

**PREPARED BY:**  
Alta Planning + Design  
**PREPARED FOR:**  
County of Los Angeles Public Works



County of Los Angeles

# Bicycle Master Plan

*Final Plan - December 2011*





# County of Los Angeles Bicycle Master Plan

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# Executive Summary



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*Every time I see an adult on a bicycle, I no longer despair for the future of the human race.*

*- H. G. Wells*

The County of Los Angeles Bicycle Master Plan (Plan) proposes a vision for a diverse regional bicycle system of interconnected bicycle corridors, support facilities, and programs to make bicycling more practical and desirable to a broader range of people in the County. The Plan is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs throughout the unincorporated communities of the County of Los Angeles for 20 years (2012 to 2032). The implementation of this Plan will start upon adoption by the Board of Supervisors. The success of the Plan relies on the continued support from all County Departments, the Board of Supervisors, the bicycling public, and advocates throughout the County who recognize the benefits of cycling in their community. The implementation of the network and the programs and policies outlined in the Plan will not be possible without availability of significant and sustained funding levels from grants as well as dedicated funding sources available to the County.

The Plan is an update to the 1975 County Bikeway Plan. The Plan provides direction for improving mobility of bicyclists and encouraging more bicycle ridership within the County by expanding the existing bikeway network, connecting gaps, addressing constrained areas, providing for greater local and regional connectivity, and encouraging more residents to bicycle more often. This Plan is a sub-element of the Transportation Element of the Los Angeles County General Plan. The General Plan is the long-range policy document that guides growth and development in the unincorporated County. The County's General Plan<sup>1</sup> is currently being revised and updated. Once the County's General Plan Update is adopted, this Plan will become a component of the Mobility Element of the County's General Plan. This Plan addresses the guiding principles, goals and policies of the General Plan as it plans for a more bicycle-friendly county that reduces traffic congestion and its carbon footprint, and provides improved opportunities for bicycling and active transportation.

## Purpose of the Bicycle Master Plan

The Plan is an update to the 1975 County Bikeway Plan. The Plan provides direction for improving mobility of bicyclists and encouraging more bicycle ridership within the County by expanding the existing bikeway network, connecting gaps, addressing constrained areas, providing for greater local and regional connectivity, and encouraging more residents to bicycle more often.

The Plan complies with Streets and Highways Code Section 891.2, making the County eligible for Bicycle Transportation Account (BTA) funds. The BTA is an annual program that provides state funds for city and county projects that improve safety and convenience for bicycle commuters. **Appendix A** presents the County of Los Angeles Bicycle Master Plan BTA Checklist.

<sup>1</sup> A draft of the 2035 General Plan is available at: <http://planning.lacounty.gov/generalplan>.

## Public Participation

Community involvement was vital to the development of the Plan. The Plan team held three rounds of public workshops to present to the public the Plan's findings and recommendations and to receive public feedback. A total of 32 public workshops were conducted.

The Plan team performed extensive outreach, including:

- Electronic mail blasts to stakeholders, including all 88 cities in Los Angeles County.
- Posting notices on the project website.
- Producing a meeting flyer in English and Spanish.
- Creating and distributing a press release.
- Mailing comment cards to local bike shops, libraries, and parks and recreation facilities.
- Discussing the Plan at Town Council meetings in unincorporated areas and at meetings held by the County of Los Angeles Department of Regional Planning for community specific plans.
- Distributing postcards at “Bike ~~Foto~~ Work Week” events throughout the County sponsored by the Los Angeles County Metropolitan Transportation Authority (LACMTA).
- Posting public service announcements on County websites, Bus Shelters in unincorporated areas, and on buses and shuttles that operate within or near unincorporated areas.
- Retaining the Los Angeles County Bicycle Coalition (LACBC) to assist with the outreach and to encourage attendance at the workshops. LACBC issued a press release to news media, radio and television; they worked with various entities to coordinate the posting of workshop information on these entities' websites; and sent electronic mail blasts to their members/subscribers.

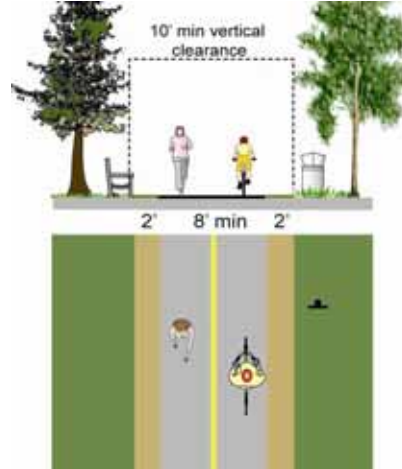
To improve connectivity between the Plan's recommendations and the existing and planned bikeways in other jurisdictions, the County kept the cities throughout Los Angeles County aware of the status of the Plan via electronic mail blasts. The cities were invited to review and comment on the Plan, as well as to attend the public workshops. Although not every city responded, representatives from numerous cities attended the public workshops and submitted comments on the Plan.

# Bikeway ~~Facilites~~Facilities Types

Bikeway Description	Example Graphic
---------------------	-----------------

**Class I – Bicycle Path**

Bike paths, also called shared-use paths or multi-use paths, are paved right-of-way for exclusive use by bicyclists, pedestrians, and other non-motorized modes of travel. They are physically separated from vehicular traffic and can be constructed in roadway right-of-way or exclusive right-of-way. Most of Los Angeles County bicycle paths are located along the creek and river channels, and along the beach. These facilities are often used for recreation but also can provide important transportation connections.



**Class II - Bicycle Lane**

Bike lanes are defined by pavement striping and signage used to allocate a portion of a roadway for exclusive bicycle travel. Bike lanes are one-way facilities on either side of a roadway. Bike lanes are located adjacent to a curb where no on-street parking exists. Where on-street parking is present, bike lanes are striped to the left side of the parking lane.

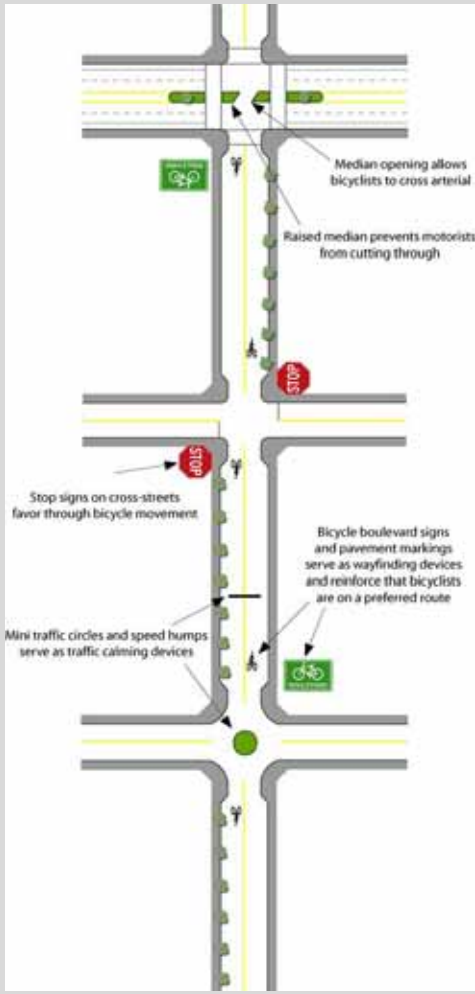


**Class III – Bicycle Route**

Bike routes provide shared use with motor vehicle traffic within the same travel lane. Designated by signs, bike routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand.



### Bikeway Facilities Types (continued)

Bikeway Description	Example Graphic
<p><b>Bicycle Boulevards</b></p> <p>Bicycle boulevards are local roads or residential streets that have been enhanced with signage, traffic calming, and other treatments to prioritize bicycle travel. Bicycle boulevards are typically found on low-traffic / low-volume streets that can accommodate bicyclists and motorists in the same travel lanes, without specific bicycle lane delineation. The treatments applied to create a bicycle boulevard heighten motorists' awareness of bicyclists and slow vehicle traffic, making the boulevard more conducive to safe bicycle (and pedestrian) activity. Bicycle boulevard treatments <u>can</u> include signage, pavement markings, intersection treatments, traffic calming measures and can include traffic diversions. <u>The specific treatments employed for a bicycle boulevard will be determined during project implementation based on input received from the public.</u> <b>Bicycle boulevards are not defined as a specific bikeway type by Caltrans; however, the basic design features of bicycle boulevards comply with Caltrans standards.</b></p>	 <p>The diagram illustrates a bicycle boulevard intersection. Key features include:         <ul style="list-style-type: none"> <li><b>Median opening:</b> A gap in the raised median allows bicyclists to cross the arterial street.</li> <li><b>Raised median:</b> Prevents motorists from cutting through the boulevard.</li> <li><b>Stop signs:</b> Located on cross-streets to favor through bicycle movement.</li> <li><b>Traffic calming:</b> Mini traffic circles and speed humps are used to slow down motorist traffic.</li> <li><b>Wayfinding:</b> Bicycle boulevard signs and pavement markings reinforce that bicyclists are on a preferred route.</li> </ul> </p>

In addition to these standard designs, the Plan includes innovative bicycle treatments such as colored bicycle lanes, raised bicycle lanes, buffered bicycle lanes, cycletracks, and bicycle boxes. While these treatments do not have approved design standards at this time, the County will incorporate them into the Plan's toolbox of treatments as their uniform designs and standards are approved by the State of California Department of Transportation (Caltrans). Caltrans and the Federal Highway Administration allow for the experimental implementation of such treatments. The County promotes the use of these innovative treatments and will apply for and implement experimental projects utilizing them where cost effective and where such projects enhance the safety of bicycles, pedestrians, and motorists.

## Summary of Recommendations

The Plan proposes to build on the existing 144 miles of bikeways throughout the County, and install approximately ~~816~~832 miles of new bikeways in the next 20 years. Along with the proposed bikeway network, the Plan outlines a range of recommendations to facilitate accomplishing the regional goals of increasing the number of people who bike and the frequency of bicycle trips for all purposes. This will be accomplished by encouraging the development of Complete Streets,<sup>2</sup> improving safety for bicyclists, and increasing public awareness and support for bicycling in the County of Los Angeles. The recommendations include bicycle infrastructure improvements, bicycle-related programs, implementation strategies, and policy and design guidelines for the unincorporated communities of the County of Los Angeles and where the County owns property or has jurisdictional control, such as along flood control facilities.

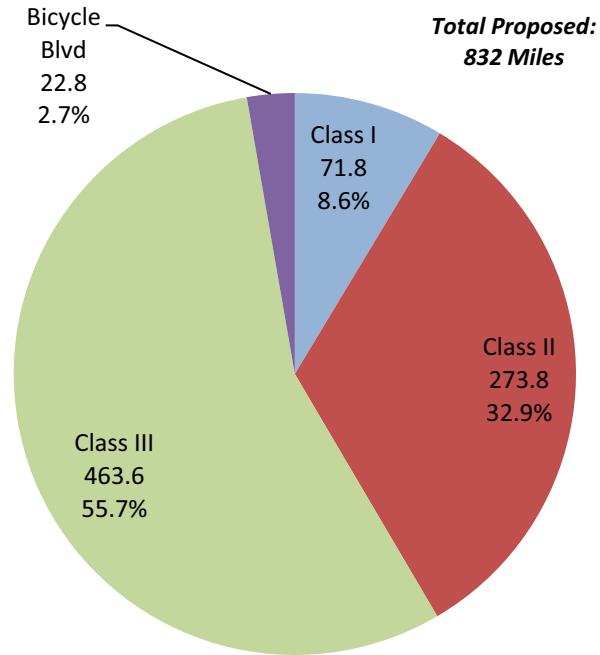
Table i-1 summarizes the mileage of existing bikeway facilities and the mileage and cost for bikeway facilities proposed by this Bicycle Master Plan within each of the ten Planning Areas.<sup>3</sup> Figures i-1 and i-2 illustrate the percentage of each type of bicycle facility recommended and its respective cost. The boundaries for the planning areas are illustrated in Figure i-3. Figures i-4 and i-5 depict the proposed bicycle network for the eastern and western portions of the County, respectively.

**Table i-1: Summary of Existing and Recommended Bikeway Facilities**

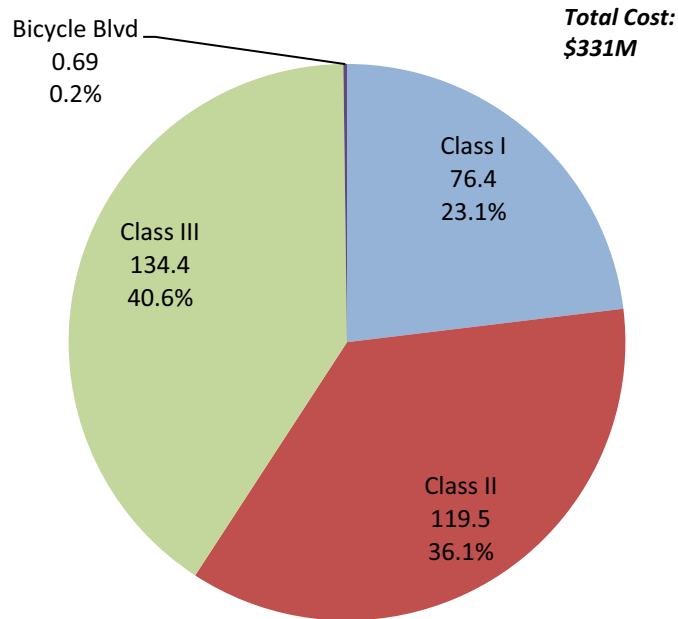
Planning Area	Existing Facilities			Proposed Facilities			
	Class I	Class II	Class III	Class I	Class II	Class III	Bicycle Blvd
Antelope Valley	3.2	3.8	0.2	---	<u>89.495.9</u>	<u>138.2134.8</u>	---
East San Gabriel Valley	7.5	7.6	9.4	<u>25.42</u>	<u>30.831.0</u>	<u>27.530.6</u>	<u>3.04.3</u>
Gateway	45.4	1.0	9.7	<u>5.87</u>	<u>23.31</u>	<u>10.312.0</u>	---
Metro	---	2.3	---	<u>0.67</u>	<u>48.21</u>	<u>26.89</u>	<u>12.24</u>
San Fernando Valley	---	1.5	---	2.2	<u>0.91.7</u>	7.5	--
Santa Clarita Valley	---	2.4	0.9	16.5	33.4	<u>108.35</u>	--
Santa Monica Mountains	---	0.5	---	---	1.8	<u>9293.98</u>	--
South Bay	9.4	1.1	<u>--0.0</u>	<u>9.02</u>	<u>14.28</u>	<u>9.36</u>	0.9
West San Gabriel	23.3	---	2.6	<u>8.19.1</u>	<u>16.817.1</u>	<u>32.034.3</u>	5.2
Westside	11.5	---	0.7	3.2	<u>7.16.9</u>	<u>5.76</u>	--
<b>Total Mileage</b>	<b><u>110.100.3</u></b>	<b>20.2</b>	<b>23.5</b>	<b><u>70.671.8</u></b>	<b><u>265.9273.8</u></b>	<b><u>458.6463.6</u></b>	<b><u>21.322.8</u></b>
<b>Total Cost</b>	---	---	---	<b><u>\$7576.49M</u></b>	<b><u>\$140119.7M5M</u></b>	<b><u>\$110134.4M</u></b>	<b><u>\$0.63M69M</u></b>

<sup>2</sup> Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to safely move along and across a complete street. – [www.completestreets.org](http://www.completestreets.org)

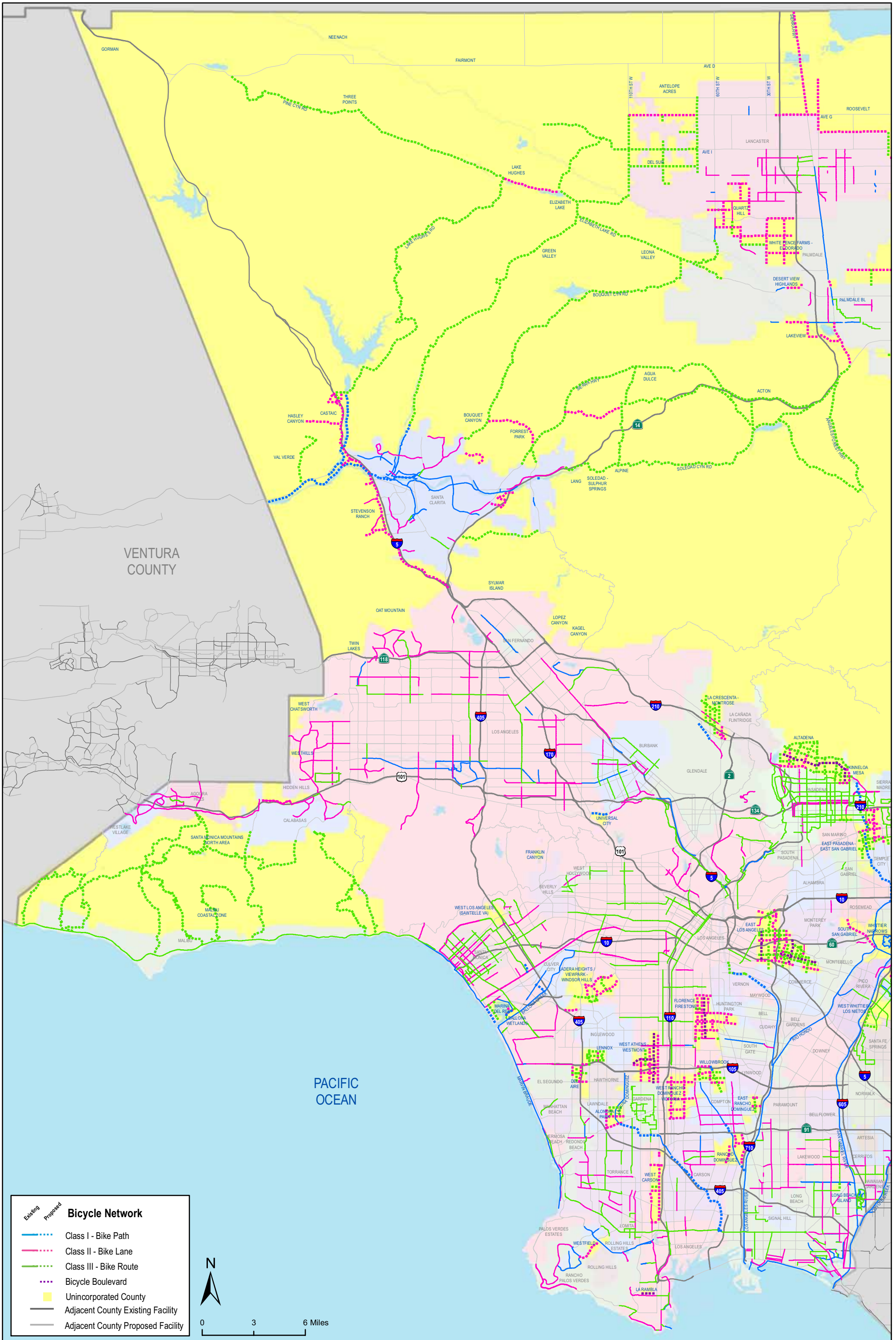
<sup>3</sup> The Plan is organized by the eleven Planning Area boundaries used for the County General Plan, with the exception of the Coastal Islands planning area, which contains no County-maintained roadways.



**Figure i-1: Total Miles of Proposed Bikeway Facilities**



**Figure i-2: Estimated Cost of Proposed Bikeway Facilities**



**Figure i-3: Western Los Angeles County Proposed Bicycle Network**

**Los Angeles County Bicycle Master Plan**

Source: Los Angeles Metro (2006; 2010); Alta Planning + Design (2010)  
Date: 1/30/2011



## Plan at a Glance

The Plan includes five chapters and eleven appendices. A supplemental atlas of maps of the existing and proposed bikeway network was also made available on the Plan website for ease of reference. The following is a brief orientation to the chapters and the appendices in the Plan.

### Chapter 1: Introduction

This chapter introduces the purpose of creating a Bicycle Master Plan for the County of Los Angeles, and how the community has been involved in the planning process. It also presents the benefits of bicycling, describing how a bicycle-friendly County will contribute to resolving general complex issues that affect the quality of life of its residents.

### Chapter 2: Goals, Policies, and Implementation Actions

This chapter includes the Goals, Policies, and Implementation Actions necessary to implement the Plan. The overarching goal of the Plan is to increase bicycling throughout the County of Los Angeles through the development and implementation of bicycle-friendly policies, programs, and infrastructure. To achieve this, the Plan identified the following goals:

- Goal 1 **Bikeway System:** Expanded, improved, and interconnected system of County bikeways and bikeway support facilities.
- Goal 2 **Safety:** Increased safety of roadways for all users.
- Goal 3 **Education:** Develop education programs that promote safe bicycling.
- Goal 4 **Encouragement Programs:** Encourage County residents to walk or ride a bike for transportation and recreation.
- Goal 5 **Community Support:** Community supported bicycle network.
- Goal 6 **Funding:** Funded Bikeway Plan.



Investing in bicycle-friendly communities can have a profound influence on the quality of life of County Residents.

### Chapter 3: Existing Conditions and Proposed Network

This chapter discusses the existing conditions and proposed bikeway network for the ten Planning Areas in the County.

#### Existing Conditions

Representing about 11% of the County's total population, the unincorporated areas include more than 1 million residents living in approximately 300,000 households.

The unincorporated areas of the County of Los Angeles comprise 2,656.6 square miles of Los Angeles County's 4,083.2 square miles, equivalent to approximately 65% of the County's total land area. These unincorporated areas are climatically and ecologically diverse. The majority of unincorporated County land is located in the northern part of the county and includes expansive open space. The unincorporated areas of the County consist of 124 separate, non-contiguous land areas. These areas in the northern part of the County are covered by large amounts of sparsely populated land and include the Angeles and Los Padres National Forests, and the Mojave Desert. The unincorporated areas of the southern portion of the County consist of 58 communities, located among the other urban incorporated cities in the county, and are often referred to as the County's unincorporated urban islands. The County's southwestern boundary consists of 70 miles of Pacific Ocean coastline and encompasses two islands, Santa Catalina and San Clemente.

### **Proposed Network**

The Plan recommends approximately ~~816-832~~ 816-832 miles of bikeway facilities at a proposed cost of ~~\$327331.7-0~~ \$327331.7-0 million to construct. The network selection process included extensive public outreach and on-going consultation with County staff through monthly meetings with the Technical Advisory Committee, comprised of the County of Los Angeles Departments of Beaches and Harbors, Parks and Recreation, Public Health, Public Works, and Regional Planning. The Plan team received monthly consultation with the Bicycle Advisory Committee (BAC), comprised of two representatives from each Supervisorial District, and one representative for Caltrans and LACMTA, respectively.

## **Chapter 4: Education, Enforcement, Encouragement and Evaluation Programs**

This chapter describes bicycle-related programs that are essential facets of the overall bicycle system envisioned for the County of Los Angeles. These include education, encouragement, enforcement and evaluation programs.

### **Education**

The Plan proposes bicycle education programs that target both youth and adults such as Community Bicycle Education Courses, Youth Bicycle Safety Education, Bicycle Rodeos, and Public Awareness Campaigns for motorists, bicyclists and others.

### **Enforcement**

The Plan recognizes that traffic enforcement is a necessity to improve conditions for all roadway users. The recommended enforcement programs include Bicycle Patrol Unit and Bicycle Light Enforcement.

### **Encouragement**

The Plan recognizes that encouragement programs may likely play the biggest part in improving Bicycle Ridership in the County. The Plan recommends a variety of encouragement programs for youth and adults, such as Suggested Routes to School, Family Biking Programs, Bicycling Maps, Valet Bike Parking at Events, Bike to Work Week/Month, Launch Party for New Bikeways, Bike and Hike to Park programs, [Bicycle Sharing programs](#) and Local partnerships for more bicycle parking.

### **Evaluation**

The plan recognizes that in order to track its progress it is critical that the County monitors and evaluates ~~changings~~ changes in bicycling patterns. This Plan recommends convening a Community Stakeholder Group, to establish a bicycle biennial count program, and to provide annual progress reports on the progress of implementing this Bicycle Master Plan.

