ST
DANA ST
EL CAMINO REAL
SPRINGER RD
MIRAMONTE RD
CUESTA DR
GRANT RD
SOUTH DR
ALICE AVE
SYLVAN AVE
DALE AVE
Caltrain San Antonio Station
San Antonio Transit Center
Monta Loma Elementary School
Crittenden Middle School
Theuerkauf Elementary School
Stevenson Elementary School
Community Center
Senior Center
Teen Center
Mountain View Academy
Mariano Castro Elementary School
Mountain View Transit Center
City Hall
Kaiser Permanente
St. Joseph Elementary School
Edith Landels Elementary School
St. Stephen Lutheran
Yew Chung International School
Graham Middle School
Benjamin Bubb Elementary School
Palo Alto Medical
Frank L. Huff Elementary School
Springer Elementary School
St. Francis High School
El Camino Hospital
Alta Vista High School
Mountain View High School
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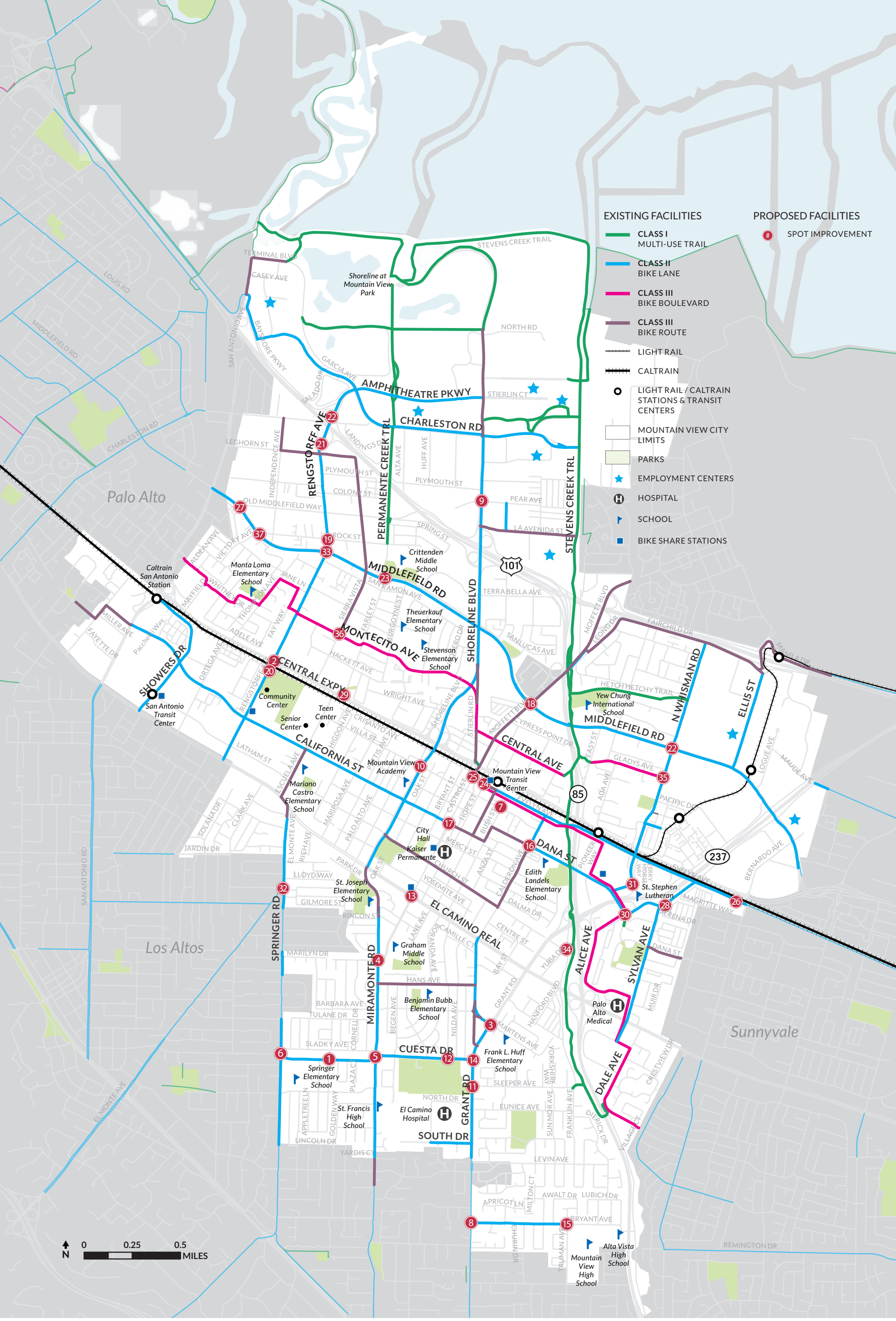

MOUNTAIN VIEW BICYCLE TRANSPORTATION PLAN UPDATE
Draft Spot Improvement Recommendations
January 28, 2015

DRAFT

MOUNTAIN VIEW BICYCLE TRANSPORTATION PLAN UPDATE
Draft Other City Bikeway Improvements Proposed
January 28, 2015

DRAFT

MOUNTAIN VIEW BICYCLE TRANSPORTATION PLAN UPDATE
Composite Map: Draft Network and Spot Improvement Recommendations + City Plans
January 28, 2015

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BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) WORK PLAN