## Chapter 5: Funding and Implementation

### Funding

An overview of potential funding sources for proposed projects and programs, and planning level cost estimates are presented in Chapter 5. The implementation of the network and the programs and policies outlined in the Plan will not be possible without availability of significant and sustained funding levels from grants as well as dedicated funding sources available to the County. The County is committed to a balanced approach in assigning its available funding to streets and roads, bikeways, and pedestrian projects commensurate with their needs.

### Implementation

The Plan provides a long-term vision for the development of a region-wide bicycle network that can be used by all residents for all types of trips. Implementation of the Plan will take place incrementally over many years; and while the Plan is intended to guide bicycling in the County for the next 20 years. The County will review and update the Plan every five years (See Policy 1.5, Chapter 2). County staff will review the list of projects on a regular basis, add new projects, remove completed projects, and revise priorities as conditions changes. These changes will be reflected in future updates to the Plan.

The County will evaluate the effectiveness of the Bike Plan Implementation every two years (See IA 1.5.1, Chapter 2). Suggested measurements to measure the County's progress toward implementing the Plan and its effectiveness are provided in Table 5-1 of Chapter 5. These suggested measurements include measurement of bicycle mode share; public attitudes about biking; number of miles of bikeways; proportion of arterial streets with bike lanes; independent recognition of non-motorized transportation planning efforts; as well as a measured reduction in collisions involving bicyclists.

## Appendices

### Appendix A: Bicycle Transportation Account Checklist

Appendix A presents the County of Los Angeles Bicycle Master Plan BTA Checklist. The Plan complies with Streets and Highways Code Section 891.2, making the County eligible for Bicycle Transportation Account (BTA) funds.

### Appendix B: Ridership and Air Quality Benefits

Appendix B presents the benefits of bicycling in relation to environmental/climate change, reduction in obesity and other public health issues, as well as improvements in local and regional economies, and quality of life and safety in the community.

## Appendix C: Relationship to Existing Plans and Policies

Appendix C lists the existing plans and policies of the State of California, Los Angeles County and other local agencies that were reviewed during development of the Plan. The Plan was developed to be consistent with these policies and plans to the greatest extent possible.

## Appendix D: Existing Land Uses

Appendix D includes maps depicting the existing land use, including locations of residential neighborhoods, schools, shopping centers public buildings, and major employment centers for all ten Planning Areas.

## Appendix E: End of Trip Facilities

End of trip facilities, such as short term and long term bicycle parking, showers and changing facilities for employees are essential components of a bicycle network. Appendix E provides recommendations for bicycle parking at key locations in unincorporated communities within the unincorporated County. In addition, as per Policy 1.6, in Chapter 2, the County is committed to establish a bicycle parking policy by 2013.

## Appendix F: Design Guidelines

Bicyclists have legal access to all county streets. While this Plan identifies a specific subset of streets to be designated as bikeways, many bicyclists will need to use other streets to reach their destinations. Therefore, it is important that all roadways be designed to accommodate bicyclists.

The County will continue to implement on- and off-street projects to encourage walking and bicycling, to improve safety and accessibility, and to enhance the quality of the walkway and bikeway networks so that these activities become integral parts of daily life. Appendix F provides a range of design options for bicycle treatments and key principles to guide the development of future County bikeway facilities.

The guidelines provide a toolbox of ideas that can be implemented in the County, but do not reflect treatments that will be used for any specific project. California State law requires that the State adopt uniform standards, and that local agencies conform to those standards. ~~For this reason, only~~ The guidelines include those standards included in currently prescribed by the Caltrans Highway Design Manual and/or the California Manual of Uniform Traffic Control Devices are described in the Plan. In addition to these standard designs, the Plan includes innovative bicycle treatments such as colored bicycle lanes, raised bicycle lanes, buffered bicycle lanes, cycletracks, and bicycle boxes. While these treatments do not have approved design standards at this time, the County will incorporate them into the Plan's toolbox of treatments as their uniform designs and standards are approved by the State of California Department of Transportation (Caltrans).

## Appendix G: Street Plan Analysis

Appendix G describes Alta Planning + Design's 'Street Plan' model used for determining the suitability of all roadways studied for the proposed bikeway network. The Street Plan model is a method to determine how an existing roadway cross section can be modified to include bike lanes. Assuming acceptable minimum widths for each roadway element, the model analyzes a number of factors to determine strategies to retrofit bike lanes on each surveyed roadway segment. Options for retrofitting bike lanes given the physical curb-to-curb roadway constraints are also described in the appendix.

## **Appendix H: Engineering Unit Cost Estimates**

Appendix H outlines the estimated unit costs used for various recommendations included in the Plan, which were used to determine the estimated total cost of \$~~327.5~~31.0 million to implement the bicycle network proposed in the Plan.

## **Appendix I: Prioritization and Phasing Plan**

Appendix I describes the three phases for implementing the proposed bikeway network, and the prioritization strategy used for determining the phase for each project.

### **Prioritization Strategy**

Sixteen different criteria were used to assign prioritization scoring. The criteria fell under two main category themes: Utility and Implementation. The first category, Utility Criteria, considered a project's usefulness toward enhancing the current bicycle network and providing service to key land uses. The second category, Implementation Criteria, considered prioritizing those projects with fewer implementation obstacles.

### **Phasing Plan**

The Plan will be implemented in the following three phases:

- Phase I: Projects listed are anticipated to be implemented within the first five-year period following adoption of the Plan (2012-2017).
- Phase II: Projects listed are anticipated to be implemented within the ten-year period following Phase I (2017-2027).
- Phase III: Projects listed are anticipated to be implemented within the final five-year period of the term of the Plan (2027-2032).

The phasing plan for the non-infrastructure programs are briefly discussed in Chapter 5. Phasing of the bicycle network primarily takes into consideration the overall prioritization score for each project and the anticipated available funding. However, projects in which funding has already been allocated, or that are expected to be implemented in conjunction with County road reconstruction and/or rehabilitation projects may be shown in an earlier phase, regardless of their prioritization score

## **Appendix J: Facilities Removed**

Those segments of the proposed network that were removed from the Plan, either due to their feasibility or because they are outside of the County's jurisdiction, are documented in Appendix J.

## **Appendix K: Acronyms**

Appendix K provides a list of acronyms used in the Plan and their corresponding meaning.

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# 1. Introduction



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The County of Los Angeles Bicycle Master Plan (Plan) proposes a vision for a diverse regional bicycle system of interconnected bicycle corridors, support facilities, and programs to make bicycling more practical and desirable to a broader range of people in the County. The Plan is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs throughout the unincorporated communities of the County of Los Angeles for 20 years (2012 to 2032). The implementation of this Plan will start upon adoption by the Board of Supervisors. The success of the Plan relies on the continued support from all County Departments, the Board of Supervisors, the bicycling public, and advocates throughout the County who recognize the benefits of cycling in their community. The implementation of the network and the programs and policies outlined in the Plan will not be possible without availability of significant and sustained funding levels from grants as well as dedicated funding sources available to the County.

The Plan is an update to the 1975 County Bikeway Plan. The Plan provides direction for improving mobility of bicyclists and encouraging more bicycle ridership within the County by expanding the existing bikeway network, connecting gaps, addressing constrained areas, providing for greater local and regional connectivity, and encouraging more residents to bicycle more often. This Plan is a sub-element of the Transportation Element of the Los Angeles County General Plan. The General Plan is the long-range policy document that guides growth and development in the unincorporated County. The County's General Plan<sup>4</sup> is currently being revised and updated. Once the County's General Plan Update is adopted, this Plan will become a component of the Mobility Element of the County's General Plan. This Plan addresses the guiding principles, goals and policies of the General Plan as it plans for a more bicycle-friendly county that reduces traffic congestion and carbon footprint, and provides improved opportunities for bicycling and active transportation.

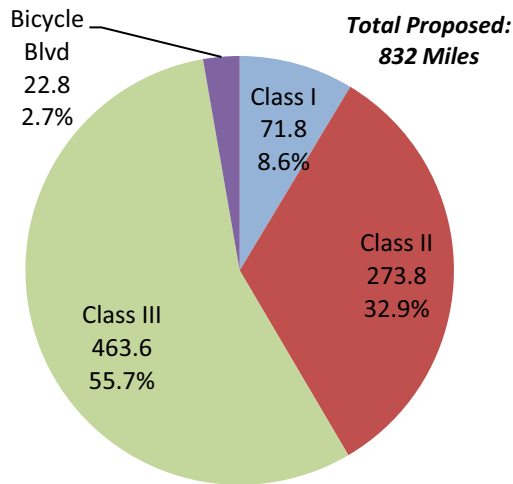
The Plan proposes to build off the existing 144 miles of bikeways throughout the County, and install approximately ~~816-832~~ miles of new bikeways in the next 20 years. The ~~816-832~~ miles of proposed bikeways consist of approximately ~~71-72~~ miles Class I bike paths, approximately ~~265-274~~ miles Class II bike lanes, and approximately ~~459-463~~ miles of Class III bike routes, as defined/described in Chapter 1000 of the Caltrans Highway Design Manual. The Plan also proposes a network of ~~21-23~~ miles of bicycle boulevards, which are facilities that prioritize bicycle travel on low-traffic, low-volume streets and are intended to provide greater safety and comfort to bicyclists. An introduction to the different types of facilities is provided in **Chapter 3: Table 3-1**, which are discussed in detail in the Design Guidelines presented in **Appendix F. Figure 1-5 and 1-2** illustrate the portions of the total miles and estimated cost of the recommended bikeway network by facility type.

Along with the proposed bikeway network, the Plan outlines a range of recommendations to facilitate accomplishing the regional goals of increasing the number of people who bike and the frequency of bicycle trips for all purposes. This will be accomplished by encouraging the development of Complete Streets<sup>5</sup>, improving safety for bicyclists, and increasing public awareness and support for bicycling in the County of Los Angeles. The recommendations include bicycle infrastructure improvements, bicycle-related programs, implementation strategies, and policy and design guidelines for the unincorporated communities of the County of Los Angeles and where the County owns property or has jurisdictional control, such as along flood control facilities.

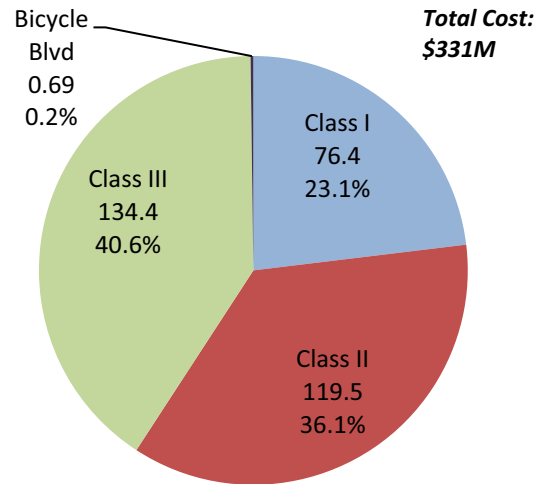
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<sup>4</sup> A draft of the 2035 General Plan is available at: <http://planning.lacounty.gov/generalplan>.

<sup>5</sup> Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to safely move along and across a complete street. – [www.completestreets.org](http://www.completestreets.org)



**Figure 1-1: Total Miles of Proposed Bikeway Facilities**



**Figure 1-2: Estimated Cost of Proposed Bikeway Facilities**

## 1.1 Setting

The unincorporated areas of the County of Los Angeles comprise 2,656.6 square miles of Los Angeles County’s 4,083.2 square miles, equivalent to approximately 65% of the County’s total land area. These unincorporated areas are climatically and ecologically diverse. The majority of unincorporated County land is located in the northern part of the county and includes expansive open space. The unincorporated areas of the County consist of 124 separate, non-contiguous land areas. These areas in the northern part of the County are covered by large amounts of sparsely populated land and include the Angeles and Los Padres National Forests, and the Mojave Desert. The unincorporated areas of the southern portion of the County consists of 58 communities, located among the other urban incorporated cities in the county, which are often referred to as the County’s unincorporated urban islands. The County’s southwestern boundary consists of 70 miles of Pacific Ocean coastline and encompasses two islands, Santa Catalina and San Clemente.

Representing about 11% of the County’s total population, the unincorporated area population is projected to be approximately 1,188,000 people in 2010<sup>6</sup>.

Figure 1-5 displays Los Angeles County’s location within the region as well as Planning Area boundaries.

<sup>6</sup> 2008 SCAG Regional Plan, Table 2.5: Los Angeles County Population Projections



**Figure 1-3: Los Angeles County**

Los Angeles County Bicycle Master Plan

Source: Los Angeles County (2011)  
Date: 10/05/11

## 1.2 Purpose of the Bicycle Master Plan

The Plan is an update to the 1975 County Bikeway Plan. The Plan provides direction for improving mobility of bicyclists and encouraging more bicycle ridership within the County by expanding the existing bikeway network, connecting gaps, addressing constrained areas, providing for greater local and regional connectivity, and encouraging more residents to bicycle more often.

The Plan complies with Streets and Highways Code Section 891.2, making the County eligible for Bicycle Transportation Account (BTA) funds. The BTA is an annual program that provides state funds for city and county projects that improve safety and convenience for bicycle commuters. **Appendix A** presents the County of Los Angeles Bicycle Master Plan BTA Checklist.

## 1.3 Benefits of Bicycling

A more bicycle-friendly County will contribute to resolving several complex and interrelated issues, including traffic congestion, air quality, climate change, public health, and livability. This Plan can affect all of these issues by guiding unincorporated areas toward bicycle friendly development, which collectively can have a profound effect on the existing and future livability in the County of Los Angeles.

### 1.3.1 Environmental/Climate Change Benefits

Replacing vehicular trips with bicycle trips has a measurable impact on reducing human-generated greenhouse gases (GHGs) in the atmosphere that contribute to climate change. Fewer vehicle trips and vehicle miles traveled (VMT) translate into fewer mobile source pollutants released into the air, such as carbon dioxide, nitrogen oxides, and hydrocarbons. Providing transportation options that reduce VMT is an important component of decreasing GHG emissions and improving air quality. **Appendix B** presents a quantitative estimate of the air quality benefits associated with current bicycling rates, as well as future activity levels in each unincorporated planning area.

### 1.3.2 Public Health Benefits

Public health professionals have become increasingly aware that the impacts of automobiles on public health extend far beyond asthma and other respiratory conditions caused by air pollution. There is also a much deeper understanding of the connection between the lack of physical activity resulting from auto-oriented community designs and various health-related problems, such as obesity and other chronic diseases. Although diet and genetic predisposition contribute to these conditions, physical inactivity is now widely understood to play a significant role in the most common chronic diseases in the United States, including heart disease, stroke, and diabetes. Creating bicycle-friendly communities is one of several effective ways to encourage active lifestyles, ideally resulting in a higher proportion of the County's residents achieving recommended activity levels.

### 1.3.3 Economic Benefits

Bicycling is economically advantageous to individuals and communities. According to some statistics, the annual operating costs for bicycle commuters are 1.5% to 3.5% of those for automobile commuters.<sup>7</sup> Cost savings associated with bicycle travel expenses are also accompanied by potential savings in health care costs.

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<sup>7</sup> Active Transportation website: <http://www.activetransportation.org/costs.htm>

On a community scale, bicycle infrastructure projects are generally far less expensive than automobile-related infrastructure. Further, shifting a greater share of daily trips to bike trips reduces the impact on the region's transportation system, thus reducing the need for improvements and expansion projects.

### 1.3.4 Community/Quality of Life Benefits

Fostering conditions where bicycling is accepted and encouraged increases a community's livability from a number of different perspectives that are often difficult to measure but nevertheless important. The design, land use patterns, and transportation systems that comprise the built environment have a profound impact on quality of life issues. Studies have found that people living in communities with built environments that promote bicycling and walking tend to be more socially active, civically engaged, and are more likely to know their neighbors, whereas urban sprawl has been correlated with social and mental health problems, including stress.<sup>8,9</sup> The aesthetic quality of a community improves when visual and noise pollution caused by automobiles is reduced and when green space is reserved for facilities that enable people of all ages to recreate and commute in pleasant settings.

### 1.3.5 Safety Benefits

Conflicts between bicyclists and motorists result from poor riding and/or driving behavior as well as insufficient or ineffective facility design. Encouraging development and redevelopment in which bicycle travel is fostered improves the overall safety of the roadway environment for all users. Well-designed bicycle facilities improve security for current cyclists and also encourage more people to bike, which in turn can further improve bicycling safety. Studies have shown that the frequency of bicycle collisions has an inverse relationship to bicycling rates, which means more bicyclists on the road equates to lower crash rates.<sup>10</sup> Providing information and educational opportunities about safe and lawful interactions between bicyclists and other roadway users also improves safety.

## 1.4 Public Participation

Community involvement was vital to the development of the Plan. The Plan team held three rounds of public workshops to present to the public the Plan's findings and recommendations and to receive public feedback.

The **first round** of workshops introduced the Plan to the public and provided opportunities for public input. The Plan team performed extensive outreach to inform County residents of these workshops, including sending electronic mail blasts to stakeholders, including all 88 cities in Los Angeles County, posting notices on the project website, producing a meeting flyer in English and Spanish, creating and distributing a press release, and mailing comment cards to local bike shops, libraries, and parks and recreation facilities. There were a total of ten first round workshops held between February and March 2010. Meeting attendance was an average of ten people.

The **second round** of workshops, held in June 2010, served as a mid-project update for the public. These workshops focused on specific study corridors being evaluated by the project engineering team; education, encouragement and enforcement program recommendations; and project prioritization methodology. There

<sup>8</sup> Frumkin, H. 2002. *Urban Sprawl and Public Health*. *Public Health Reports*, 117: 201–17.

<sup>9</sup> Leyden, K. 2003. *Social Capital and the Built Environment: The Importance of Walkable Neighborhoods*. *American Journal of Public Health* 93: 1546–51.

<sup>10</sup> Jacobsen, P. *Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling*. *Injury Prevention*, 9: 205–209. 2003.

were a total of 11 public workshops during the second round, which also attracted an average of ten people per workshop. In addition to the outreach efforts used for the first round of workshops, the outreach for the second round of workshops included discussion of the Plan at Town Council meetings in unincorporated areas and at meetings held by Regional Planning for community specific plans, distribution of postcards at “Bike To Work Week” events throughout the County sponsored by ~~the Los Angeles County Metropolitan Transportation Authority (LACMTA)~~, and posting public service announcements on County websites, Bus Shelters in unincorporated areas, and on buses and shuttles that operate within or near unincorporated areas.

The **third round** of public workshops included a presentation of the draft Plan and provided opportunities for the public to provide input on the draft Plan. In addition to the outreach efforts used for the first and second round of workshops, the County retained the Angeles County Bicycle Coalition (LACBC) to assist with the outreach and to encourage attendance at the workshops. LACBC issued a press release to news media, radio and television; they worked with various entities to coordinate the posting of our workshop information on these entities’ websites; and sent electronic mail blasts to their members/subscribers. There were a total of 11 public workshops held between March and April 2011, with an average attendance of ten people per workshop.

The public comment period for the draft Plan was from March 31<sup>st</sup> to June 3<sup>rd</sup>, which was extended to target participants on the Los Angeles Bike to Work Week. The County again enlisted LACMTA’s assistance to distribute quarter page flyers at the Bike to Work Day pit stops, encouraging interested parties to comment on the draft Plan.

To improve connectivity between the Plan’s recommendations and the existing and planned bikeways in other jurisdictions, the County kept the cities throughout Los Angeles County aware of the status of the Plan via electronic mail blasts. The cities were invited to review and comment on the Plan, as well as to attend the public workshops. Although not every city responded, representatives from numerous cities attended the public workshops and submitted comments on the Plan.

## 1.5 Updates and Amendments to the Plan

This Plan provides direction for developing a comprehensive bicycle network, support facilities, and programs for the County. Although this is a 20 year planning document, the County recognizes that in order to achieve the desired results of increasing bicycling throughout Los Angeles County, the County needs to remain flexible to updating and amending the recommendations and proposals contained in this Plan.

The County will consult the community stakeholder group, the affected communities, and other stakeholders throughout implementation of this Plan. Over time, additional facilities may be identified for which bikeway facilities are desirable, or it may be desirable to change a bikeway designation from one classification to another based on community input and/or engineering considerations.

As indicated in Policy 1.5, the County will complete regular updates of the Bicycle Master Plan every five years. In addition, the Plan may be amended more frequently if necessary. Updates and amendments to this Plan would be subject to approval by the County Regional Planning Commission and the County Board of Supervisors.

### **1.5.1 Requests for Additional Facilities and/or Modifications to the Proposed Bicycle Network**

The County added a significant number of facilities as a result of the public comments received throughout development of the Plan. Since it was necessary to finalize the bicycle network before completing the Final Environmental Impact Report for this Plan, the County could not continue to consider the requests that were received after November 2011 for inclusion into the Plan. The County is maintaining a record of the additional requests received, and will consider them for inclusion in future updates and/or amendments.

### **1.5.2 Class III Bike Routes in Rural Communities**

Prior to approval of the Plan, the County received feedback from bicycle advocacy groups requesting that the Class III bicycle routes proposed in ~~the~~ rural areas of the County be changed to Class II bike lanes. ~~These groups~~ expressed concern for bicyclists ~~sharing the road -safety along the proposed Class III facilities, on these facilities~~ given the high speed of vehicular traffic ~~expected-exhibited~~ on these rural roadways. During the public outreach phase of the Plan, other members of the public expressed ~~desire-a preference~~ for Class III bike routes ~~over Class II bike lanes~~ on these rural roadways ~~over Class II bike lanes~~ to better preserve the rural characteristics of their communities.

The Plan proposes several hundred miles of Class III bicycle routes along these rural roadways; however, the Plan also recognizes that most of these facilities require widening and/or shoulder improvements to provide adequate room for bicyclists to ride. The Design Toolbox in Appendix F provides additional design consideration to enhance bicyclist safety for these “Shoulder Bikeways”. If during the implementation phase of a project, the community supports changing the designation to a Class II bike lane, the County ~~will~~ evaluate the feasibility, and ~~pursue-amend the Plan at that time.~~

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## **2. Goals, Policies and Implementation Actions**



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The purpose of the Plan is to guide the development of infrastructure, policies, and programs that improve the bicycling environment in the County of Los Angeles. The Plan focuses on areas under the County's jurisdictional authority; however, it also coordinates with bicycle planning efforts of other agencies. This chapter describes the Goals, Policies, and Implementation Actions (IA) necessary to implement this Plan.

## **Overarching** ~~Overarching~~ Goal

*“Increased bicycling throughout the County of Los Angeles through the development and implementation of bicycle-friendly policies, programs, and infrastructure.”*

### **Goal 1 – Bikeway System**

***Expanded, improved, and interconnected system of county bikeways and bikeway support facilities to provide a viable transportation alternative for all levels of bicycling abilities, particularly for trips of less than five miles***

#### **Policy 1.1 Construct the bikeways proposed in 2012 County of Los Angeles Bicycle Master Plan over the next 20 years.**

Lead Department: County of Los Angeles Department of Public Works (DPW)

Timeframe: Phase I: 2012 to 2017; Phase II: 2017 to 2027; Phase III: 2027 to 2032.

Chapter 5 explains how the projects were grouped into phases and lists the projects in Phase I. Appendix I presents a detailed list of all implementation phases. DPW will coordinate with the community stakeholder group established pursuant to IA 5.1.1, for prioritizing and implementing projects.

##### **IA 1.1.1 Propose and prioritize bikeways that connect to transit stations, commercial centers, schools, libraries, cultural centers, parks and other important activity centers within each unincorporated area and promote bicycling to these destinations.**

Lead Department: DPW

Timeframe: Ongoing

##### **IA 1.1.2 Coordinate with adjacent jurisdictions and LACMTA to implement bicycle facilities that promote connectivity.**

Lead Department: DPW

Timeframe: Ongoing

DPW will continue to coordinate with other cities and LACMTA to review and comment on bicycling issues of mutual concern. DPW will continue to propose bicycle facilities where appropriate to improve regional connectivity and also support and encourage LACMTA and local jurisdictions to install bicycle facilities within their jurisdiction and/or as part of their large transportation projects.

**IA 1.1.3 Implement bikeways proposed in this Plan when reconstructing or widening existing streets.**

Lead Department: DPW

Timeframe: Ongoing

All roadway reconstruction and widening projects shall implement the bikeways proposed in the Plan. Some of the proposed projects may require additional community outreach, and more extensive environmental clearances.

**IA 1.1.54 Implement bikeways proposed in this Plan when completing road rehabilitation and preservation projects.**

Lead Department: DPW

Timeframe: Ongoing

All roadway rehabilitation and preservation projects should consider implementing the bikeways proposed in the Plan if the proposed bikeway can be incorporated without significantly delaying the project schedule that would necessitate more costly pavement treatments.

Pavement preservation projects are maintenance projects that rely on utilizing timely, appropriate and successive preservation treatments in order to postpone costly rehabilitation and reconstruction projects. These projects generally follow expedited schedules and do not provide the same opportunity for extensive community outreach and/or environmental clearances as other road construction projects.

Timeframe: Ongoing

**Policy 1.2 ~~Enact changes in~~ Amend the County Codes and Land Uses that to encourage additional bikeways and bicycle support facilities.**

Lead Department: County of Los Angeles Department of Regional Planning (DRP)

Timeframe: by 2015

~~Amendments to the County Code may include: To condition developers to implement bicycle facilities, use developer fees for bikeway projects, or to~~ changes to the roadway cross-sections, ~~using developer fees for bikeway projects,~~ requirements for developers to provide bikeways and bicycle support facilities, ~~and other~~ changes ~~as needed in the County Codes and Land Uses are required~~

**Policy 1.3 Coordinate with developers to provide bicycle facilities that encourage biking and link to key destinations.**

Lead Department: DRP, DPW

Timeframe: Ongoing

DPW will continue to encourage developers to voluntarily use alternative roadway cross-sections that can accommodate bikeways and bicycle facilities. ~~Compliance with any changes incorporated into the County Code pursuant to Policy 1.2 will be required. After changes are incorporated into the County Codes, pursuant to Policy 1.2, DPW and DRP will require developers to include bikeways and bicycle facilities in new developments.~~

**IA 1.3.1 Require the implementation of bike lanes and bicycle support facilities along key corridors.**

Lead Department: DRP, DPW

Timeframe: In 2015, after necessary changes are enacted in the County Code pursuant to Policy 1.2.

~~After changes are incorporated into the County Codes, pursuant to Policy 1.2, DPW and DRP will require developers to include bikeways and bicycle facilities in new developments.~~ As part of the draft County General Plan, there are 11 Transit-Oriented Districts (TODs) being established. TODs are areas that are within a 1/2 mile radius from a major transit stop, with development and design standards, and incentives to facilitate transit-oriented development. Installation of bike lanes and bicycle support facilities within these TODs will be incorporated into the TOD Station Area Plans for each TOD.

**IA 1.3.2 Require bicycle parking at key locations, such as employment centers, parks, transit, schools, and shopping centers.**

Lead Department: DRP, DPW

Timeframe: By 2015, after a bicycle parking policy is developed (IA 1.6.2) and subsequent changes are enacted in the County Codes pursuant to Policy 1.2.

**Policy 1.4 Support the development of bicycle facilities that encourage new riders.**

Lead Department: DRP, DPW

Timeframe: Ongoing

**IA 1.4.1 Support efforts to develop a Complete Streets policy that accounts for the needs of bicyclists, pedestrians, disabled persons, and public transit users.**

Lead Departments: DRP, DPW

Timeframe: initiated within 2 years of adoption of the draft General Plan.

Development of a Complete Streets Ordinance is included as a Phase 1 Implementation Program in the draft County General Plan. The Implementation Program for the General Plan is divided into three phases. Phase 1 indicates the highest priority for implementing the General Plan, and should be initiated within the first two years of adoption of the General Plan.

**IA 1.4.2 Provide landscaping along bikeways where appropriate.**

Lead Department: DPW

Timeframe: Ongoing.

**IA 1.4.3 Ensure the provision of convenient and secure end of trip facilities at key destinations.**

Lead Department: DPW, DRP

Timeframe: By 2015, after a bicycle parking policy is developed (IA 1.6.2) and subsequent changes are enacted in the County Codes pursuant to Policy 1.2.

High quality bicycle parking within the public right-of-way and on private property will be provided, especially in high demand locations, such as near transit hubs, commercial and

employment centers, schools and colleges, and other major trip generators. DPW will also consider seeking grant funding to procure bicycle racks, and partnering with local businesses and community members to install bicycle parking throughout the County at no or substantially reduced costs to the local businesses.

**IA 1.4.4 Allow the use of and promote new and/or innovative bicycle facility designs and standards on County bicycle facilities upon adoption by the State of California.**

Lead Department: DPW

Timeframe: Ongoing

California State law requires the State to adopt uniform standards, and for local agencies to conform to those standards. The Design Guidelines in Appendix F provide a range of design options for bicycle treatments. As additional designs and standards are adopted by the State of California, they will be ~~included among~~ incorporated into the Plan's toolbox of treatments that may be implemented.

**Policy 1.5 Complete regular updates of the Bicycle Master Plan to be current with policies and requirements for grant funding and to improve the network.**

Lead Department: DRP, DPW

Timeframe: Every five years as per Caltrans BTA requirements

**IA 1.5.1 Measure the effectiveness of the Bikeway Plan implementation.**

Lead Department: DPW, DRP

Timeframe: Annually (April)

DPW will coordinate with DRP to include details on the progress made toward implementing the goals, policies, and programs of the Bikeway Plan, as part of the General Plan Annual Progress Report ~~Update~~. DPW will also develop and maintain a website pursuant to Policy 5.2, to provide more frequent updates on the progress of the Plan implementation.

**Policy 1.6 Develop a bicycle parking policy.**

Lead Department: DPW

Timeframe: Establish by 2013

DPW will review best practices guidelines for bicycle parking developed by the Association of Pedestrian and Bicycle Professionals and others to formulate the County Bicycle Parking policy. In general, bicycle parking should be located within fifty feet of building entrances and be clearly visible from the building entrance and its approaches.

**IA 1.6.1 Identify where bicycle parking facilities are needed and identify the appropriate type (e.g., inverted U style racks at grocery stores, bike lockers near transit stations).**

Lead Department: DPW

Timeframe: Beginning in 2013

**IA 1.6.2 Establish bicycle parking design standards and requirements for all bicycle parking on County property and for private development.**

Lead Department: DRP, DPW

Timeframe: Establish program by 2013

## Goal 2 - Safety

### *Increased safety of roadways for all users.*

#### **Policy 2.1 Implement projects that improve the safety of bicyclists at key locations.**

Lead Department: DPW

Timeframe: ongoing – See Appendix I for a detailed list of the projects and their implementation phases

##### **IA 2.1.1 Review bicyclist-related automobile crashes to identify potential problem areas.**

Lead Department: DPW

Timeframe: Annually

DPW will monitor bicycle-related collisions in relation to the overall number of bicyclists obtained from the biennial counts pursuant to IA 2.4.2, and from other agencies; and seek a continuous reduction in the collision rates over the next twenty years.

##### **IA 2.1.2 ~~Explore the use of~~Implement “sharrow” markings on all existing and proposed Class III facilities, as deemed appropriate and in accordance with the most current edition of the Manual on Uniform Traffic Control Devices.**

Lead Department: DPW

Timeframe: ongoing

##### **IA 2.1.3 Coordinate with the California Public Utilities Commission to consider impacts and safety mitigation measures when proposed bicycle facilities are adjacent to, near or over any railroad or rail transit right-of-way.**

Lead Department: DPW

Timeframe: Ongoing

#### **Policy 2.2 Encourage alternative street standards that improve safety such as lane reconfigurations and traffic calming.**

Lead Department: DPW, DRP

Timeframe: Ongoing

##### **IA 2.2.1 Identify opportunities to remove travel lanes from roads where there is excess capacity in order to provide bicycle facilities.**

Lead Department: DPW

Timeframe: Facilities proposed in this Plan that required travel lane reductions will be implemented per the Phasing Plan in Appendix I. Other potential facilities that are identified will be considered for inclusion in future Bikeway Plan updates performed pursuant to Policy 1.5.

##### **IA 2.2.2 Implement the bicycle boulevards proposed by this Plan.**

Lead Department: DPW

Timeframe: By 2027.

**IA 2.2.3 Investigate the use of reflective striping alternatives on Class I bike paths that would address concerns with slippery conditions that generally result from traditional reflective striping.**

Lead Department: DPW

Timeframe: By 2014

**Policy 2.3 Support traffic enforcement activities that increase bicyclists' safety.**

Lead Department: DPW

Timeframe: Ongoing

Support increased enforcement of unsafe bicyclist and motorist behaviors and laws that reduce bicycle/motor vehicle collisions and conflicts, and bike lane obstruction.

**IA 2.3.1 Encourage enforcement of traffic laws including citing bicyclists, pedestrians and motor vehicle operators consistently for violations to enhance bicyclist and pedestrian safety.**

Lead Department: DPW<sup>11</sup>

Timeframe: Ongoing

**IA 2.3.2 Encourage targeted enforcement activities in areas with high bicycle and pedestrian volumes.**

Lead Department: DPW<sup>11</sup>

Timeframe: Ongoing

**IA 2.3.3 Encourage enforcement agencies to conduct traffic enforcement on Class I Bikeways**

Lead Department: DPW<sup>12</sup>

Timeframe: Ongoing

**Policy 2.4 Evaluate impacts on bicyclists when designing new or reconfiguring streets.**

Lead Department: DPW

Timeframe: Ongoing

**IA 2.4.1 Encourage the development and approval of traffic study criteria that better accounts for bicyclists and pedestrians.**

Lead Department: DPW

Timeframe: Ongoing

**IA 2.4.2 Conduct biennial counts of bicyclists on key bikeways to gauge the effectiveness of the County's bicycle facilities in increasing bicycle activity.**

Lead Department: DPW

Timeframe: Every other year beginning in 2012.

DPW will identify a minimum of 20 locations to conduct counts of bicyclists. The selection of locations to conduct these counts will consider those areas with a high number of bicycle-

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<sup>11</sup> County will encourage enforcement activities; however, CHP is responsible for traffic enforcement on unincorporated county roadways.

<sup>12</sup> County will encourage enforcement activities; however, enforcement is the responsibility of the local law enforcement agency for which the Class I bikeway is located in

related automobile collisions and will be selected in consultation with the community stakeholder group established pursuant to IA 5.1.1. Expansion of the number of locations to conduct counts of bicyclists is contingent on the availability of funds.

**IA 2.4.3 Use alternative Level of Service (LOS) standards that account for bicycles and pedestrians when adopted by Caltrans.**

Lead Department: DPW

Timeframe: Beginning in 2012

**Policy 2.5 Improve and enhance the County's Suggested Routes to School program.**

Lead Department: DPW

Timeframe: Ongoing

**IA 2.5.1 Implement improvements that encourage safe bicycle travel to and from school.**

Lead Department: Los Angeles County Office of Education (LACOE), DPW

Timeframe: Ongoing

**IA 2.5.2 Develop incentive programs for students who participate in the Suggested Routes to School Program.**

Lead Department: DPW, LACOE

Timeframe: Ongoing

**Policy 2.6 Support development of a Healthy Design Ordinance.**

Lead Department: County of Los Angeles Department of Public Health (DPH), DRP

Timeframe: Adoption of ordinance by summer of 2012

Healthy Design has been defined as features of the built environment that promote physical activity in the form of walking, bicycling, and exercise.

**Policy 2.7 Support the use of the Model Design Manual for Living Streets and Design as a reference for DPW.**

Lead Department: DPW

Timeframe: Ongoing

The Model Design Manual for Living Streets focuses on all users and all modes, seeking to achieve balanced street design that accommodates cars, while ensuring that pedestrians, cyclists and transit users can travel safely and comfortably. This manual also incorporates features to make streets lively, beautiful, economically vibrant as well as environmentally sustainable.

## Goal 3 – Education

### *Develop education programs that promote safe bicycling*

#### **Policy 3.1 Provide bicycle education for all road users, children and adults**

Lead Department: DPW, DPH

Timeframe: 2012-2032

DPW and DPH will continue to seek funding for non-infrastructure projects to provide safety education for bicyclists of all of age groups and skill levels. DPW will continue to encourage partnership programs with County agencies such as DPH and/or non-County agencies to provide safety education that benefits the residents in unincorporated County areas.

##### **IA 3.1.1 Offer bicycle skills, bicycle safety classes, and bicycle repair workshops.**

Lead Department: DPH, LACOE, and DPW

Timeframe: 2012-2032

DPW will dedicate staff time, work with community advocates and/or solicit volunteer support to set up bicycle repair seminars at major community events in unincorporated County areas, or for bike rides along County maintained Class I bike paths.

##### **IA 3.1.2 Develop communication materials aimed to improve safety for bicyclists and motorists.**

Lead Department: DPW

Timeframe: 2012-2032

#### **Policy 3.2 Create safety education campaigns aimed at bicyclists and motorists (e.g., public service announcements, brochures, etc.).**

Lead Department: DPW

Timeframe: 2012-2032

DPW will regularly distribute brochures with safety instructions and updated suggested route to school maps tailored for local elementary schools in unincorporated County areas to encourage cycling. DPW will continue to seek grant funding to expand the safety education campaigns to target all age groups.

#### **Policy 3.3 Train county staff working on street design, construction, and maintenance projects to consider the safety of bicyclists in their work.**

##### **IA 3.3.1 Educate all key personnel on the needs of bicyclists.**

Lead Department: DPW, DRP

Timeframe: Ongoing

Provide bicycle education to County staff involved in decisions regarding transportation facilities. This would include, but would not be limited to, traffic engineers, planners, civil engineers, landscape architects, field inspectors and street maintenance personnel.

**IA 3.3.2 Educate maintenance personnel on the importance of bicycling related maintenance.**

Lead Department: DPW

Timeframe: Ongoing

**IA 3.3.3 Explore development of an education program to educate County employees who use a County vehicle on how to safely share the road with bicycles**

Lead Department: County of Los Angeles Department of Human Resources (DHR)

Timeframe: 2015

**Policy 3.4 Support training for the California Highway Patrol (CHP).**

**IA 3.4.1 Work with the CHP to provide training regarding bicyclists' rights and responsibilities pursuant to the California Vehicle Code and the County Code.**

Lead Department: DPW

Timeframe: 2012-2032

## Goal 4 - Encouragement Programs

*County residents that are encouraged to walk or ride a bike for transportation and recreation.*

**Policy 4.1 Support organized rides or cycling events, including those that may include periodic street closures in the unincorporated areas.**

Lead Department: DPW

Timeframe: Ongoing

DPW will work with other County agencies such as the Department of Parks and Recreation as well as non-County agencies to support bicycle rides along County roadways as well as the County maintained Class I bike paths.

**Policy 4.2 Encourage non-automobile commuting.**

**IA 4.2.1 Promote Bike to Work Day/Bike to Work Month among County employees.**

Lead Department: County of Los Angeles Chief Executive Office (CEO), DHR

Timeframe: Annually (May)

**IA 4.2.2 Investigate options for incentivizing County employees to use bicycles and other non-auto modes of transportation to commute to work.**

Lead Department: CEO, DHR

Timeframe: By 2015

**IA 4.2.3 Expand the County fleet to include alternate modes of transportation, e.g. bicycles.**

Lead Department: ISD, DPW

Timeframe: By 2015

**IA 4.2.4 Participate in a working group with LACMTA, the Southern California Association of Governments (SCAG), local agencies and advocacy groups,**

**and private industry/entrepreneurs to develop a regionally consistent bicycle sharing program in Los Angeles County.**

Lead Department: DPW

Timeframe: Beginning in 2012

LACMTA will develop a working group comprised of all interested local agencies and groups in the region who will work with private partners/entrepreneurs to develop a regionally consistent bicycle sharing program for Los Angeles County. The County will be a participating member in this working group.

**Policy 4.3 Develop maps and wayfinding signage and striping to assist navigating the regional bikeways.**

Lead Department: DPW

Timeframe: Enhancing the County's bicycle network with additional wayfinding signage and striping is ongoing. Development of Maps will start in 2012.

The maps will be made available on the County Bikeway website to be developed pursuant to Policy 5.2- and upon request.

## Goal 5 – Community Support

### *Community supported bicycle network.*

**Policy 5.1 Support Community Involvement.**

**IA 5.1.1 Establish a community stakeholder group to assist with the implementation of the Bicycle Master Plan.**

Lead Department: DPW

Timeframe: ~~Ongoing~~ Beginning in 2012

The community stakeholder group will oversee the implementation of this Plan and will provide input on bicycle issues in the County. **Input from the group can include selection of projects for available grant opportunities.** Section 4.4.2 provides additional details related to the **roles and selection of members of this group.**

**IA 5.1.2 Encourage citizen participation and stakeholder input in the planning and implementation of bikeways and other bicycle related improvements by holding public meetings and workshops to solicit community input.**

Lead Department: DPW

Timeframe: Ongoing

**Policy 5.2 Create an online presence to improve visibility of bicycling issues in unincorporated Los Angeles County.**

Lead Department: DPW

Timeframe: By 2012

**IA 5.2.1 Provide updates to the community about planned projects.**

Lead Department: DPW

Timeframe: By 2012

**IA 5.2.2 Provide closure updates to the community about County-maintained regional bikeways.**

Lead Department: DPW

Timeframe: By 2012

**IA 5.2.3 Provide information on bicycle safety and Wayfinding resources**

Lead Department: DPW

Timeframe: By 2012

**Policy: 5.3 Maintain efforts to gauge community interest and needs on bicycle-related issues.**

Lead Department: DPW

Timeframe: Ongoing

**IA 5.3.1 Conduct periodic online surveys to gauge interest in bicycling and related issues throughout the county.**

Lead Department: DPW

Timeframe: Approximately every two years

## Goal 6 - Funding

### *Funded Bikeway Plan.*

**Policy 6.1 Identify and secure funding to implement this Bicycle Master Plan.**

**IA 6.1.1 Support innovative funding mechanisms to implement this Bicycle Master Plan.**

Lead Department: DPW

Timeframe: Ongoing

DPW will continue to leverage funding for bikeways and bicycle support facilities through its road construction and bikeway programs. The County is committed to a balanced approach in assigning our available Road, Prop C Local Return, Measure R Local Return, and Article 3 Bikeway funds to address the County's streets and roads, bikeways, and pedestrian improvement and maintenance priorities commensurate with their needs and funding eligibility. DPW will also consider other innovative funding mechanisms, such as public-private partnerships, to implement this Plan.

**IA 6.1.2 Support new funding opportunities for bicycle facilities that are proposed at the Federal, State, and Local level that impact the county.**

Lead Department: DPW

Timeframe: Ongoing

**IA 6.1.3 Identify and apply for grant funding that support the development of bicycle facilities and programs.**

Lead Department: DPW

Timeframe: Ongoing

Chapter 5 outlines known grant opportunities for which DPW intends to apply for funds.

**IA 6.1.4 Establish construction of bikeways as a potential mitigation measure for project-related vehicle trips.**

Lead Department: DPW

Timeframe: In 2015, after necessary changes are enacted in the County Code pursuant to Policy 1.2.

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### **3. Existing Conditions and Proposed Network**



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This chapter presents an overview of existing conditions and proposed network improvements in the unincorporated County of Los Angeles. The content begins with a summary and description of the regional bike paths maintained by the County, and is then organized alphabetically by County planning area. The statistics presented in each section are specific to these planning areas only; however, the maps display information about the incorporated cities interspersed within the unincorporated areas.

Each section opens with a description of the planning area's geographic, land use, and population characteristics. Then, a summary of existing bicycle conditions is presented, including existing County-maintained bicycle facilities, multimodal connections, and bicycle-involved collisions reported in the area from 2004 through 2009. The proposed network is then presented with information on the alignments and classifications of recommended bicycle networks in the plan area.

**Figure 3-1** on page 30 displays an index map of the County of Los Angeles region, which provides information on where to find figures for a specific planning area within the plan. **Figure 3-2** and **Figure 3-3** provide an overview of existing bicycle facilities in the western and eastern portions of the County. The maps display data from the LACMTA showing the existing bicycle facilities in incorporated cities adjacent to the County planning areas. LACMTA updated its existing bicycle facilities GIS shapefile in the summer of 2010. Maps of existing land uses by planning area can be found in **Appendix D**.

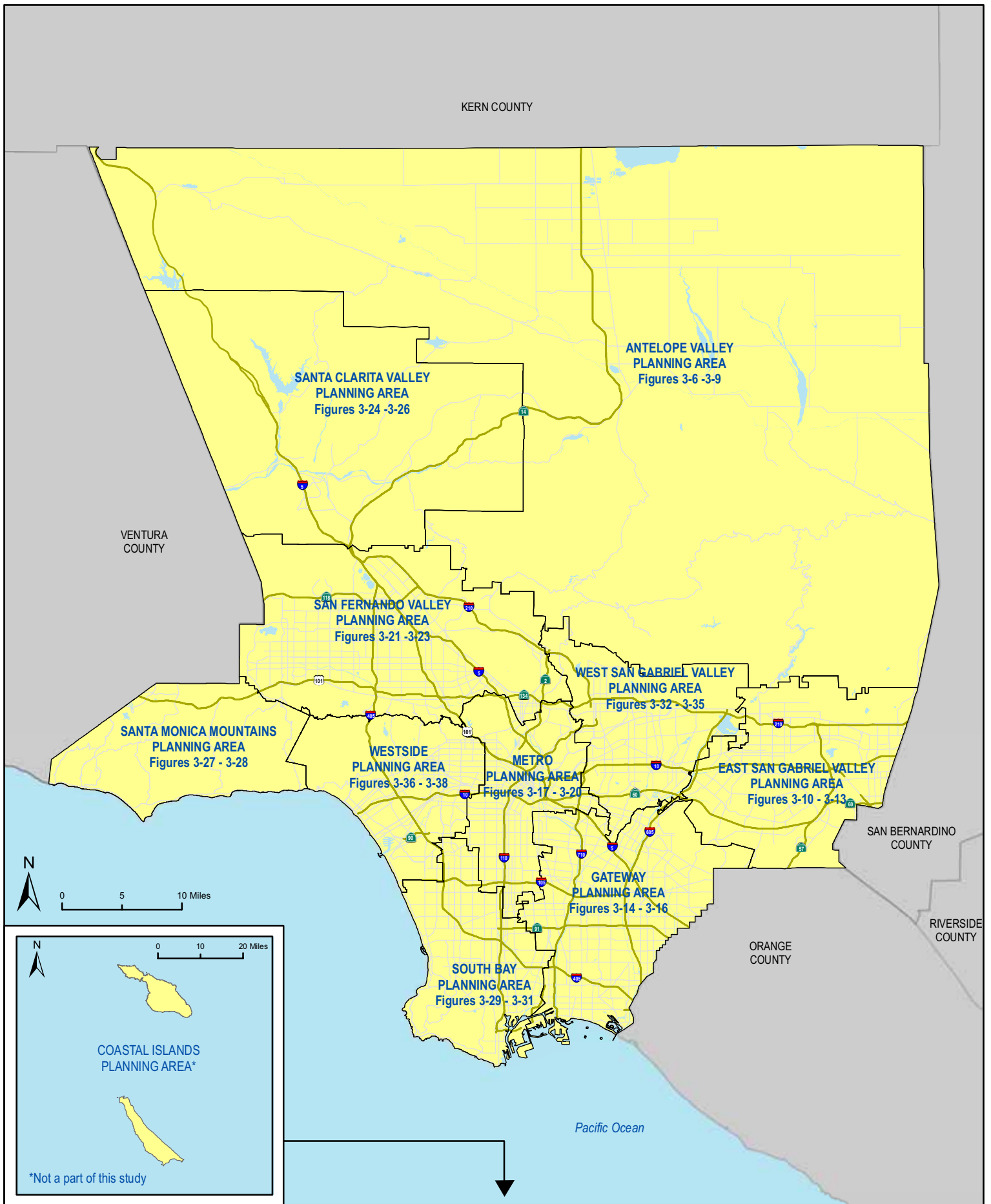
The proposed network is displayed on two overview maps: **Figure 3-4**, the western portion of the County, and **Figure 3-5**, the eastern portion of the County. Information on the alignments and classifications of recommended bicycle networks for each planning area are provided in sections 3.2 through 3.11. **Appendix E** provides maps identifying existing bicycle parking at Metro stations and proposed end-of-trip facilities for each planning area.