Fiscal Year 2014-15

UPDATED NOVEMBER 2014

Title and Description	Key Milestones	Date (per milestone)	Current Status Notes
Fiscal Year 2014-15 Work Items			
1. Provide input/direction during Bicycle Transportation Plan update process.	Needs assessment.	September 2014	Complete.
	Draft Prioritization Criteria	November 2014	Complete.
	Draft strategies and recommendations.	January 2015	
	Draft plan.	June 2015	
2. Provide input on potential pedestrian improvements along Middlefield Road between the RREEF development at 700 East Middlefield Road and the Middlefield Light Rail Station (carryover from FY 2013-14 Work Plan).	CDD request for B/PAC review/input.	TBD	

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) WORK PLAN

Fiscal Year 2014-15

UPDATED NOVEMBER 2014

Title and Description	Key Milestones	Date (per milestone)	Current Status Notes
3. Promote and participate in events to encourage bicycling and walking.	Farmers' Market.	Ongoing, based on B/PAC members' availability.	
	Walk to School Day(s).	October 8, 2014	Complete.
	Multi-Library Bike Tour.	October 18, 2014	Complete.
	Arbor Day.	March 14, 2015	
	Annual Spring Parade.	April 2015	
	Bike to School Day(s).	May 2015	
	VERBS Program Events.	Ongoing, based on B/PAC members' availability.	

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) WORK PLAN

Fiscal Year 2014-15

UPDATED NOVEMBER 2014

Title and Description	Key Milestones	Date (per milestone)	Current Status Notes
3. Promote and participate in events to encourage bicycling and walking (continued).	Bike to Work Day. Thursday Night Live. CNC Meetings • Monta Loma/Farley/ Rock Street Neighbor-hood. • Other neighborhoods.	May 14, 2015 Summer 2015, based on B/PAC members' availability. October 2, 2014 TBD	Complete.
4. Annual review of Pedestrian Master Plan (PMP) document.	B/PAC agenda item.	February 2015	

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) WORK PLAN

Fiscal Year 2014-15

UPDATED NOVEMBER 2014

Title and Description	Key Milestones	Date (per milestone)	Current Status Notes
5. Monitor PMP performance measures, trends, and targets to assess improvements in the City's pedestrian environment.	Update data on students walking to school.	4 times/ school year	B/PAC received August 2013 to July 2014 data on November 19, 2014 and is available on City website.
	Update data on students receiving pedestrian safety education.	4 times/ school year	B/PAC received August 2013 to July 2014 data on November 19, 2014 and is available on City website.
	Update data on pedestrian/ vehicle and pedestrian/ bicycle collisions.	Quarterly	B/PAC received January to September 2014 data on November 19, 2014 and is available on City website.
	Update pedestrian safety-related vehicle enforcement measure data.	Quarterly	Follow-up with Police Department to begin reporting.
6. Receive report and provide input regarding the Police Department's procedure for collecting and reporting data on bicycle and pedestrian-related collisions.	B/PAC agenda item.	February 2015	

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) WORK PLAN

Fiscal Year 2014-15

UPDATED NOVEMBER 2014

Title and Description	Key Milestones	Date (per milestone)	Current Status Notes
7. Receive report and provide input regarding the availability of bicycle facilities at City-sponsored events.	B/PAC agenda item.	November 2014	Complete.
Ongoing Work Items			
A. Review, prioritize, and recommend bicycle and pedestrian projects for annual TDA Article 3 funding application cycle.	VTA call for projects announcement.	February 2015	Initial B/PAC review of potential projects on November 19, 2014. B/PAC review of Middlefield/ Independence Intersection Improvement Project scheduled for spring 2015.
B. Provide input into the development and review of comprehensive bicycle/pedestrian facility plans and regulations (e.g., General Plan Circulation Chapter, Precise Plans, Zoning Ordinance bicycle parking requirements).	As required/requested.		

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) WORK PLAN

Fiscal Year 2014-15

UPDATED NOVEMBER 2014

Title and Description	Key Milestones	Date (per milestone)	Current Status Notes
C. Review City roadway system and bikeway/pedestrian facilities for bicycle and pedestrian suitability and make recommendations on improvements.	Ongoing.	Ongoing	*Ask MV* submitted for bike lane restriping at South Whisman Road/ Dana Street and bike network gap at El Monte Avenue/ Escuela Avenue.
D. Make recommendations on capital improvements to bicycle/pedestrian facilities.	Annual Capital Improvement Program (CIP) development and approval process.	Spring 2015	
E. Review private development project applications requiring General Plan, Precise Plan, and/or zoning amendments (Gatekeeper projects).	As directed by City Council.		

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) WORK PLAN

Fiscal Year 2014-15

UPDATED NOVEMBER 2014

Title and Description	Key Milestones	Date (per milestone)	Current Status Notes
F. Review public projects to ensure adequate consideration of the needs of bicyclists, pedestrians, and the disabled.	As identified by staff.		Castro Street Modification Project presented on September 17, 2014. Permanente Creek Trail Charleston Road Crossing presented on September 17, 2014. Proposed Green Bike Lane Pilot Project presented on October 29, 2014. Shoreline Corridor Study update provided on October 29, 2014. California Street/ Escuela Avenue Improvements Project presentation scheduled for February 25, 2015.

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) WORK PLAN

Fiscal Year 2014-15

UPDATED NOVEMBER 2014

Title and Description	Key Milestones	Date (per milestone)	Current Status Notes
G. Promote bicycle and pedestrian safety via the City website and programs (e.g., VERBS).	Ongoing.	Ongoing	
H. Coordinate with City departments and advisory bodies, other Santa Clara County jurisdictions, and transportation-related agencies (e.g., VTA, Caltrans) on pedestrian and bicycling matters.	City representative attend monthly VTA BPAC meeting. Pursue as opportunities are identified.	Ongoing Ongoing	