**Table 3-1** presents the Caltrans bikeway classification system, which this plan follows in classifying all existing and proposed bikeway facilities. Note that while the County may impose more stringent facility requirements, the County must follow the State minimum standards for all facilities.

The Plan presents an interconnected network of bicycle corridors that adds approximately 832 miles of bikeways throughout the County. The additional bikeways would improve the mobility of bicyclists within the County by enhancing safety, directness, and convenience within and between major regional destinations and activity centers. The 832 miles of proposed bikeways consist of approximately 72 miles Class I bike paths, approximately 274 miles Class II bike lanes, and approximately 463 miles of Class III bike routes, as defined/described in Chapter 1000 of the Caltrans Highway Design Manual. The Plan also proposes a network of 23 miles of bicycle boulevards,<sup>13</sup> which are facilities that prioritize bicycle travel on low-traffic, low-volume streets and are intended to provide greater safety and comfort to bicyclists. **Table 3-1** provides an introduction to the four proposed facility types, which are discussed in further detail in the Design Guidelines presented in **Appendix F**.

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<sup>13</sup> Bicycle Boulevards will be abbreviated BB in subsequent tables.



**Figure 3-1: Los Angeles County Index of Planning Area Maps**

Los Angeles County Bicycle Master Plan

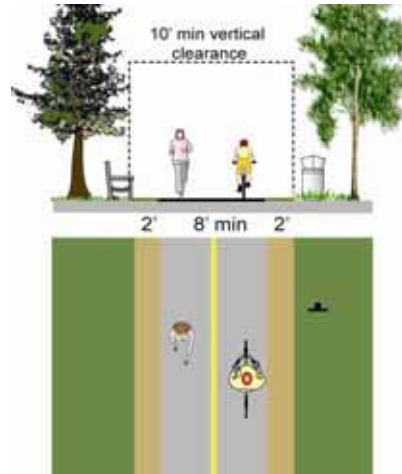
Source: Los Angeles County (2011)  
Date: 10/05/11

**Table 3-1: Bikeway Facilities Types**

**Bikeway Description** **Example Graphic**

**Class I – Bicycle Path**

Bike paths, also called shared-use paths or multi-use paths, are paved right-of-way for exclusive use by bicyclists, pedestrians, and other non-motorized modes of travel. They are physically separated from vehicular traffic and can be constructed in roadway right-of-way or exclusive right-of-way. Most of Los Angeles County bicycle paths are located along the creek and river channels, and along the beach. These facilities are often used for recreation but also can provide important transportation connections.



**Class II - Bicycle Lane**

Bike lanes are defined by pavement striping and signage used to allocate a portion of a roadway for exclusive bicycle travel. Bike lanes are one-way facilities on either side of a roadway. Bike lanes are located adjacent to a curb where no on-street parking exists. Where on-street parking is present, bike lanes are striped to the left side of the parking lane.

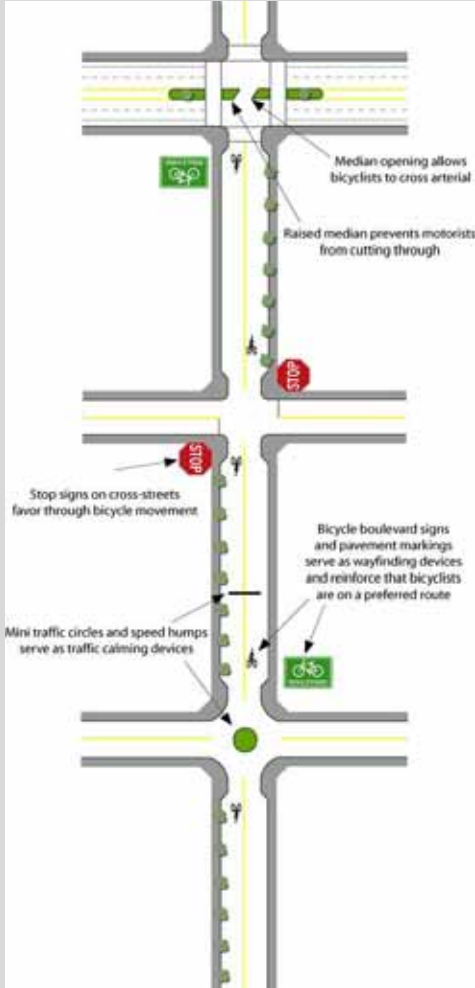


**Class III – Bicycle Route**

Bike routes provide shared use with motor vehicle traffic within the same travel lane. Designated by signs, bike routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand.



**Table 3-1: Bikeway Facilities Types (continued)**

Bikeway Description	Example Graphic
<p><b>Bicycle Boulevards</b></p> <p>Bicycle boulevards are local roads or residential streets that have been enhanced with signage, traffic calming, and other treatments to prioritize bicycle travel. Bicycle boulevards are typically found on low-traffic / low-volume streets that can accommodate bicyclists and motorists in the same travel lanes, without specific bicycle lane delineation. The treatments applied to create a bicycle boulevard heighten motorists' awareness of bicyclists and slow vehicle traffic, making the boulevard more conducive to safe bicycle (and pedestrian) activity. Bicycle boulevard treatments <u>can</u> include signage, pavement markings, intersection treatments, traffic calming measures and can include traffic diversions. <u>The specific treatments employed for a bicycle boulevard will be determined during project implementation based on input received from the public.</u></p> <p><b>Bicycle boulevards are not defined as a specific bikeway type by Caltrans; however, the basic design features of bicycle boulevards comply with Caltrans standards.</b></p>	 <p>The diagram illustrates a bicycle boulevard layout with several key features:         <ul style="list-style-type: none"> <li><b>Median opening:</b> A gap in the raised median allows bicyclists to cross the arterial road.</li> <li><b>Raised median:</b> Prevents motorists from cutting through the boulevard.</li> <li><b>Stop signs:</b> Located on cross-streets to favor through bicycle movement.</li> <li><b>Signage and pavement markings:</b> Bicycle boulevard signs and markings serve as wayfinding devices and reinforce that bicyclists are on a preferred route.</li> <li><b>Traffic calming devices:</b> Mini traffic circles and speed humps are used to slow down motorist traffic.</li> </ul> </p>

In addition to these standard designs, the Plan includes innovative bicycle treatments such as colored bicycle lanes, raised bicycle lanes, buffered bicycle lanes, cycletracks, and bicycle boxes. While these treatments do not have approved design standards at this time, the County will incorporate them into the Plan's toolbox of treatments as their uniform designs and standards are approved by the State of California Department of Transportation (Caltrans). Caltrans and the Federal Highway Administration allow for the experimental implementation of such treatments. The County promotes the use of these innovative treatments and will apply for and implement experimental projects utilizing them where cost effective and where such projects enhance the safety of bicycles, pedestrians, and motorists.

### 3.1 Regional Bicycle Paths Maintained by the County

In addition to the bikeways within unincorporated areas, the County of Los Angeles maintains many regional bicycle paths that travel through incorporated cities. These bicycle paths are described below.

### **Ballona Creek Bicycle Path**

The County-maintained portion of the Ballona Creek Bicycle Path runs 1.5 miles along the northern side of Ballona Creek, between Lincoln Avenue and the Pacific Avenue Bridge where it connects with the Marvin Braude Bicycle Path. The unincorporated areas adjacent to this path include West Fox Hills and Marina del Rey.

### **Compton Creek Bicycle Path**

The southern County-maintained portion of the Compton Creek Bicycle Path runs 1.8 miles along the east side of Compton Creek, between Del Amo Boulevard to just south of the Gardena Freeway (CA-91). Existing access points are located at Del Amo Boulevard, Alameda Street, and Santa Fe Avenue. The unincorporated areas adjacent to this path include Rancho Dominguez, West Rancho Dominguez-Victoria, and Willowbrook.

### **Coyote Creek Bicycle Path**

The Coyote Creek Bicycle Path straddles the Los Angeles County and Orange County border, running from the North Fork confluence with the La Mirada Creek down to the San Gabriel River. The County of Los Angeles Department of Public Works maintains the 2.8-mile portion on the west side of the channel from Centralia Street to North Fork Coyote Creek. The unincorporated Cerritos Islands are adjacent to this path.

### **Dominguez Channel Bicycle Path**

The Dominguez Channel Bicycle Path runs along the east side of the Dominguez Channel, from Main Street and Broadway to Vermont Avenue and Artesia Boulevard, near the Artesia Transit Center. The unincorporated areas adjacent to this path include West Carson.

### **La Cañada Verde Creek Bicycle Path**

The La Cañada Verde Creek Bicycle Path runs 0.1 miles along the south side of the La Cañada Verde Creek in the Whittier area, from Mulberry Street to Broadway. Mulberry Street and Broadway are the only access points. This bike path is entirely within the unincorporated South Whittier-Sunshine Acres community.

### **Laguna Dominguez Bicycle Path**

The Laguna Dominguez Bicycle Path runs 3.2 miles along the west side of the Dominguez Creek, from Redondo Beach Boulevard to 120<sup>th</sup> Street. The unincorporated areas adjacent to this path include Alondra Park and Hawthorne Island.

### **Los Angeles River Bicycle Path**

The County-maintained portion of the Los Angeles River Bicycle Path runs 16.7 miles along the Los Angeles River, from the Shoreline Bikeway in Long Beach to Atlantic Boulevard in the City of Vernon. The community of East Rancho Dominguez is the only unincorporated community that is adjacent to this path. South of Imperial Highway, the Los Angeles River Bicycle Path runs along the east bank of the river. At Imperial Highway in South Gate, at the confluence of the Los Angeles River and Río Hondo, the path splits into two directions. The Los Angeles River Bicycle Path continues north, although the path switches over to the west

bank where it continues along the river until its terminus at Atlantic Boulevard. The path along the east bank becomes Rio Hondo Path north of Imperial Highway, and continues northeasterly along the Rio Hondo.

#### **North Fork Coyote Creek Bicycle Path**

The North Fork Coyote Creek Bicycle Path runs 2.8 miles along the eastside of Coyote Creek, from Foster Road in Santa Fe Springs to the confluence with the Coyote Creek in Cerritos. No unincorporated areas are adjacent to this facility.

#### **Rio Hondo Bicycle Path**

The Rio Hondo Bicycle Path consists of 17.5 miles of inter-connected bicycle path along the Rio Hondo, Upper Rio Hondo and through the Whittier Narrows Regional Park, connecting to the San Gabriel River Bicycle Path. The southernmost part of the path begins at Imperial Highway in South Gate, where it connects to the Los Angeles River Bicycle Path and continues north to Peck Park in Arcadia.

#### **San Gabriel River Bicycle Path**

The San Gabriel River Path runs 30.2 miles along the San Gabriel River, from San Gabriel Canyon Road in Azusa to the access into El Dorado Park in Long Beach. There are numerous access points along the path. The unincorporated areas adjacent to this path include West Whittier-Los Nietos, North Whittier, Whittier Narrows, Avocado Heights, and East Azusa.

#### **San Jose Creek Bicycle Path**

The San Jose Creek Bicycle Path runs 2.1 miles along the south side of the San Jose Creek in the City of Industry, from 7<sup>th</sup> Avenue to Workman Mill Road. Access points are only located at 7<sup>th</sup> Avenue and Workman Mill Road. The unincorporated areas adjacent to this path include Avocado Heights and Hacienda Heights.

#### **Santa Anita Wash Bicycle Path**

The Santa Anita Wash Bicycle Path runs one mile along the Santa Anita Wash, from Live Oak Avenue to the east side of the spillway of Peck Road Water Conservation where it meets the Rio Hondo Bicycle Path in Arcadia. The unincorporated areas adjacent to this path include the South Monrovia Islands.

#### **Marvin Braude Bicycle Path (formerly South Bay Beach Bicycle Path)**

The Marvin Braude Bicycle Path is a 20-mile system that runs along the Pacific Coast from Pacific Palisades in the City of Los Angeles to the City of Torrance. The County maintains approximately 14.9 miles of the path from the northern boundary of the City of Santa Monica to its southern terminus in the City of Torrance. Within these limits, the County does not maintain the bicycle lane on Washington Boulevard from north of Admiralty Way to Venice Beach, or the portion from 1<sup>st</sup> Avenue at Hermosa Beach to the southern end of the Pier at Redondo Beach.

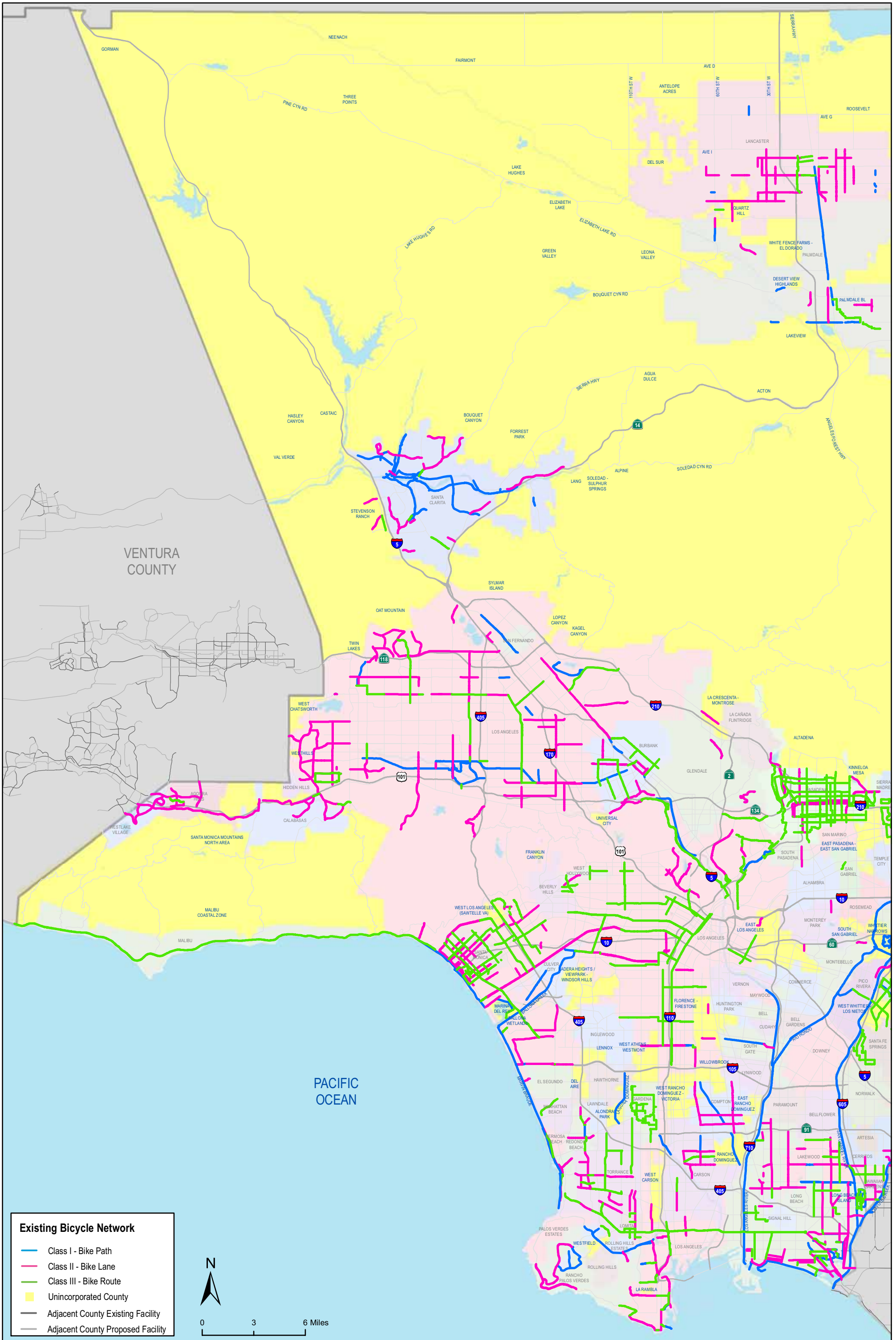
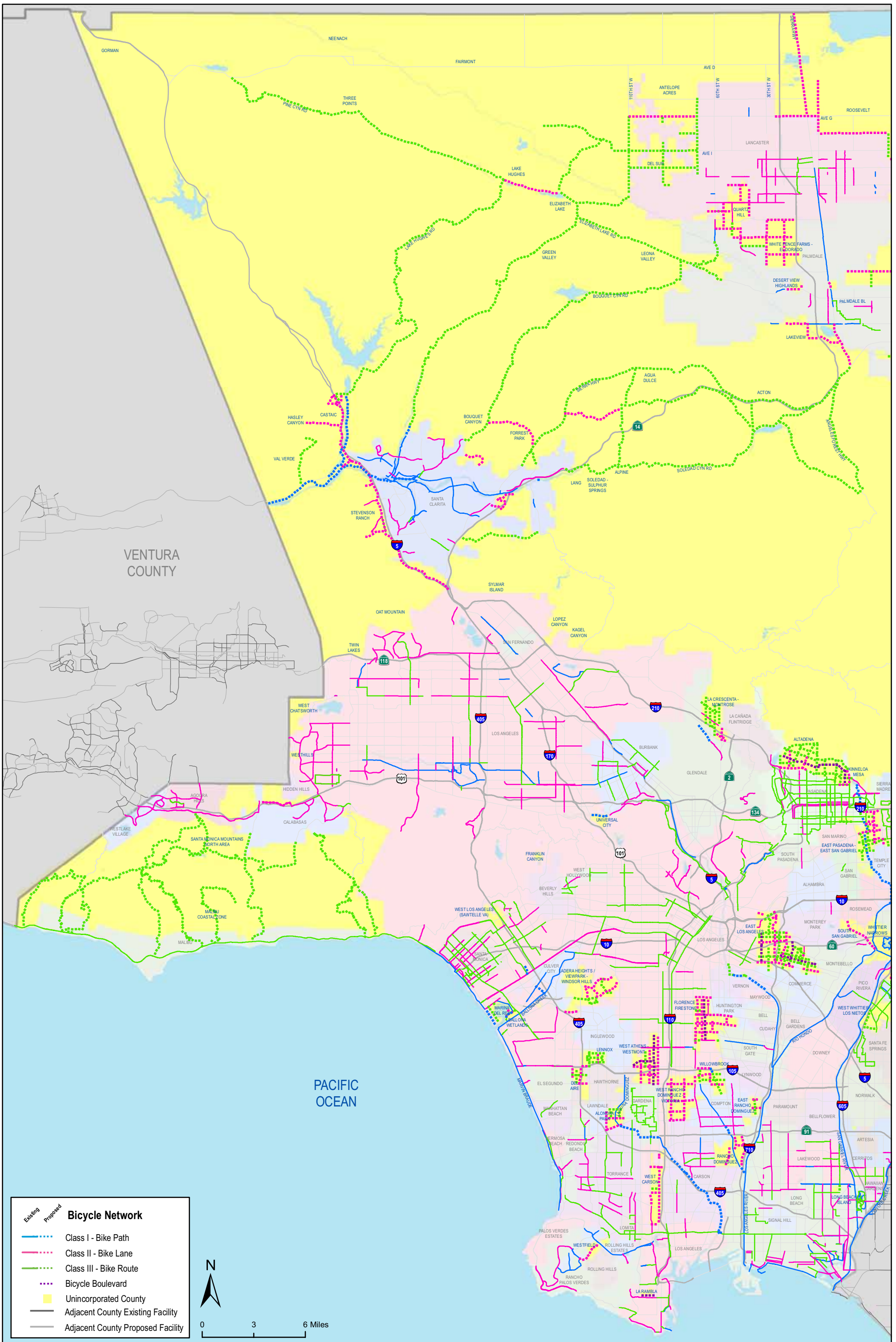


Figure 3-2: Overview of Existing Bikeways in Western Los Angeles County

Los Angeles County Bicycle Master Plan

Source: Los Angeles Metro (2006; 2010); Alta Planning + Design (2010)  
Date: 1/30/2011

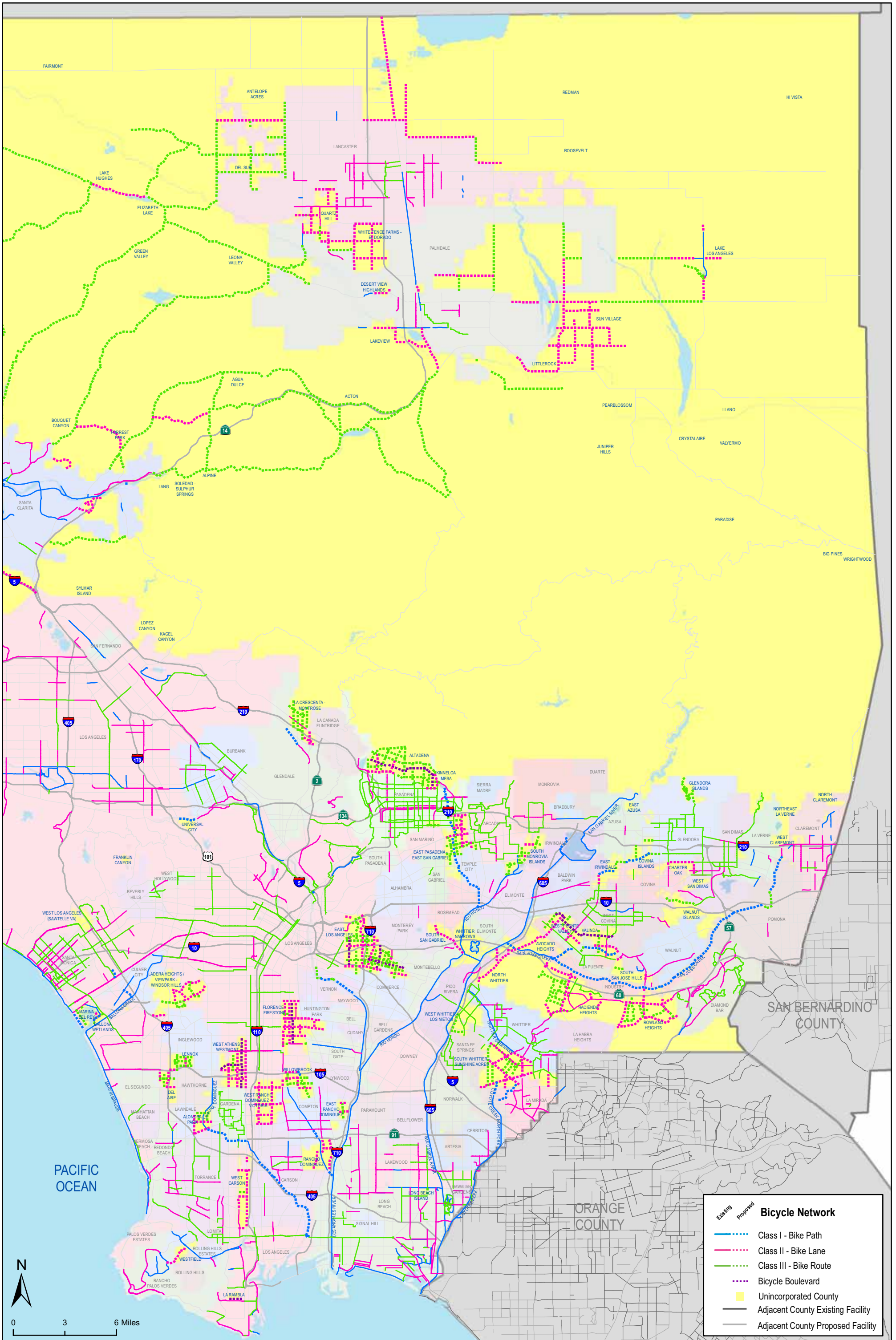




**Figure 3-4: Western Los Angeles County Propsed Bicycle Network**

**Los Angeles County Bicycle Master Plan**

Source: Los Angeles Metro (2006; 2010); Alta Planning + Design (2010)  
Date: 1/30/2011



**Figure 3-5: Eastern Los Angeles County Proposed Bicycle Network**

**Los Angeles County Bicycle Master Plan**

Source: Los Angeles Metro (2006; 2010); Alta Planning + Design (2010)  
 Date: 1/30/2011

### 3.1.1 Network Development

The network selection and classification process included extensive public outreach, on-going consultation with County of Los Angeles staff through a Technical Advisory Committee (TAC), and input from the County's Bicycle Advisory Committee (BAC). The TAC's membership includes staff from the Department of Public Works (DPW), Department of Regional Planning, Department of Public Health, Department of Beaches and Harbors, the Los Angeles County Sheriff's Department, and California Highway Patrol. The BAC is comprised of appointees from the County Supervisors, and staff from Caltrans and LACMTA. The proposed network was also influenced considerably by existing plans and ongoing bicycle planning efforts, by both the County of Los Angeles and other adjacent jurisdictions. The overall objective was to create a seamless, well-integrated bikeway network throughout Los Angeles County.

*StreetPlan*, an Alta Planning + Design model, was used to evaluate the feasibility of installing bike lanes on roadway segments throughout the County of Los Angeles. *StreetPlan* compares measurements taken of the existing roadway cross-section with roadway design minimum widths for the County and the amount of roadway space available to make a feasibility assessment. The assessments made by the *StreetPlan* model were later followed up by engineering review. **Appendix G** provides a detailed description of the *StreetPlan* model that was conducted to evaluate the proposed bikeway network.

This feasibility study identified potential bicycle facilities based on existing street cross-sections and proposed cross-sections, which is sufficient for a planning level analysis. Implementing specific bike facilities proposed in the Plan will require a more detailed traffic study that takes into account traffic volumes, speeds, percentage of heavy vehicles/trucks, demand for bicycle facilities, coordination with other jurisdictions/agencies, public outreach, and other considerations.

To enhance the utility of the regional bicycle network, this Plan also includes provisions for secure and convenient bicycle parking and support facilities that encourage transportation-based bicycle trips, and enhance access to transit.

Consistent with the County's Neighborhood Traffic Management Program's<sup>14</sup> primary goal of involving the community in the planning process, the implementation of bicycle boulevard projects will include a process of public outreach to neighborhood residents and other stakeholders. Upon notifying the community of proposed bicycle boulevard projects, a steering committee would be assembled, comprised of neighborhood residents and other stakeholders, County of Los Angeles representatives, and DPW staff. The steering committee will monitor and guide DPW's data collection and analysis. The data analysis will provide further information on the cost and feasibility of potential bicycle boulevard treatments.

DPW staff and the steering committee will present the collected data and analysis results to the public at a community workshop. Planning and outreach for the community workshops will attempt to solicit broad participation and support throughout the community. Upon receiving reasonable community consensus at the public meeting(s), DPW staff will present the bicycle boulevard study results to appropriate regulatory agencies (e.g., County Board of Supervisors, Los Angeles County Sheriff, Los Angeles County Fire, and California Highway Patrol) for review and implementation.

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<sup>14</sup> *Neighborhood Traffic Management Program* [http://dpw.lacounty.gov/TNL/NTMP/Page\\_01.cfm](http://dpw.lacounty.gov/TNL/NTMP/Page_01.cfm)

### 3.1.2 Bicycle Demand and Air Quality Benefits Analysis

Replacing vehicular trips with bicycle trips has a significant impact on reducing human-generated greenhouse gases (GHGs) in the atmosphere that contribute to climate change. Fewer vehicle trips and Vehicle Miles Traveled (VMTs)<sup>15</sup> translates into fewer mobile source pollutants being released into the air, such as carbon dioxide, nitrogen oxides, and hydrocarbons. Under the Clean Air Act, regions must meet the National Ambient Air Quality Standards established by the U.S. Environmental Protection Agency or they are designated as non-attainment areas.

South Coast Air Quality Management District (SCAQMD) covers most of the County of Los Angeles and is designated a non-attainment area for ozone and Particulate Matter (PM 2.5 and PM 10). The SCAQMD jurisdiction is approximately 10,743 square miles and includes the entire County except for the Antelope Valley, which is covered by the Antelope Valley Air Quality Management District (AVAQMD). The SCAQMD implements a wide range of programs and regulations that address point source pollution and mobile source emissions, and enforces air quality through inspections, fines, and educational training.

The AVAQMD, which includes the Antelope Valley, is a non-attainment area for ozone. Ozone is formed by a photochemical reaction of different pollutants including nitrogen oxides and hydrocarbons. Exposure to ozone has been linked to a number of acute health problems, especially in children.<sup>16</sup> PM pollution has been linked to a number of acute and chronic conditions including chronic bronchitis and heart attack.<sup>17</sup> Although the Los Angeles region has made great strides in improving air quality in recent decades, continued effort is needed to meet federal standards and protect public health. Replacing vehicle trips with bicycle trips is one of many strategies that can help address air pollution.

The SCAQMD and the AVAQMD are responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the region.

Appendix B presents detailed estimates of existing and future bicycle ridership and associated air quality benefits. For each planning area, an adjusted estimate of current bicycling levels was made using County of Los Angeles and United States Census data, along with several adjustments for likely bicycle commuter underestimations. The Plan predicted future bicycle ridership based on increases observed in other cities and automobile trip reductions for each planning area. Based on the vehicular trip reductions, the Plan predicted planning area-specific air quality benefits for 2035<sup>18</sup>. The planning areas included in the Plan are listed alphabetically. Table 3-2 summarizes existing and future bicycle ridership for all planning areas in unincorporated County of Los Angeles and the associated air quality benefits.

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<sup>15</sup> Vehicle Miles Traveled is a measurement of the extent of motor vehicle operation, a sum of all miles traveled by motor vehicles over a given period.

<sup>16</sup> [http://www.aqmd.gov/forstudents/health\\_effects\\_on\\_children.html](http://www.aqmd.gov/forstudents/health_effects_on_children.html)

<sup>17</sup> <http://www.epa.gov/pm/health.html>

<sup>18</sup> 2035 was chosen as the horizon year to conform to the County General Plan, which estimates future population in 2035

**Table 3-2: Current and Future Ridership and Air Quality Benefits**

<b>Commuting Statistics</b>	<b>Current (2010)</b>	<b>Future (2035)</b>
Study area population	1,188,324	1,648,695
Employed population	404,342	549,131
Bike-to-work mode share	2.0%	4.0%
Number of bike-to-work commuters	2,176	6,264
School children, ages 6-14 (grades K-8)	174,140	279,535
School children bicycling mode share	2.0%	4.0%
School children bike commuters	3,483	10,873
Number of college students in study area	77,887	125,138
Estimated college bicycling mode share	10.0%	15.0%
College bike commuters	7,789	18,359
Total number of bike commuters	13,719	44,477
Total daily bicycling trips	27,438	88,955
<b>Vehicle Trips and Miles Reduction</b>	<b>Current (2010)</b>	<b>Future (2035)</b>
Reduced Vehicle Trips per weekday	9,167	24,464
Reduced Vehicle Trips per year	2,392,599	6,385,134
Reduced Vehicle Miles per weekday	60,415	155,375
Reduced Vehicle Miles per year	15,768,365	40,552,751
<b>Air Quality Benefits</b>	<b>Current (2010)</b>	<b>Future (2035)</b>
Reduced Hydrocarbons (pounds/weekday)	181.14	465.86
Reduced NO <sub>x</sub> (pounds/weekday)	126.53	325.42
Reduced CO (pounds/weekday)	1,651.59	4,247.52
Reduced CO <sub>2</sub> (pounds/weekday)	49,148	126,398
Reduced Hydrocarbons (pounds/year)	47,278	121,589
Reduced NO <sub>x</sub> (pounds/year)	33,025	84,933
Reduced CO (pounds/year)	431,065	1,108,604
Reduced CO <sub>2</sub> (pounds/year)	12,827,656	32,989,896

Source: See LACBMP Appendix C, Tables C1-10.

The above analysis shows that while the population of the study area is expected to increase by 45% over the next 23 years, the expected number of bike commuters will increase by 225%. The increased number of trips taken by bicycle will reduce VMT by 155,375 miles on an average weekday, and lead to sizeable air quality benefits. By 2035, emissions of nearly 85,000 pounds of smog-forming NO<sub>x</sub> will be avoided per year, along with 16,500 tons of CO<sub>2</sub>, one of the principle gasses associated with global climate change.

## 3.2 Antelope Valley Planning Area

The Antelope Valley Planning Area consists of 1,800 square miles of unincorporated territory within the Antelope Valley. The planning area encompasses the majority of northern County of Los Angeles, accounting for 44% of the County of Los Angeles' total square mileage.<sup>19</sup> The planning area is primarily comprised of rural communities and open space, including high desert lands, the Liebre and Sierra Pelona mountain ranges, and the Angeles National Forest. **Figure D-1** in the appendices displays the existing land uses for the communities in the Antelope Valley Planning Area.

There are an estimated 103,000 residents living in the unincorporated communities of Antelope Valley Planning Area.<sup>20</sup> The unincorporated areas surround the more urban and densely populated incorporated cities of Palmdale and Lancaster with estimated populations of 182,663 and 160,650 respectively.<sup>21</sup> Over the past decade, the entire Antelope Valley has experienced significant population growth, including the unincorporated area within the planning area, which is largely due to the influx of housing subdivisions within and adjacent to Palmdale and Lancaster. This trend is expected to continue with the current unincorporated areas of the planning area projected to grow to a population of 255,000 by 2035.<sup>22</sup>

The planning area's 18 unincorporated communities are Acton, Antelope Acres, Crystallaire, Gorman, El Dorado, Juniper Hills, Green Valley, Lake Hughes, Elizabeth Lake, Lake Los Angeles, Leona Valley, Littlerock, Llano, Pearblossom, Quartz Hill, Sun Village, White Fence Farms, and Wrightwood. The following subsections describe current bicycling conditions in Antelope Valley unincorporated communities.

### 3.2.1 Existing Bicycling Conditions

Bicycling conditions throughout the planning area vary significantly due to Antelope Valley's diverse terrain and land use patterns. Some of the more populated communities such as Quartz Hill or Littlerock/Pearblossom have flat terrain and grid street networks that are conducive to developing a bicycle network with connections to neighboring jurisdictions' bicycle networks. In more rural areas, many of Antelope Valley's roadways are narrow, two-lane roads that function as either arterial highways or residential streets. Some of these roadways have wider shoulders and some also have relatively low traffic volumes and most have no on-street parking demand. Bicycling as a transportation mode can be challenging throughout the planning area due to substantial distances to access employment and commercial centers.

The planning area's unincorporated parts contain 7.2 miles of County maintained bikeways. The existing bikeways are located in Quartz Hill and Lake Los Angeles. The bikeways within Quartz Hill connect with the bicycle network of the neighboring City of Lancaster. **Table 3-3** summarizes the location, classification, and mileage of existing bikeways. **Figure 3-6** shows Antelope Valley's existing bikeways along with major transit stations and bicycle-involved collisions.

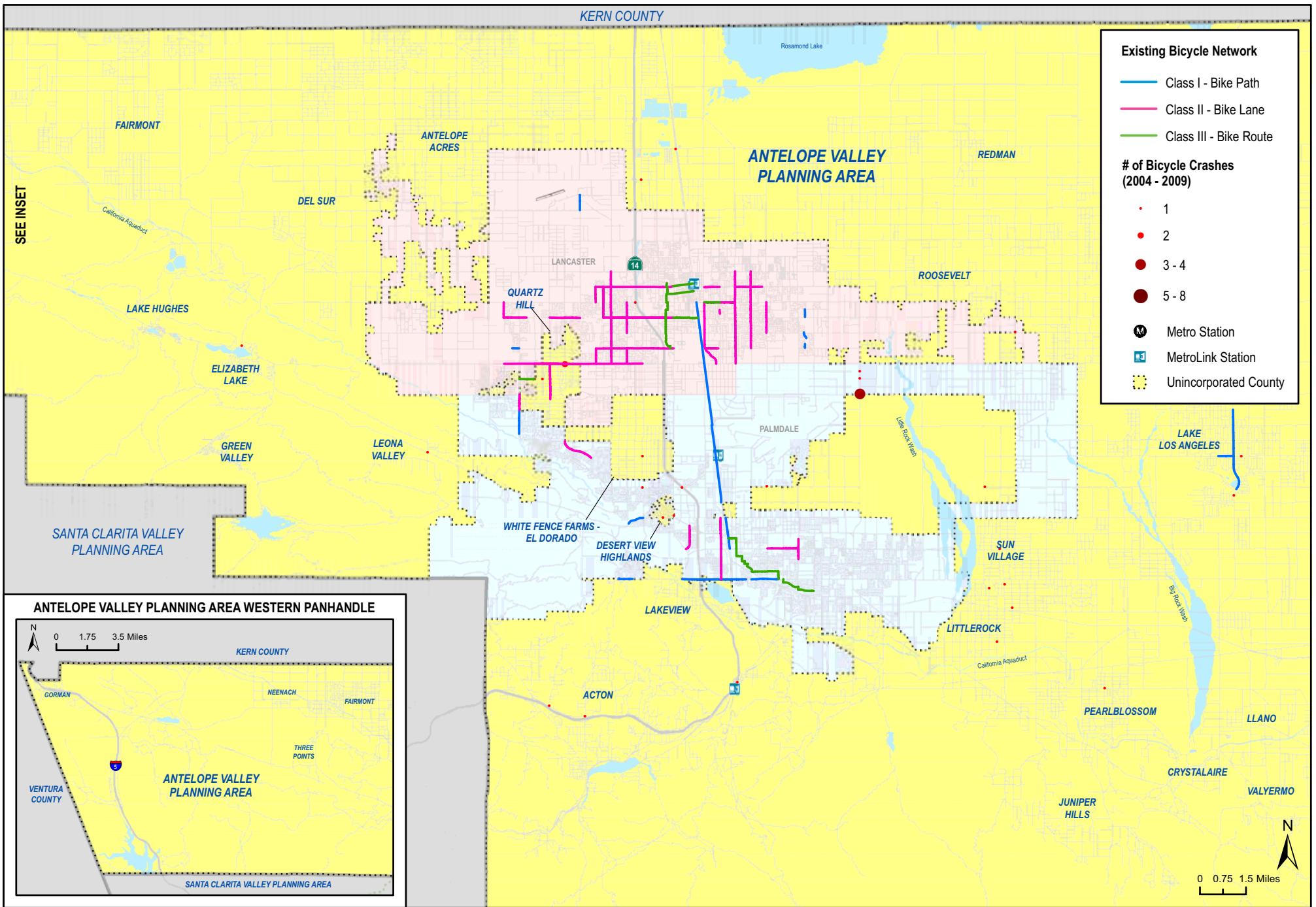
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<sup>19</sup> Los Angeles County, *Antelope Valley Area Plan Update Background Report*, 2009

<sup>20</sup> 2008 SCAG *Regional Transportation Plan*, Table 2.5: Los Angeles County Population Projections

<sup>21</sup> 2008 SCAG *Regional Transportation Plan*.

<sup>22</sup> 2008 SCAG *Regional Transportation Plan*.



**Figure 3-6: Antelope Valley Planning Area Existing Bicycle Network, Major Transit Stations, and Bicycle Crashes (2004-2009)**

**Table 3-3: Existing Antelope Valley Bikeways**

Community	Segment	From	To	Class	Mileage
Lake Los Angeles	170 <sup>th</sup> Street East	Avenue M-8	Avenue P	1	2.7
Lake Los Angeles	Avenue O	165 <sup>th</sup> Street East	170 <sup>th</sup> Street East	1	0.5
Quartz Hill	50 <sup>th</sup> Street West	Avenue L	Avenue M-4	2	1.3
Quartz Hill	60 <sup>th</sup> Street West	Avenue L-4	Avenue L-8	2	0.3
Quartz Hill	60 <sup>th</sup> Street West	Avenue L-12	Avenue M-8	2	0.7
Quartz Hill	Avenue L	55 <sup>th</sup> Street West	40 <sup>th</sup> Street West	2	1.5
Quartz Hill	Avenue L-8	57 <sup>th</sup> Street West	55 <sup>th</sup> Street West	3	0.2
				<b>Total</b>	<b>7.2</b>

*\*County-maintained bikeways only*

Bicycle collision data assists with identifying locations that may require safety assessment and serves as baseline with which to measure the impacts of bicycle program and infrastructure improvements. According to the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS), 46 bicycle collisions were reported within the unincorporated parts of Antelope Valley Planning Area between 2004 through 2009. Of these 46 instances, three took place at the intersection of 50<sup>th</sup> Street E and Avenue M, which is the greatest number of crashes at a single location in the Planning Area.

Bicycle-transit integration is vital to encouraging utilitarian bicycling in areas where there is significant distance between where most people live and work. There are three MetroLink stations in Antelope Valley, including one within the unincorporated area, the Vincent Grade/Acton Station. By providing improved bicycle access to commuter rail stations, residents will have greater opportunity to complete lengthy trips without the use of an automobile.

### 3.2.2 Proposed Network

Table 3-4 summarizes the proposed bicycle network mileage by classification type within the Antelope Valley Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would provide an additional [227.6230.7](#) miles of facility across the planning area, a substantial increase compared to the approximately eight miles of existing bicycle facility within the unincorporated parts of Antelope Valley.

**Table 3-4: Antelope Valley Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class II – Bike Lane	<a href="#">89.495.1</a>	<a href="#">39.241.6%</a>
Class III – Bike Route	<a href="#">138.2134.8</a>	<a href="#">6058.84%</a>

<b>Total</b>	<b>227.6230.7</b>	<b>100%</b>
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Table 3-5 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-7 displays the proposed bicycle network as well as existing bicycle facilities and major transit stations in the Antelope Valley Planning Area. Figure 3-8 shows a more detailed view of the proposed bicycle network within the communities of Quartz Hill and White Fence Farms. Figure 3-9 provides a more detailed view of the proposed bicycle network within the communities of Littlerock and Sun Village Area.

**Table 3-5: Antelope Valley Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	30 <sup>th</sup> Street West	Avenue M	Avenue O-12	White Fence Farms-El Dorado, Cities of Lancaster <sup>A</sup> and Palmdale <sup>A</sup>	2	2.78	5	120
2	Elizabeth Lake Road	Dianron Road	10th Street West	Desert View Highlands	2	0.8	5	110
3	170th Street East	Avenue M	Avenue M-8	Lake Los Angeles	2	0.5	5	110
	170th Street East	Avenue P	Palmdale Boulevard		2	0.415		
4	<u>Elizabeth Lake Road</u>	<u>Lake Hughes Road</u>	<u>Munz Ranch Road</u>	<u>Elizabeth Lake</u>	<u>2</u>	<u>3.4</u>	<u>5</u>	<u>110</u>
54	Sierra Highway	Avenue S	Pearblossom Highway	Lakeview and City of Palmdale <sup>A</sup>	2	2.7	5	105
65	Avenue L-8	65 <sup>th</sup> Street West	60 <sup>th</sup> Street West	City of Lancaster <sup>A</sup>	2	0.5	5	100
67	50 <sup>th</sup> Street West	Avenue M-2	Avenue N	Quartz Hill	3	0.9	5	95
78	55th Street West	Avenue L	Avenue M-8	Quartz Hill and City of Lancaster <sup>A</sup>	2	1.5	5	95
89	Ridge Route Road/ Pine Canyon Road/ Elizabeth Lake Road	Lancaster Road	0.3 miles east of Cherry Tree Lane (Palmdale city limit)	Three Points, Lake Hughes, Elizabeth Lake, Leona Valley	3	34.1	5	95
						30.8		
910	40 <sup>th</sup> Street East	Avenue H	Lancaster Blvd	Roosevelt, and City of Lancaster <sup>A</sup>	3	1.5	5	90
1011	40 <sup>th</sup> Street West	Avenue K-4	Avenue M	Quartz Hill, and City of Lancaster <sup>A</sup>	2	1.7	5	90
14	Avenue O	90th Street East	150th Street	Lake Los Angeles	3	4.0	5	90

<a href="#">12</a>			East					
		150th Street	165th Street		2	1.5		
		East	East					
		170th Street	180th Street		2	1.0		
		East	East					
<a href="#">42</a>	Angeles Forest	Sierra Highway	Aliso Canyon	Acton	3	7.1	5	90
<a href="#">13</a>	Highway		Road					
<a href="#">43</a>	Avenue N-8	Bolz Ranch	30th Street West	White Fence Farms-El Dorado	3	1.5	5	85
<a href="#">14</a>		Road		and City of Palmdale <sup>A</sup>				
<a href="#">44</a>	45th Street West	Avenue M-8	Avenue N-8	Quartz Hill, White Fence	2	1.0	5	85
<a href="#">15</a>				Farms-El Dorado and Cities of				
				Lancaster <sup>A</sup> and Palmdale <sup>A</sup>				
<a href="#">45</a>	Avenue P	160th Street	170th Street	Lake Los Angeles	3	1.6	5	85
<a href="#">16</a>		East	East					
<a href="#">46</a>	<del>Avenue O</del>	<del>30th Street West</del>	<del>10th Street West</del>	<del>White Fence Farms-El Dorado</del>	<del>2</del>	<del>2.0</del>	<del>5</del>	<del>85</del>
<a href="#">47</a>	<del>110th Street West</del>	<del>Avenue G</del>	<del>Johnson Road</del>	<del>Del Sur and City of Lancaster<sup>A</sup></del>	<del>3</del>	<del>4.5</del>	<del>5</del>	<del>80</del>

**Table 3-5: Antelope Valley Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
<a href="#">17</a>	<a href="#">Avenue O</a>	<a href="#">30th Street West</a>	<a href="#">10th Street West</a>	<a href="#">White Fence Farms-El Dorado</a>	<a href="#">2</a>	<a href="#">2.0</a>	<a href="#">5</a>	<a href="#">85</a>
<a href="#">18</a>	<a href="#">110th Street West</a>	<a href="#">Avenue G</a>	<a href="#">Johnson Road</a>	<a href="#">Del Sur and City of Lancaster<sup>A</sup></a>	<a href="#">3</a>	<a href="#">4.5</a>	<a href="#">5</a>	<a href="#">80</a>
<a href="#">19</a>	10th Street West	Auto Center Drive	Elizabeth Lake Road	Desert View Highlands and City of Palmdale <sup>A</sup>	2	0.3	5	80
<a href="#">20</a>	105th Street East	Palmdale Boulevard	Avenue S	Sun Village	2	1.5	5	80
<a href="#">49</a>								
<a href="#">21</a>	Lancaster Boulevard	40 <sup>th</sup> Street East	55 <sup>th</sup> Street East	Roosevelt and City of Lancaster <sup>A</sup>	2	1.5	5	80
<a href="#">20</a>								
<a href="#">22</a>	Barrell Springs Road	Tierra Subida Avenue	Sierra Highway	Lakeview	2	2.0	5	80
<a href="#">24</a>								
<a href="#">23</a>	Tierra Subida Avenue	Avenue S	Barrell Springs Road	Lakeview	2	0.8	5	80
<a href="#">22</a>								
<a href="#">24</a>	Avenue U	87 <sup>th</sup> Street East	96 <sup>th</sup> Street East	Little Rock, Sun Village	2	1.0	5	80
<a href="#">23</a>								
<a href="#">25</a>	Avenue M	30 <sup>th</sup> Street West	State Route 14	Quartz Hill	2	1.7	5	80
<a href="#">24</a>								
<a href="#">26</a>	20 <sup>th</sup> Street West	Avenue O-12	West Avenue M	Quartz Hill	2	2.8	5	80
<a href="#">25</a>								
<a href="#">27</a>	Avenue H	Division Street	40 <sup>th</sup> Street East	Roosevelt and City of Lancaster <sup>A</sup>	2	4.1	5	80
<a href="#">26</a>								

Chapter 3: Existing Conditions and Proposed Network

<del>28</del> 27	Avenue T	80th Street East	126th Street East	Little Rock	2	4.76	5	75
<del>29</del> 28	30 <sup>TH</sup> Street East	East Avenue Q	East Avenue P	Antelope Valley	3	1.0	5	75
<del>30</del> 29	Avenue K	52 <sup>nd</sup> Street West	40 <sup>th</sup> Street West	Quartz Hill and City of Lancaster <sup>A</sup>	2	1.2	5	75
<del>31</del> 30	Avenue S	0.3 miles east of The Groves (Palmdale city limit)	Tierra Subida Avenue	Lakeview	2	1.3	5	75
<del>32</del> 34	Crown Valley Road	Sierra Highway	Soledad Canyon Road	Acton	3	1.9	5	75
<del>33</del> 32	Avenue R	90th Street East	110th Street East	Sun Village	2	2.0	5	75
<del>34</del> 33	Division Street	Avenue H	Avenue E	Roosevelt	2	3.0	5	75
<del>35</del> 34	Sierra Highway	Avenue P-8	East Avenue Q	Antelope Valley	2	0.5	5	75
<del>36</del> 35	90 <sup>th</sup> Street West	Avenue G	Avenue G-8	Fairmount, Del Sur, and City of Lancaster <sup>A</sup>	3	0.5	5	75
<del>37</del> 36	Avenue L-8	60th Street West	50th Street West	Quartz Hill and City of Lancaster <sup>A</sup>	2	<del>0.71</del> 0	5	75
<del>38</del> 37	Mackennas Gold Avenue/ Rawhide Avenue	Avenue P	170th Street East	Lake Los Angeles	3	0.9	5	70
<del>39</del> 38	116th Street East	Avenue S	Avenue T	Sun Village	2	1.0	5	70
<del>40</del> 39	Avenue M-8	60th Street West	45th Street West	Quartz Hill and City of Palmdale <sup>A</sup>	2	1.5	5	70
40	<del>45<sup>th</sup> Street West</del>	<del>Avenue K-4</del>	<del>Avenue L</del>	<del>Quartz Hill</del>	<del>2</del>	<del>1.0</del>	<del>5</del>	<del>70</del>

Table 3-5: Antelope Valley Planning Area Proposed Bicycle Facilities (continued)

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
41	<u>45<sup>th</sup> Street West</u>	<u>Avenue K-4</u>	<u>Avenue L</u>	<u>Quartz Hill</u>	<u>2</u>	<u>1.0</u>	<u>5</u>	<u>70</u>
<del>42</del> 44	San Francisquito Canyon Road	Calle Siemerio	Elizabeth Lake Road	Green Valley, Elizabeth Lake	3	3.5	5	70

County of Los Angeles | Bicycle Master Plan

<a href="#">43</a> <a href="#">42</a>	90 <sup>th</sup> Street West	Avenue H-8	Avenue K	Fairmount, Del Sur, and City of Lancaster <sup>A</sup>	3	2.5	5	70
<a href="#">44</a> <a href="#">43</a>	106 <sup>th</sup> Street East	Avenue S	Pearblossom Highway	Sun Village	2	2.5	5	65
<a href="#">45</a> <a href="#">44</a>	Sierra Highway	Avenue A	Avenue G	Roosevelt	2	6.1	5	65
<a href="#">46</a> <a href="#">45</a>	Red Rover Mine Road/ Escondido Canyon Road	Sierra Highway	Crown Valley Road	Acton	3	<del>2.34</del>	5	65
<a href="#">47</a> <a href="#">46</a>	96 <sup>th</sup> Street East	Avenue R-8	Avenue U	Little Rock, Sun Village	2	2.5	5	65
<a href="#">48</a> <a href="#">47</a>	Pearblossom Highway	62 <sup>nd</sup> Street East	87 <sup>th</sup> Street East	Little Rock and City of Palmdale <sup>A</sup>	2	3.0	5	65
<a href="#">49</a> <a href="#">48</a>	Avenue S	0.5 miles west of 90 <sup>th</sup> Street East	116 <sup>th</sup> Street	Little Rock, Sun Village	2	3.2	5	65
<a href="#">50</a> <a href="#">49</a>	Johnson Road	Elizabeth Lake Road	110 <sup>th</sup> Street West	Elizabeth Lake, Del Sur	3	3.4	5	65
<a href="#">51</a> <a href="#">50</a>	East Avenue P	15 <sup>th</sup> Street East	50 <sup>th</sup> Street East	Antelope Valley Planning Area and City of Palmdale <sup>A</sup>	2	3.6	5	65
<a href="#">52</a> <a href="#">51</a>	Avenue K	85 <sup>th</sup> Street West	90 <sup>th</sup> Street West	Fairmount, Del Sur, and City of Lancaster <sup>A</sup>	3	0.5	5	65
<a href="#">53</a> <a href="#">52</a>	Avenue H	80 <sup>th</sup> Street West	70 <sup>th</sup> Street West	Fairmount, Del Sur, and City of Lancaster <sup>A</sup>	3	1.0	5	65
<a href="#">54</a> <a href="#">53</a>	Avenue G	Lancaster City Limits	Division Street	Roosevelt	2	2.5	5	65
<a href="#">55</a> <a href="#">54</a>	Godde Hill Road	<del>Avenue M-8</del> Avenida Entrada	Elizabeth Lake Road	Quartz Hill, Leona Valley and City of Palmdale <sup>A</sup>	3	<del>4.42</del> 9	5	65
<a href="#">56</a> <a href="#">55</a>	40 <sup>th</sup> Street East	0.3 miles north of Barrell Springs Road	Barrell Springs Road	Antelope Valley Planning Area	3	0.3	5	60
<a href="#">57</a> <a href="#">56</a>	50 <sup>th</sup> Street East	Avenue M	Avenue Q	Antelope Valley Planning Area	3	4.0	5	60
<a href="#">58</a> <a href="#">57</a>	Barrell Springs Road/ Cheseboro Road/ Mount Emma Road	47 <sup>th</sup> Street East	Fort Tejon Road	Antelope Valley Planning Area	3	5.0	5	60

**Table 3-5: Antelope Valley Planning Area Proposed Bicycle Facilities (continued)**

Chapter 3: Existing Conditions and Proposed Network

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
<del>59</del> 58	Aliso Canyon Road	Soledad Canyon Road	Angeles Forest Highway	Acton	3	7.4	5	60
<del>60</del> 59	90th Street East 90th Street East/ 87th Street East	Avenue M Avenue Q	Avenue Q Pearblossom Highway	Sun Village, Little Rock, City of Palmdale <sup>A</sup>	3 2	<del>3.62</del> 0 <del>4.66</del> 7	5	60
<del>61</del> 60	Palmdale Boulevard Palmdale Boulevard	60th Street East 110 <sup>th</sup> Street East	110th Street East 170 <sup>th</sup> Street East	Sun Village, Lake Los Angeles, and City of Palmdale <sup>A</sup>	2 3	4.5 6.2	5	60
<del>62</del> 64	San Francisquito Canyon Road	Calle Siemerino	Santa Clarita River Trail	Green Valley	3	14.8	5	60
<del>63</del> 62	Avenue G West	110th Street West	70th Street West	Del Sur and City of Lancaster <sup>A</sup>	2	<del>4.14</del> 0	5	60
<del>64</del> 63	Avenue N	50th Street West	State Route 14	<del>Quartz</del> Quartz Hill, White Fence-El Dorado, and Cities of Lancaster and Palmdale <sup>A</sup>	2	3.6	5	55
<del>65</del> 64	Avenue J	110th Street West	70th Street West		3	4.0	5	55
<del>66</del> 65	70th Street West	Avenue F	Avenue J		3	4.5	5	55
<del>67</del> 66	Lancaster Road/ Fairmont Neenach Road/ 120th Street West / Avenue I	160th Street West	70th Street West	Fairmont, Del Sur and City of Lancaster <sup>A</sup>	3	9.8	5	55
<del>68</del> 67	Munz Ranch Road	Fairmont Neenach Road	Elizabeth Lake Road	Del Sur, Elizabeth Lake	3	4.4	5	50
<b>Total Miles</b>						<b><u>227.6230.7</u></b>		

<sup>A</sup> Part of project traverses through or along boundary of incorporated city



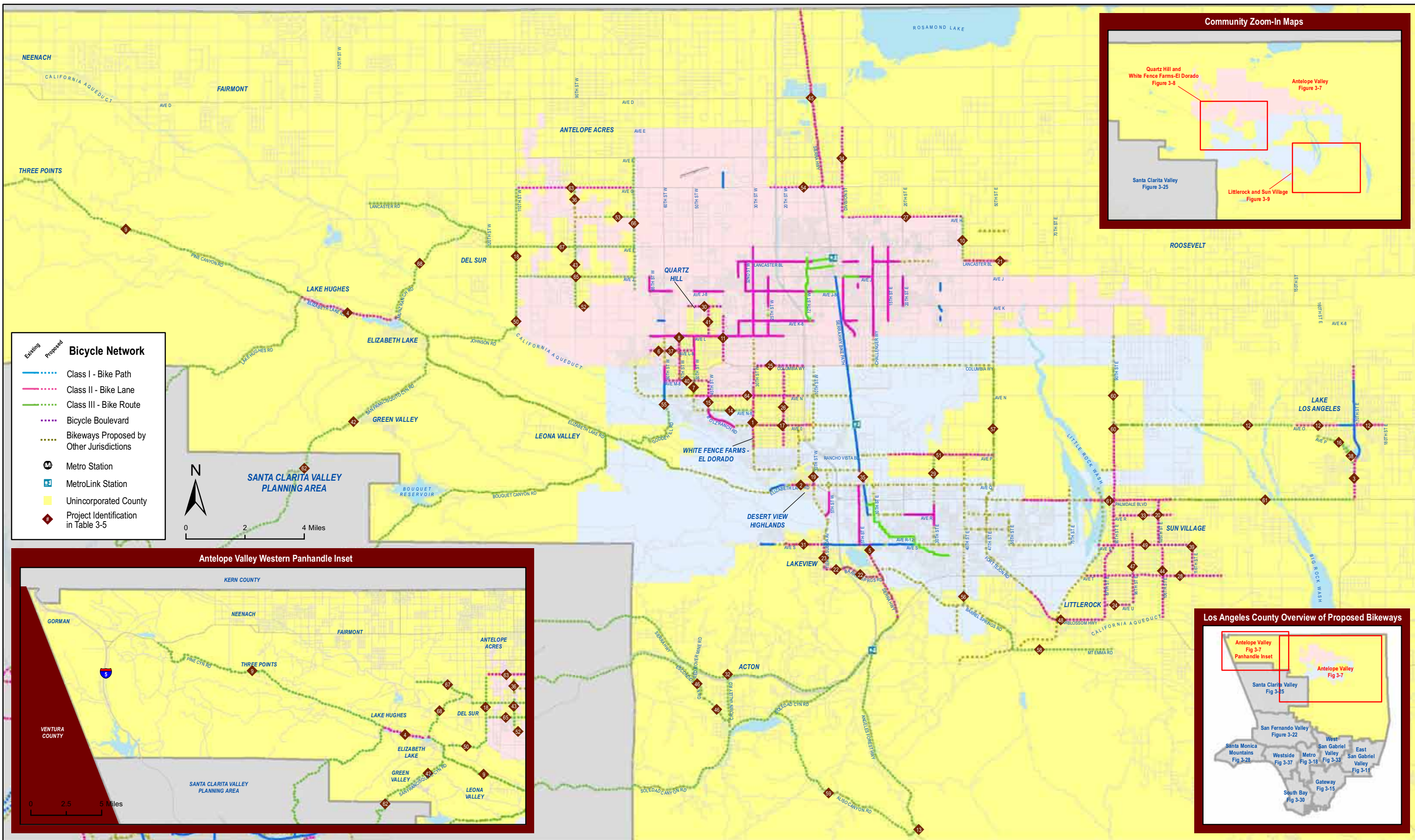
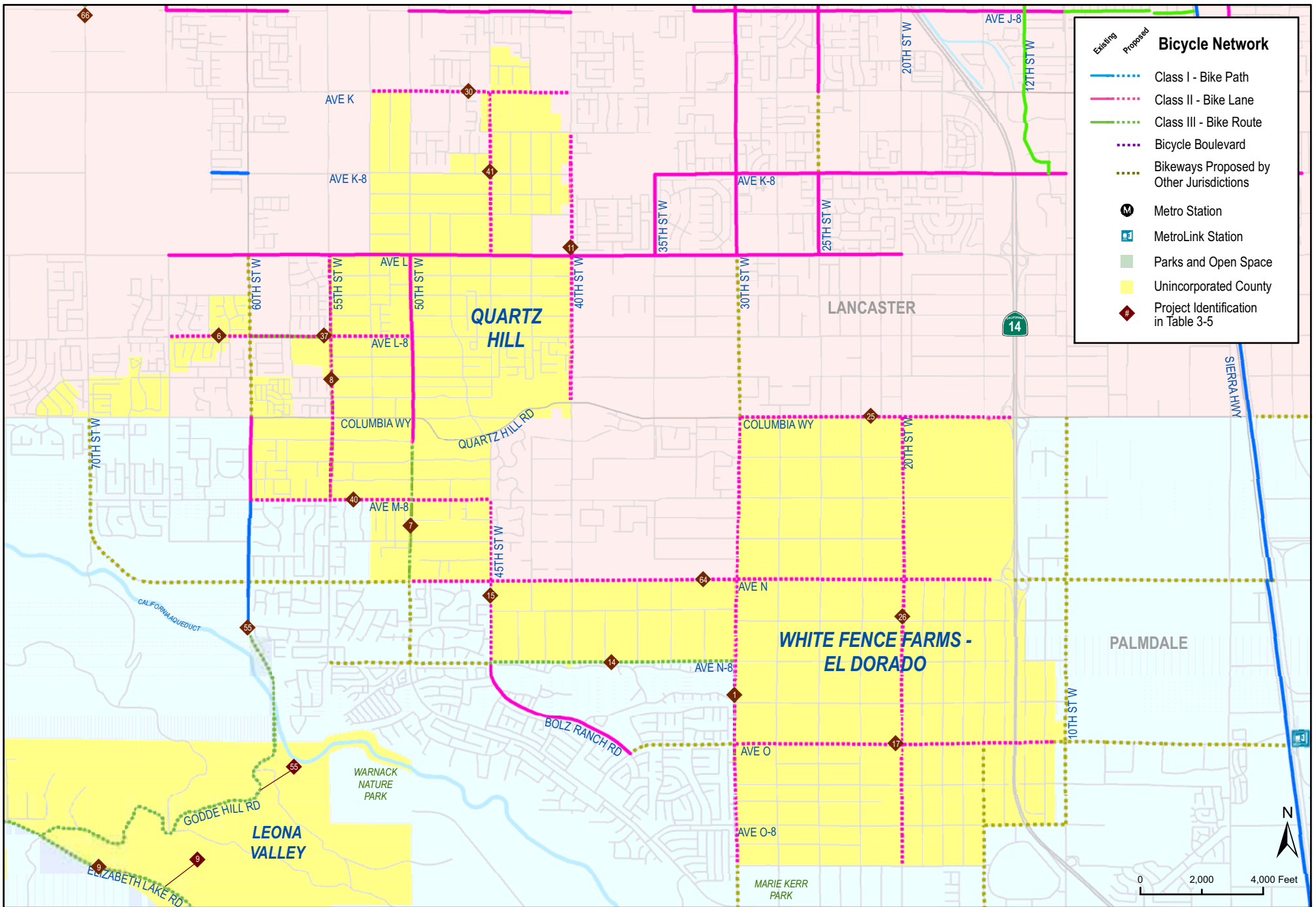
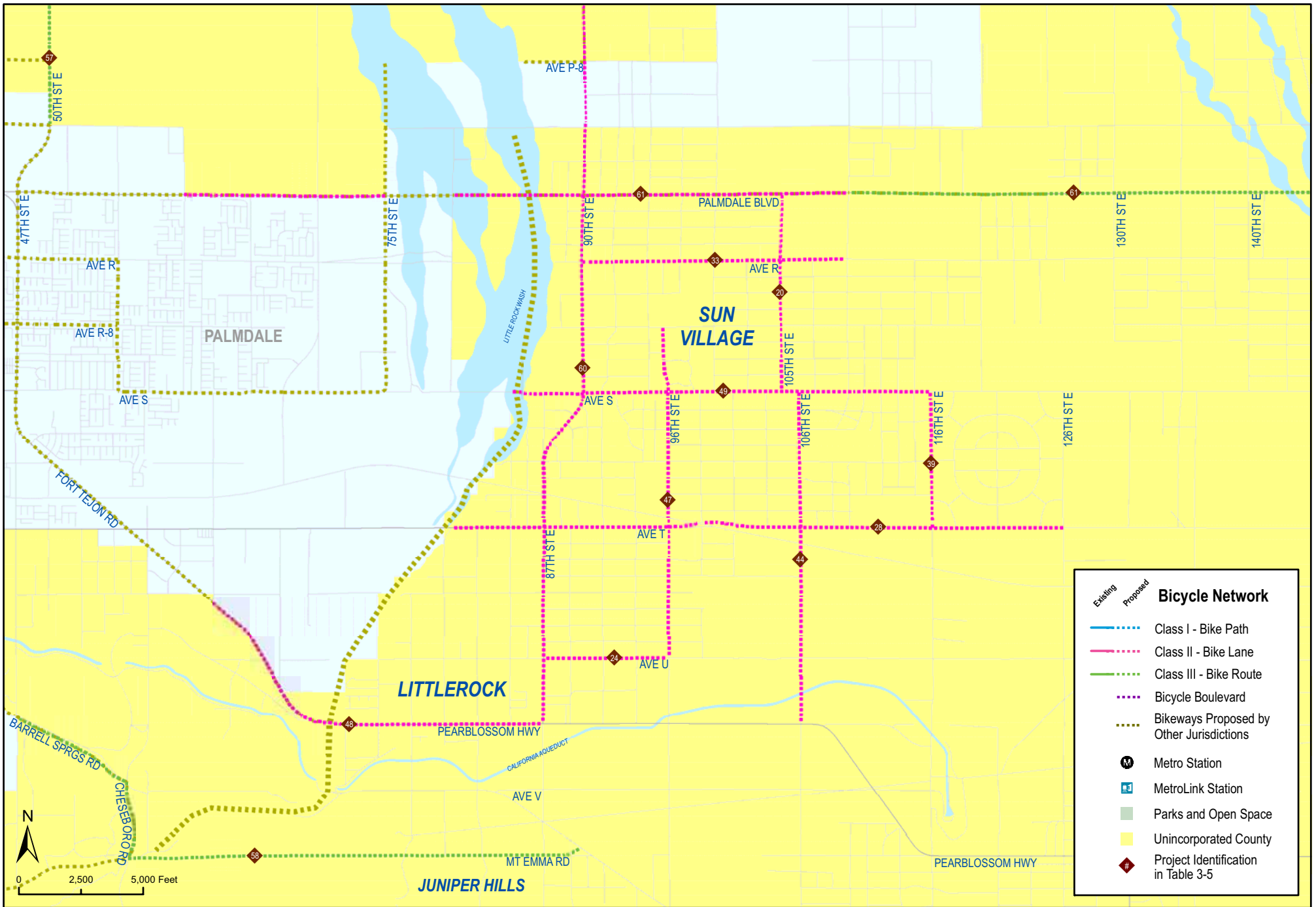


Figure 3-7: Antelope Valley Planning Area Proposed Bicycle Facilities

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**Figure 3-8: Quartz Hill and White Fence Farms-El Dorado Proposed Bicycle Facilities**



**Figure 3-9: Littlerock and Sun Village Proposed Bicycle Facilities**

**Los Angeles County Bicycle Master Plan**

Source: Los Angeles Metro (2006; 2010); Alta Planning + Design (2010)  
 Date: 1/31/2011

### 3.3 East San Gabriel Valley Planning Area

The East San Gabriel Valley Planning Area is the easternmost planning area in the Los Angeles Basin, adjacent to the San Bernardino County border. It consists of the greatest number of unincorporated communities, many of which are small, non-contiguous communities interspersed with incorporated cities. They include: Avocado Heights, Charter Oak Islands, Covina Islands, East Azusa, East Irwindale, East San Dimas, Glendora Islands, Hacienda Heights, North Claremont, North Pomona, Northeast La Verne, Northeast San Dimas, Rowland Heights, South San Jose Hills, South Walnut, Valinda, Walnut Islands, West Claremont, West Puente Valley, and West San Dimas.

Approximately 274,000 people live in the primarily built-out East San Gabriel Valley unincorporated neighborhoods.<sup>23</sup> Figure D-2 in Appendix D contains the distribution of land uses across the planning area.

#### 3.3.1 Existing Bicycling Conditions

The unincorporated parts of East San Gabriel Valley Planning Area have 24.5 miles of existing County-maintained bikeways. Table 3-6 presents the location, classification, and mileage of existing bikeways within the communities.

**Table 3-6: East San Gabriel Valley Existing Bikeways**

Community	Segment	From	To	Class	Mileage
Avocado Heights and City of Industry	San Jose Creek Bicycle Path	Workman Mill Road	7th Avenue	1	2.1
Cities of Baldwin Park and Industry	San Gabriel River Bicycle Path	Ramona Boulevard	0.1 miles south of Fineview Street	1	2.8
City of Azusa	San Gabriel River Bicycle Path	San Gabriel Canyon Road	Huntington Road	1	2.6
Covina Islands	Hollenbeck Avenue	San Dimas Wash	0.1 miles south of Edna Place	3	0.6
Hacienda Heights	Cederlane Drive	Glendale Avenue	Fieldgate Avenue	3	0.2
Hacienda Heights	Colima Road	Allenton Avenue	Larkvane Road	2	3.5
Hacienda Heights	Fieldgate Avenue	Cederlane Drive	Wedgeworth Drive	3	0.1
Hacienda Heights	Garo Street	Stimson Avenue	Glenelder Avenue	3	0.4
Hacienda Heights	Glenelder Avenue	Garo Street	Cederlane Drive	3	0.2
Hacienda Heights	Halliburton Road	Stimson Avenue	Colima Road	2	1.2
Hacienda Heights	Pepperbrook Way	Wedgeworth Drive	Azusa Avenue	3	0.1
Hacienda Heights	Stimson Avenue	Gale Avenue	La Monde Street	3	1.1
Hacienda Heights	Stimson Avenue	La Monde Street	Colima Road	2	0.9
Hacienda Heights	Wedgeworth Drive	Fieldgate Avenue	Pepperbrook Way	3	1.2
Hacienda Heights,	Colima Road	Casino Drive	Allenton Avenue	3	1.2

<sup>23</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections

Rowland Heights					
South San Jose Hills	La Puente Road	Nogales Street	Trish Way	2	0.3

**Table 3-6: East San Gabriel Valley Existing Bikeways (continued)**

Community	Segment	From	To	Class	Mileage
South San Jose Hills	Nogales Street	0.1 miles south of Amanda Street	La Puente Road	2	0.3
Valinda	Lark Ellen Avenue	0.1 miles south of Francisquito Avenue	Maplegrove Street	3	0.5
Valinda	Temple Avenue	0.1 miles west of Ruthcrest Avenue	Asuza Avenue	3	1.1
Valinda	Valinda Avenue	0.1 miles south of Merced Avenue	Maplegrove Street	3	0.6
Valinda	Valinda Avenue	Burtree Street	Amar Road	2	0.3
Valinda	Valinda Avenue	Maplegrove Street	Meadowside Street	2	0.1
Valinda	Valinda Avenue	Meadowside Street	Burtree Street	3	0.1
Walnut Islands	Cameron Avenue	Whitebirch Drive	Grand Avenue	2	0.6
Walnut Islands	Grand Avenue	Cameron Avenue	0.3 miles south of Hillside Drive	2	0.4
West Puente Valley	Sunset Avenue	Fairgrove Avenue	Temple Avenue	3	0.8
West Puente Valley	Temple Avenue	0.2 miles east of Baldwin Park Boulevard	Puente Avenue	3	0.5
West Puente Valley	Temple Avenue	Sunset Avenue	Unruh Avenue	3	0.7
				<b>Total</b>	<b>24.5</b>

\*County-maintained bikeways only

Figure 3-10 displays the existing bicycle network along with mass transit stations and locations of bicycle collisions<sup>24</sup> in the East San Gabriel Valley Planning Area. Los Angeles County Metropolitan Authority

MTA #	Corridor	Jurisdiction	Description	Constraints
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(LACMTA) identified one gap in the 2006 Metro Bicycle Transportation Strategic Plan, as shown in Table 3-7.

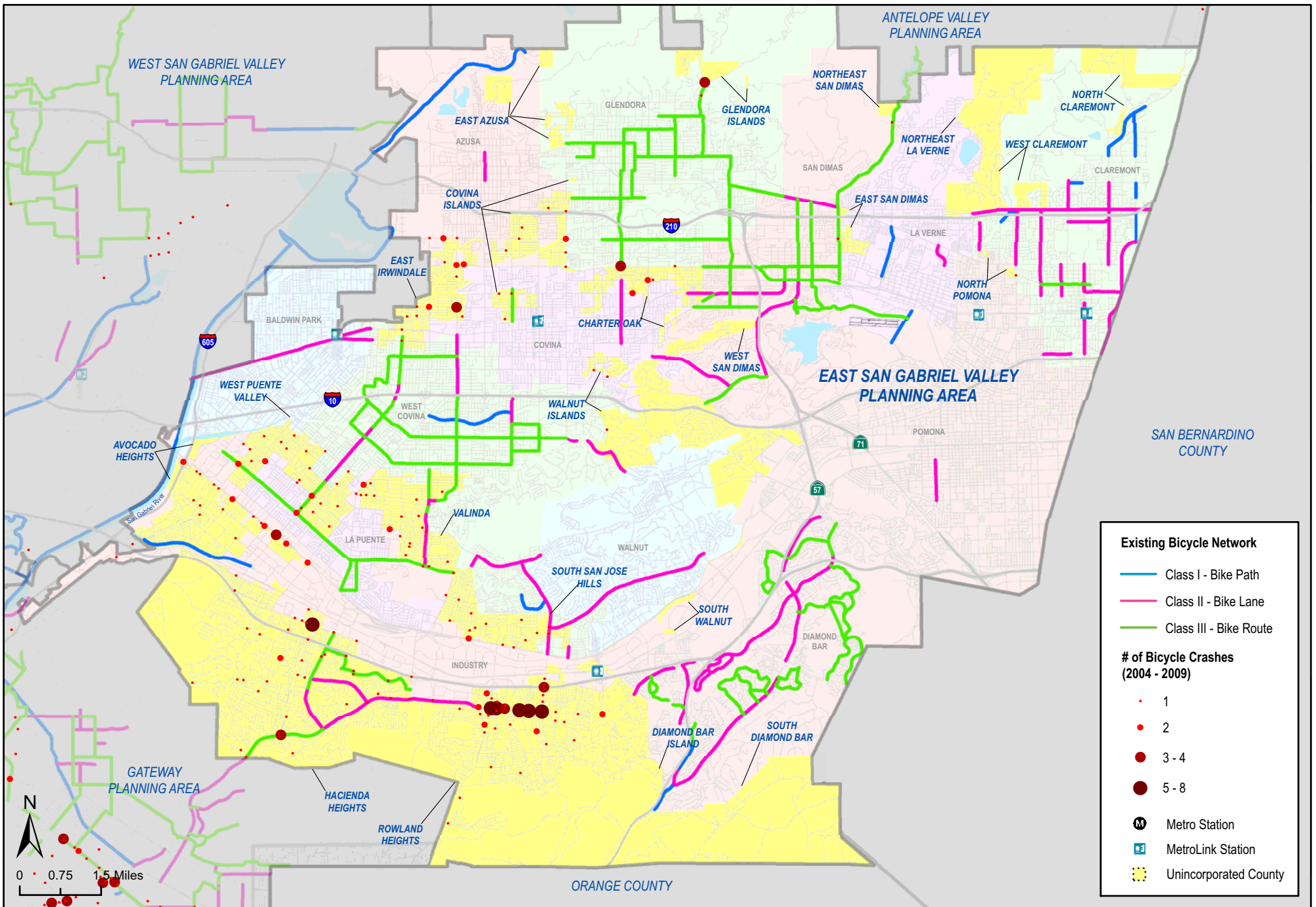
<sup>24</sup> Bicycle collision locations displayed for unincorporated county only.

29	Colima Road	LA County	Colima Road between Fullerton Rd and Diamond Bar City Limits in unincorporated Rowland Heights	ROW width
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**Table 3-7: MTA Identified Gaps in the East San Gabriel Inter-Jurisdictional Bikeway**

*Source: Los Angeles County Metropolitan Transportation Authority: 2006 Metro Bicycle Transportation Strategic Plan, p. 103-104*

According to the California Highway Patrol SWITRS data, a total of 256 bicycle collisions were reported within the unincorporated communities of East San Gabriel Planning Area from 2004 through 2009. Sixty-eight of these collisions occurred within Rowland Heights and seven at the intersection of Paso Real Avenue and Colima Road, the single greatest crash location in the planning area between 2004 and 2009. A nearly one-mile segment of Colima Road from Fullerton Drive to Nogales Street had a reported 32 bicycle collisions during the study period.



**Figure 3-10 East San Gabriel Valley Planning Area Existing Bicycle Network, Major Transit and Bicycle Crashes (2004-2009)**

### 3.3.2 Proposed Network

Table 3-8 summarizes the proposed bicycle network mileage by classification type within the East San Gabriel Valley Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would provide approximately **86.491.1** miles of facility across the planning area compared to its approximately 24.5 existing miles of bicycle facility.

**Table 3-8: East San Gabriel Valley Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class I – Bicycle Path	25.225.4	27.7%29.0%
Class II – Bicycle Lane	31.030.8	34.0%35.6%
Class III – Bicycle Route	30.627.5	33.6%34.8%
Bicycle Boulevard	4.33.0	4.7%3.8%
<b>Total</b>	<b>91.186.4</b>	<b>100%</b>

Table 3-9 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-11 displays the proposed bicycle network as well as existing bicycle facilities and major transit stops in the East San Gabriel Valley Planning Area. Figure 3-12 provides a closer view of the proposed bicycle network within the communities comprising the southwestern portion of the planning area: Avocado Heights, Hacienda Heights, Valinda, and West Puente Valley. Figure 3-13 provides a more focused view of the proposed bicycle network within the communities comprising the eastern portion of the planning area: Charter Oak, Covina Islands, East Azusa, East Irwindale, Glendora Islands, Walnut Islands, and West San Dimas.

**Table 3-9: East San Gabriel Valley Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	North Sunset Avenue	Amar Road	Temple Avenue	West Puente Valley, Valinda	2	0.4	1	145

2	San Jose Creek Proposed Bicycle Path	7 <sup>th</sup> Avenue	Murchison Avenue	Cities of Industry and Pomona; Hacienda Heights, Rowland Heights, South Walnut and Walnut Islands	1	15. <del>67</del>	1, <del>54</del>	140
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**Table 3-9: East San Gabriel Valley Planning Area Proposed Bicycle Facilities (Continue)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
3	Vineland Avenue	0.3 miles north of Rath Street (Walnut Creek)	Nelson Avenue	West Puente Valley and City of Industry <sup>A</sup>	3	1.3	1	125
4	Killian Avenue	Paso Real Avenue	Otterbien Avenue	Rowland Heights	3	0.4	4	125
5	Paso Real Avenue	Colima Road	Pathfinder Road	Rowland Heights	3	0.9	4	125
6	Pathfinder Road <sup>B</sup>	Paso Real Avenue	Alexdale Lane	Rowland Heights	2	0.4	4	125
7	Jellick Drive/ Los Padres Drive	Greenbay Drive	Aguiro Street	Rowland Heights	3	1.5	4	120
8	Amar Road	Vineland Avenue	North Puente Avenue	West Puente Valley	2	0.4	1	120
9	West Gladstone Street	Blender Street	Big Dalton Wash	East Irwindale and City of Glendora <sup>A</sup>	3	0.4 <del>8</del>	1.5	120
10	Balan Road/ Annendale Avenue	Brea Canyon Cut Off Road	Pathfinder Road	Rowland Heights	3	1.0	4	115
11	Batson Avenue	Colima Road	Aguiro Street	Rowland Heights	3	1.1	4	115
12	Nogales Street	La Puente Road	Hollingworth Street	West Covina	2	0.4	1	115
13	Pathfinder Road	Fullerton Road	Paso Real Avenue	Rowland Heights	2	1.6	4	115
14	Fullerton Road	Colima Road	Pathfinder Road	Rowland Heights	2	1.6	4	115
15	Nogales Street	Arenth Avenue	Pathfinder Road	Rowland Heights and City of Industry <sup>A</sup>	2	1.8	4.1	110
16	Pathfinder Road	Alexdale Lane	Canyon Ridge Road	Rowland Heights	2	1.9	4	110
17	Mauna Loa Avenue	Citrus Avenue	La Serena Drive	East Irwindale and City of Azusa <sup>A</sup>	3	0.6	1, 5	105
18	Willow Avenue	Francisquito Avenue	Amar Road	West Puente Valley and City of La Puente <sup>A</sup>	3	0.8	1	100
19	Las Lomitas Drive/ Newton Street	Vallecito Drive	Hacienda Boulevard	Hacienda Heights	3	1.1	4	100
20	Los Robles Avenue	7th Avenue	Kwis Avenue	Hacienda Heights	3	1.3	4	100

21	Fairway Drive/ Brea Canyon Cut Off Road	Walnut Drive	Bickford Drive	Rowland Heights	2	1.0	4	100
22	Glendora Avenue	Arrow Highway	La Cienega Avenue	Charter Oak	2	0.3	5	100
23	Thompson Creek Proposed Bicycle Path <sup>E</sup>	Lockhaven Way <u>White Avenue</u>	White Avenue <u>Murchison Avenue</u>	City of Pomona	1 <u>3</u>	2.3 <u>1.4</u>	<u>5</u> <u>1</u>	100
24	Kwis Avenue	Three Palms Avenue	Newton Street	Hacienda Heights	3	0.6	4	95

**Table 3-9: East San Gabriel Valley Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
25	Walnut Avenue/ Echelon Avenue/ Ranlett Avenue	Francisquito Avenue	Temple Avenue	Valinda and City of Industry A	3	1.6	1	95
26	La Monde Street	Hacienda Boulevard	Stimson Avenue	Hacienda Heights	2	0.2	4	95
27	Temple Avenue	Azusa Avenue	Woodgate Drive	South San Jose Hills	2	0.4	1	95
28	Azusa Avenue	Colima Road	Glenfold Drive	Hacienda Heights	2	0.6	4	95
	Azusa Avenue	Glenfold Drive	Tomich Road		3	0.1		
29	Gale Avenue	7th Avenue	Stimson Avenue	Hacienda Heights and City of Industry A	2	2.0	<u>1</u> <u>4</u>	95
30	Gemini Street	Azusa Avenue	Shipman Avenue	South San Jose Hills	3	0.6	1	90
31	Aguiro Street	Fullerton Road	Los Padres Drive	Rowland Heights	3	0.7	4	90
32	Amar Road	Willow Avenue	North Unruh Avenue	West Puente Valley	2	1.5	1	90
33	Three Palms Avenue/ Farmstead Avenue/ Lujon Street	Kwis Avenue	Stimson Avenue	Hacienda Heights	3	1.0	4	85
34	Camino Del Sur	Vallecito Drive	Colima Road	Hacienda Heights	2	0.9	4	85
35	Colima Road	Casino Drive	Allenton Avenue	Hacienda Heights	2	1.2	4	85
36	Halliburton Road	Hacienda Boulevard	Stimson Avenue	Hacienda Heights	2	0.2	4	85

37	Rath Street/ Stichman Avenue/ Barrydale Street/ Mayland Avenue/ Nolandale Street/ Siesta Avenue/ Fairgrove Avenue/ Sandy Hook Avenue / Maplegrove Street	Vineland Avenue	Lark Ellen Avenue	West Puente Valley, Valinda and Cities of La Puente A and West Covina <sup>A</sup>	BB	<del>3.0</del> 4.3	1	85
38	Big Dalton Wash Proposed Bicycle Path <sup>D</sup>	Irwindale Avenue  Lark Ellen Avenue  Arrow Hwy	<del>Barranca Avenue</del> Lark Ellen Avenue  Azusa Avenue  N. Barranca Avenue	Cities of Azusa and Irwindale; Covina Islands and East Irwindale	1  3  1	<del>2.6</del> 1.0  1.1  1.6	1, 5	85
39	Rockvale Avenue	Interstate 210	Woodcroft Street	East Irwindale	3	0.8	5	80
40	Los Altos Drive	Vallecito Drive	Hacienda Boulevard	Hacienda Heights	3	0.9	4	80

**Table 3-9: East San Gabriel Valley Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
41	Colima Road	Brea Canyon Cut Off Road	City of Diamond Bar boundary (0.1 miles east of Tierra Luna)	Rowland Heights	2	0.7	4	80
42	Irwindale Avenue	Cypress Street	Badillo Street	East Irwindale	2	0.6	<del>5</del> 1	80
43	Puente Avenue/ Workman Mill Road	Barrydale Street	San Jose Creek Bicycle Path	West Puente Valley and City of Industry <sup>A</sup>	2	<del>3.2</del> 3.5	1	80
44	San Jose Creek Proposed Bicycle Path	San Gabriel River Bicycle Path	Workman Mill Avenue	Avocado Heights and Whittier Narrows	1	0.7	4	80
45	Covina Hills Road	San Joaquin Road	Via Verde	Walnut Islands and Cities of Covina A and San Dimas <sup>A</sup>	3	2.0	5	75
46	Colima Road	Larkvane Road	Brea Canyon Cut Off Road	Rowland Heights	2	2.3	4	75
47	Angelcrest Drive	Newton Avenue	La Subida Drive	Hacienda Heights	3	0.4	4	70

48	La Subida Drive	Vallecito Drive	Hacienda Boulevard	Hacienda Heights	3	0.9	4	70
49	Vallecito Drive	Los Robles Avenue	Camino Del Sur	Hacienda Heights	3	1.6	4	70
50	Brea Canyon Cut Off Road	Bickford Drive	Pathfinder Road	Rowland Heights	3	0.5	4	70
51	Arrow Highway	Glendora Avenue	Valley Center Boulevard	Charter Oak and City of Glendora <sup>A</sup>	2	1.5	5	70
52	Puente Creek Proposed Bicycle Path <sup>C</sup>	Sunset Avenue (San Jose Creek)	<a href="#">Azusa Avenue</a>	Avocado Heights, Valinda and Cities of Industry and La Puente	1	<del>3.9</del> <a href="#">1.7</a>	1	70
		<a href="#">Temple Avenue</a>	<a href="#">Hacienda Boulevard</a>		<a href="#">3</a>	<a href="#">0.4</a>		
		<a href="#">Hacienda Boulevard</a>	<a href="#">Azusa Avenue</a>		<a href="#">1</a>	<a href="#">2.2</a>		
53	7th Avenue	Clark Avenue	Palm Avenue	Hacienda Heights	2	0.5	1,4	65
	7th Avenue/ Orange Grove Avenue	Palm Avenue	Beech Hill Drive		3	0.8		
54	Hacienda Boulevard	Colima Road	0.2 miles north of Walbrook Drive	Hacienda Heights	2	2.4	1,4	65
55	Amar Road	Alieron Avenue	Azusa Avenue	Valinda	2	1.6	1	65
56	Countrywood Avenue	Wedgeworth Drive	Colima Road	Hacienda Heights	2	0.5	4	60
57	Valley Center Avenue	Arrow Highway	Badillo Street	Charter Oak and City of San Dimas <sup>A</sup>	2	0.6	5	60

**Table 3-9: East San Gabriel Valley Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
58	Glendora Mountain Road	4.4 miles north of Big Dalton Canyon Road	Big Dalton Canyon Road	East Azusa, Antelope Valley Planning Area and City of Glendora <sup>A</sup>	3	4.4	4,5	60
<b>Total Mileage</b>						<b><a href="#">86.491.1</a></b>		

<sup>A</sup> *Part of project traverses through or along boundary of incorporated city*

<sup>B</sup> *Proposed segment overlaps with Early Action bicycle project identified by County of Los Angeles*

<sup>C</sup> *Proposed segment requires on-street alignment between Temple Avenue and Hacienda Boulevard*

<sup>D</sup> *Proposed segment requires on-street alignment between Lark Ellen Avenue and Arrow Highway*

<sup>E</sup> *Proposed segment requires on-street alignment between White Avenue and Murchison Avenue*

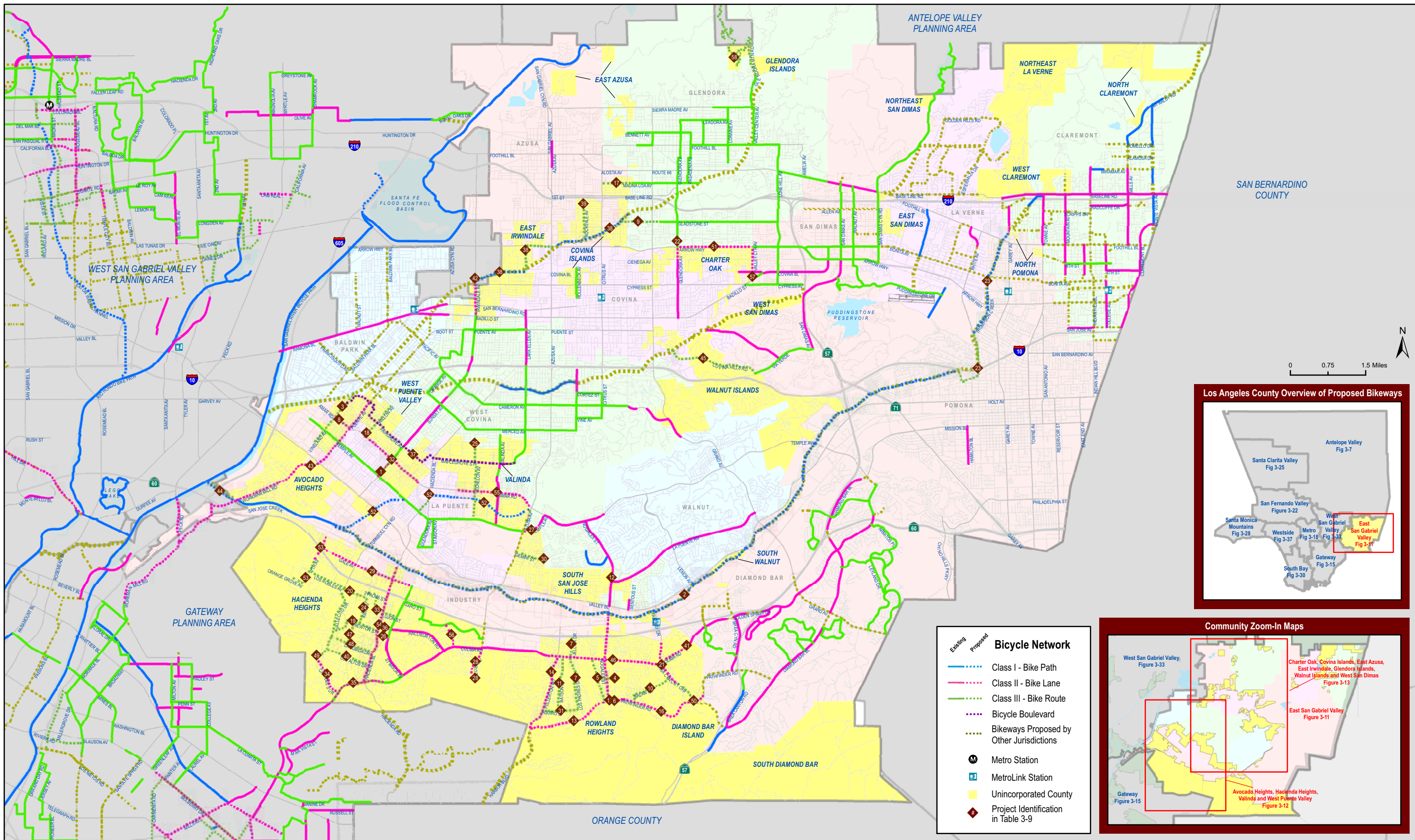
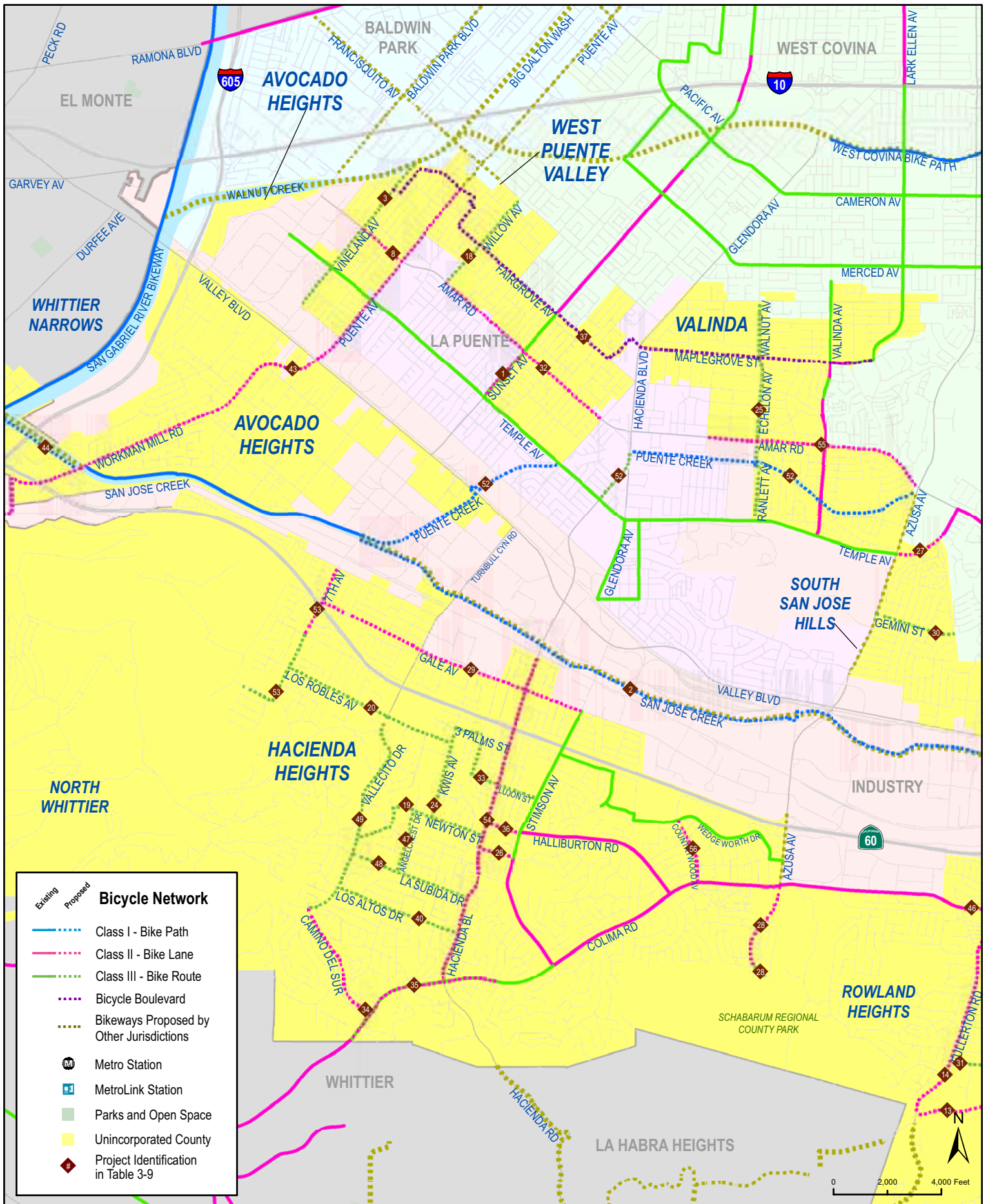
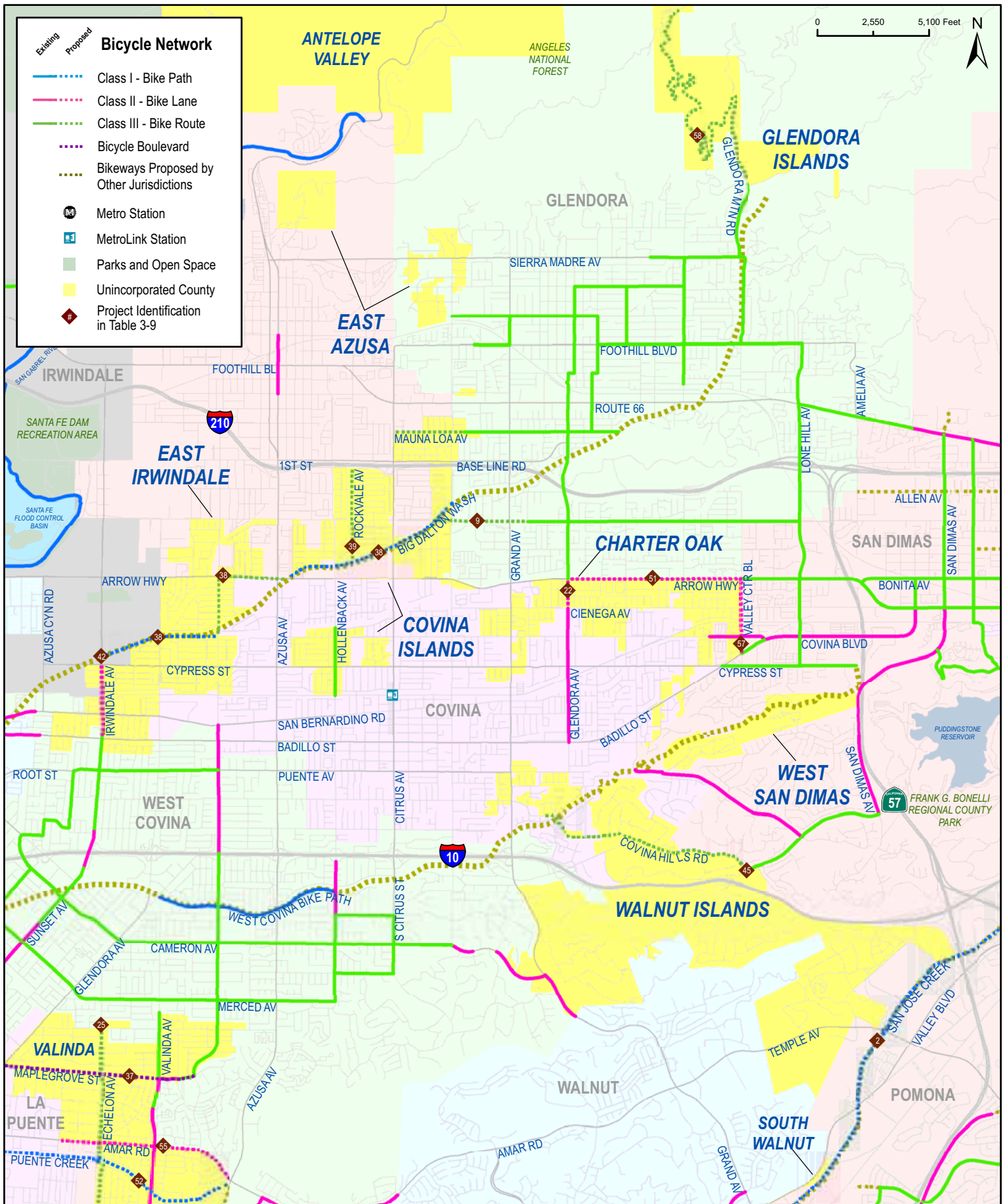


Figure 3-11: East San Gabriel Valley Planning Area Proposed Bicycle Facilities

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**Figure 3-12: Avocado Heights, Hacienda Heights, Valinda and West Puente Valley Proposed Bicycle Facilities**



**Figure 3-13: Charter Oak, Covina Islands, East Azusa, East Irwindale, Glendora Islands, Walnut Islands and West San Dimas Proposed Bicycle Facilities**

### 3.4 Gateway Planning Area

The Gateway Planning Area is located in the southern portion of the County of Los Angeles, bordering Orange County, the Metro Planning Area, and the West and East San Gabriel Valley Planning Areas. The planning area includes the following urban unincorporated islands: East Rancho Dominguez, North Whittier, Rancho Dominguez, South Whittier-Sunshine Acres, and West Whittier-Los Nietos. Approximately 129,000 people live in the Gateway Planning Area unincorporated neighborhoods.<sup>25</sup>

Most of these relatively dense unincorporated communities are predominately residential, interspersed with a mix of education, commercial, office, facilities, open space, and recreational land uses. North Whittier, however, is primarily open space, whereas Rancho Dominguez and the Bandini Islands are dominated by industrial land uses. Figure D-3 in Appendix D displays the Gateway Planning Area communities' current land uses.

#### 3.4.1 Existing Bicycling Conditions

The Gateway Planning Area unincorporated communities contain 56.1 miles of existing bikeways, including over 45 miles of County-maintained Class I. Table 3-10 presents the location, classification, and mileage of existing bikeways within the communities.

**Table 3-10: Gateway Planning Area Existing Bikeways**

Community	Segment	From	To	Class	Mileage
Bandini Islands, Cities of Bell, Compton, Cudahy, Long Beach, Paramount, South Gate and Vernon	Los Angeles River Bicycle Path	Atlantic Boulevard	Golden Shore Street	1	16.7
Cerritos Islands, City of Cerritos	Coyote Creek Bikeway	Artesia Boulevard	Crescent Avenue	1	2.9
Cities of Bellflower, Cerritos, Downey, Lakewood, Long Beach, Norwalk and Pico Rivera; West Whittier-Los Nietos	San Gabriel River Bicycle Path	0.2 miles south of Siphon Road	Wardlow Road	1	15.3
Cities of Bell Gardens, Commerce, Downey, Pico Rivera and South Gate	Rio Hondo Bicycle Path	0.2 miles north of Washington Boulevard	Imperial Highway (Los Angeles River)	1	6.0
Cities of Cerritos and Santa Fe Springs	Coyote Creek Bicycle Path (North Fork Coyote Creek)	Foster Road	Artesia Boulevard	1	2.7

<sup>25</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections

**Table 3-10: Gateway Planning Area Existing Bikeways (continued)**

Community	Segment	From	To	Class	Mileage
Rancho Dominguez	Compton Creek Bicycle Path	0.1 miles north of Homestead Place	Del Amo Boulevard	1	1.7
South Whittier-Sunshine Acres	La Cañada Verde	Mulberry Drive	Broadway	1	0.1
South Whittier-Sunshine Acres	Greenleaf Avenue	0.1 miles north of Ann Street	Barton Road	3	0.3
South Whittier-Sunshine Acres	Lambert Road	Leffingwell Road	County of Los Angeles border	3	1.0
South Whittier-Sunshine Acres	Mulberry Drive	Painter Avenue	Scott Ave	3	2.9
South Whittier-Sunshine Acres	Santa Gertrudes Avenue	Leffingwell Road	Lemon Drive	3	0.5
South Whittier-Sunshine Acres	Scott Avenue	Mulberry Drive	Lemon Drive	3	0.8
West Whittier-Los Nietos	Broadway	Whittier Blvd	Norwalk Boulevard	3	1.4
West Whittier-Los Nietos	Dunlap Crossing Road	San Gabriel River Bicycle Path	Norwalk Boulevard	3	0.3
West Whittier-Los Nietos	Mines Boulevard	Norwalk Boulevard	Lambert Road	2	1.0
West Whittier-Los Nietos	Norwalk Boulevard	Whittier Boulevard	Perkins Ave	3	2.3
West Whittier-Los Nietos	Sorensen Avenue	Lambert Road	Washington Boulevard	3	0.2
				<b>Total</b>	<b>56.1</b>

*\*County-maintained bikeways only*

Los Angeles County Metropolitan Authority (LACMTA) identified seven key gaps in the 2006 Metro Bicycle Transportation Strategic Plan, as shown in Table 3-11.

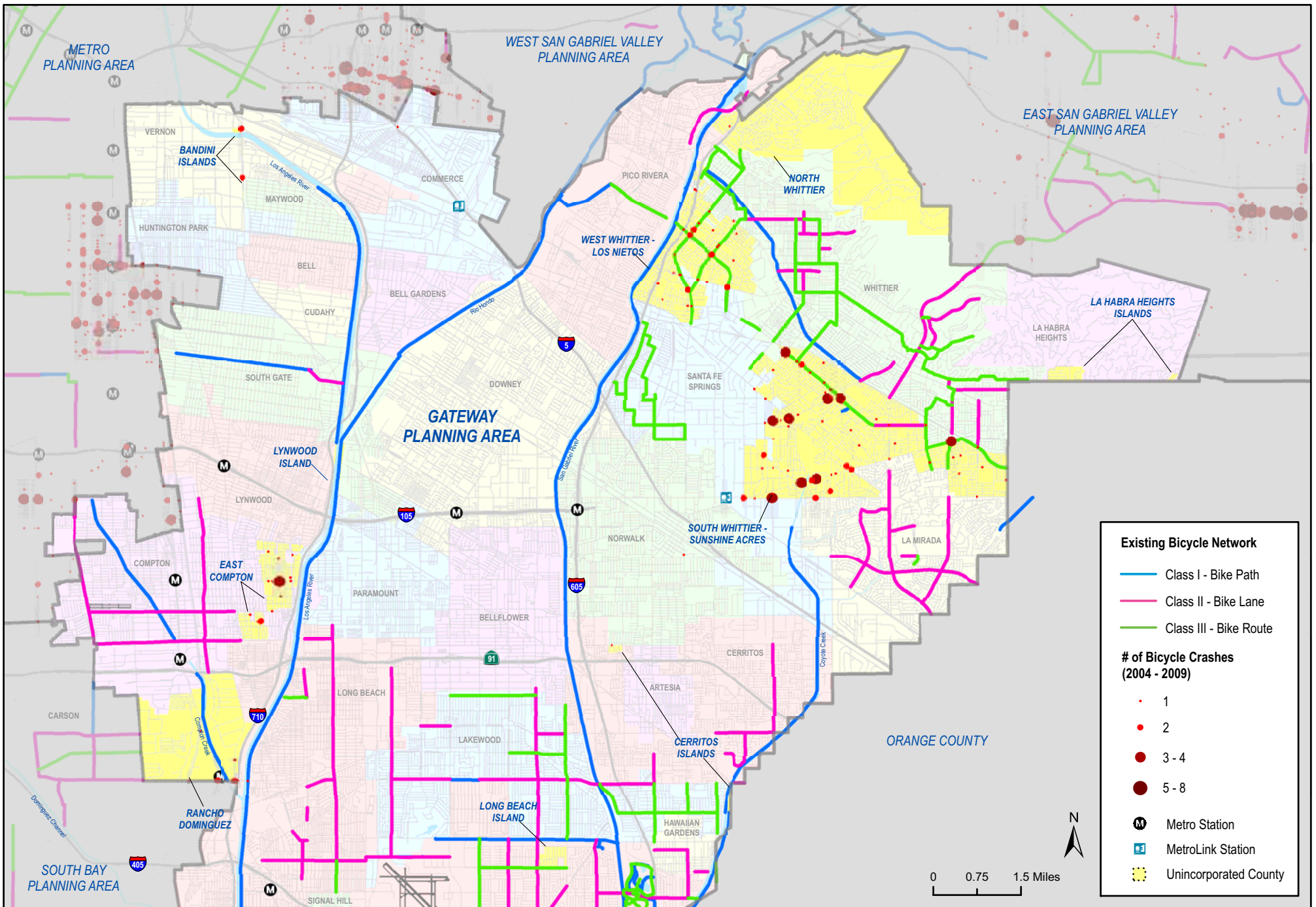
**Table 3-11: MTA Identified Gaps in the Gateway Inter-Jurisdictional Bikeway Network**

MTA #	Corridor	Jurisdiction	Description	Constraints
32	Whittier Greenway	LA County	Connection between Whittier City Limits and San Gabriel River trail	Route not identified
33	Workman Mill Road	LA County	Connection between Whittier Bike Path and Rio Hondo College	Route not identified
34	Connector	LA County / Carson	Connection between LA River Path and Compton Path terminus near Del Amo Boulevard	Route not identified
38	La Mirada / Colima Connector	LA County / La Mirada	Connection between Whittier (La Colima Road) and La Mirada Boulevard in La Mirada	Route not identified
40	Mills Avenue	LA County / Santa Fe Springs	At Mills Ave, connection between Norwalk Blvd and Whittier Greenway Bike Path	Route not identified
44	Coyote Creek	Orange County / LA County	Completion of Coyote Creek Bike Path east of North Fork on Coyote Creek Channel	ROW, bridges, jurisdictional issues
46	Gateway	Paramount / LA County	Connection between San Gabriel River and West Santa Ana Branch ROW at NW terminus of planned multi-city project	DWP ROW, Active RR, adjacent 105 Fwy

Source: Los Angeles County Metropolitan Transportation Authority: 2006 Metro Bicycle Transportation Strategic Plan, p. 103-104

Figure 3-14 displays the existing bicycle network along with major transit stations and bicycle collision sites in the Gateway Planning Area reported from 2004 through 2009. According to the California Highway Patrol SWITRS data, a total of 142 bicycle collisions were reported within the unincorporated communities of the Gateway Planning Area between 2004 and 2009. The greatest concentration by community occurred in South Whittier-Sunshine Acres, with 86 between 2004 and 2009.

As shown in Figure 3-14, two Metro lines service the planning area. Rancho Dominguez is serviced directly by a Blue Line Metro Station located where the Compton Creek bikeway terminates to the south. The Norwalk/Santa Fe Springs MetroLink station is located just outside the boundary of the South Whittier-Sunshine Acres community. The eastern terminus of the Metro Green Line is located approximately two miles west of the MetroLink Station.



**Figure 3-14: Gateway Planning Area Existing Bicycle Network, Major Transit and Bicycle Crashes (2004-2009)**

Los Angeles County Bicycle Master Plan

Source: Los Angeles Metro (2010); SWITRS (2010)  
Date: 10/13/2011

### 3.4.2 Proposed Network

Table 3-12 summarizes the proposed bicycle network mileage by classification type within the Gateway Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would provide approximately ~~39~~ 41 miles of facility across the planning area. Currently, unincorporated parts of Gateway Planning Area contain just over 56 miles of existing bicycle facilities.

**Table 3-12: Gateway Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class I – Bicycle Path	<del>5.75</del> <u>8</u>	<del>13.9%</del> <u>14.7%</u>
Class II – Bicycle Lane	<del>23.1</del> <u>23.3</u>	<del>56.5%</del> <u>59.1%</u>
Class III – Bicycle Route	<del>12.1</del> <u>10.3</u>	<del>29.6%</del> <u>26.2%</u>
<b>Total</b>	<del>40.9</del> <u>39.4</u>	<del>100%</del> <u>100%</u>

Table 3-13 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-15 displays the proposed bicycle network as well as existing bicycle facilities and major transit stops within the Gateway Planning Area. Figure 3-16 provides a more detailed view of the proposed bicycle network within the communities of South Whittier-Sunshine Acres and West Whittier-Los Nietos.

**Table 3-13: Gateway Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	Workman Mill Road	San Jose Creek Bicycle Path	Strong Avenue	North Whittier, Avocado Heights and City of Industry <sup>A</sup>	2	<del>3.6</del> <u>4</u>	1, 4	145
2	Compton Creek Proposed Bicycle Path	Del Amo Boulevard	Los Angeles River Bicycle Path	Rancho Dominguez and City of Long Beach	1	0.5	2, 4	120
3	Mills Avenue	Telegraph Road	Lambert Road	South Whittier-Sunshine Acres	2	1.4	<del>1, 4</del>	110
4	Colima Road	La Mirada Boulevard	Poulter Drive	South Whittier-Sunshine Acres	3	1.2	4	105
	Colima Road	Poulter Drive	Leffingwell Road		2	0.3		
5	Ceres Avenue	Broadway	Telegraph Road	South Whittier-Sunshine Acres	3	0.7	4	100

6	Mulberry Drive	Greenleaf Avenue	Colima Road	South Whittier-Sunshine Acres and City of Whittier <sup>A</sup>	2	2.2	4	100
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**Table 3-13: Gateway Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
7	Atlantic Avenue	Rosecrans Avenue	Alondra Boulevard	East Rancho Dominguez and City of Compton <sup>A</sup>	3	1.0	2	100
8	E. Victoria Street	S. Santa Fe Avenue	Susana Road	Rancho Dominguez	2	0.5	2	100
9	Compton Boulevard	Harris Avenue	Los Angeles River Bicycle Path	East Rancho Dominguez and City of Paramount <sup>A</sup>	2	0.8	2,4	100
10	Imperial Highway	Shoemaker Avenue	Leffingwell Road	South Whittier-Sunshine Acres and Cities of La Mirada <sup>A</sup> & Santa Fe Springs <sup>A</sup>	2	0.3	4	100
	Leffingwell Road	Imperial Highway	Scott Avenue		2	3.0		
11	Rivera Road	Pioneer Boulevard	Norwalk Boulevard	West Whittier-Los Nietos and City of Santa Fe Springs <sup>A</sup>	3	0.7	4	95
12	1st Avenue	Lambert Road	Imperial Highway	South Whittier-Sunshine Acres	2	0.8	4	95
13	Rosecrans Avenue	Butler Avenue	Gibson Avenue	East Rancho Dominguez and City of Compton <sup>A</sup>	2	0.5	2	95
14	South Susana Road	East Artesia Boulevard	Del Amo Boulevard	Rancho Dominguez	2	2.0	2	95
15	Broadway	Mills Avenue	Colima Road	South Whittier-Sunshine Acres	3	0.9	4	90
16	Santa Fe Avenue	Artesia Boulevard	0.1 miles south of Reyes Avenue (Compton Creek Bicycle Path)	Rancho Dominguez	2	1.0	2	90
17	Saragosa Street/ Pioneer Boulevard	Norwalk Boulevard	Los Nietos Road	West Whittier-Los Nietos and City of Santa Fe Springs <sup>A</sup>	3	1.43	4	90
18	Compton Creek Proposed Bicycle Path	Greenleaf Boulevard	State Route 91	City of Compton	1	0.87	2	90
19	Palo Verde Avenue	Parkcrest Street	Conant Street	Long Beach Island and City of Long Beach <sup>A</sup>	3	0.45	2,4	85
20	North Fork Coyote	Leffingwell Road	Foster Road	South Whittier-Sunshine	1	0.8	4	85

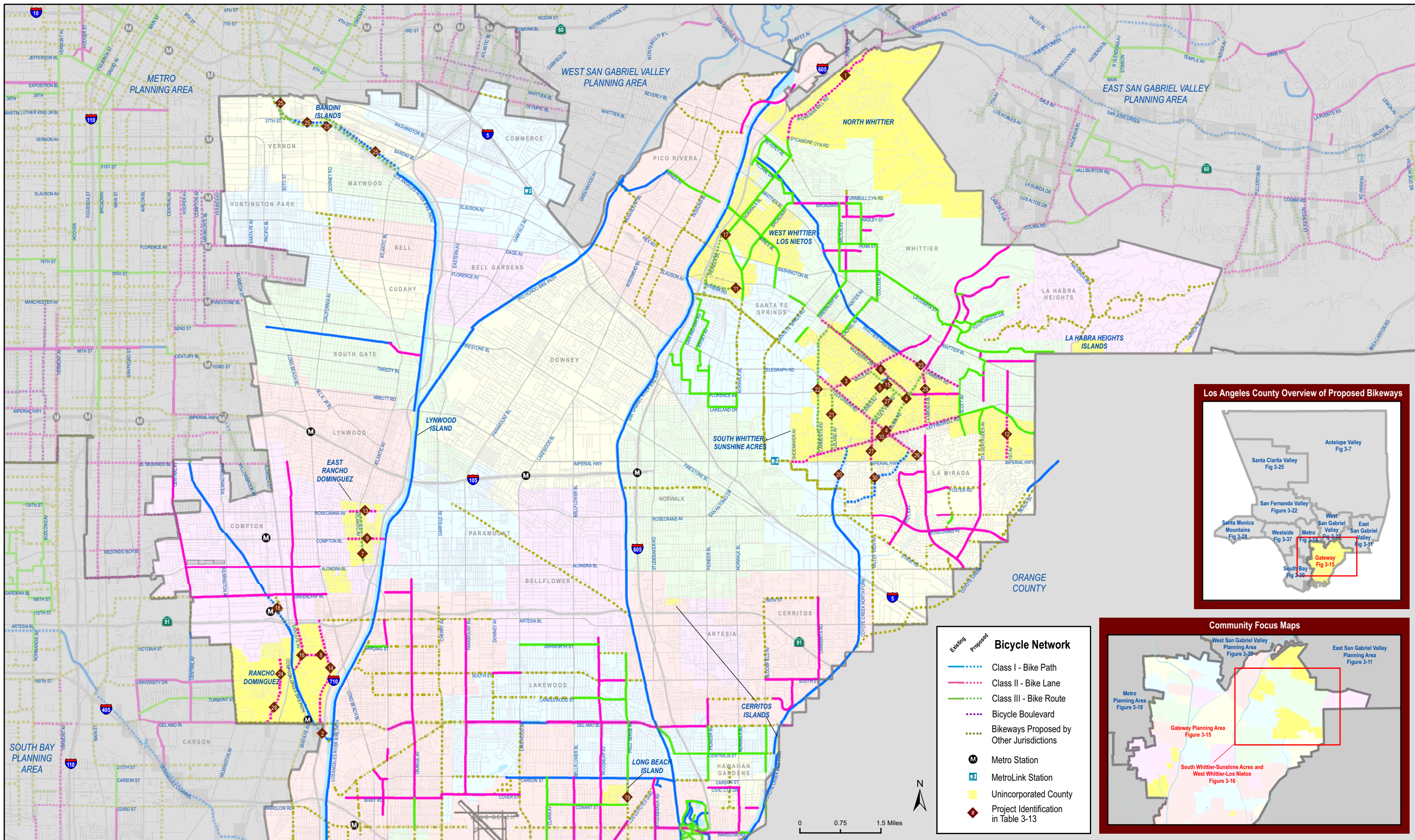
	Creek Proposed Bicycle Path			Acres, City of Santa Fe Springs				
21	Leland Avenue	Mills Avenue	Leffingwell Road	South Whittier-Sunshine Acres	3	1.2	4	80
22	Carmenita Road	Mulberry Drive	Leffingwell Road	South Whittier-Sunshine Acres and City of Santa Fe Springs <sup>A</sup>	3	2.5	4	80

**Table 3-13: Gateway Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
23	Lambert Road	Mills Avenue	Scott Avenue	South Whittier-Sunshine Acres and City of Whittier <sup>A</sup>	2	1.3	4	80
24	Laurel Park Road	East Victoria Street	South Rancho Way	Rancho Dominguez	2	0.6	2	75
25	Los Angeles River Proposed Bicycle Path <sup>B</sup>	Washington Boulevard	<del>Atlantic Boulevard</del> Bandini Boulevard	Bandini Islands, City of Los Angeles, City of Vernon	<del>4</del> 3	<del>1.91</del> .0	21	75
		Bandini Boulevard	S. Downey Boulevard		1	0.6		
		S. Downey Boulevard	Bandini Boulevard		3	0.4		
26	Telegraph Road	Carmenita Road	Huchins Drive	South Whittier-Sunshine Acres and Cities of La Mirada <sup>A</sup> and Santa Fe Springs <sup>A</sup>	2	2.4	4	75
			Valley View Avenue	Broadway	Telegraph Road	South Whittier-Sunshine Acres	3	0.7
27	Valley View Avenue	Telegraph Road	Imperial Highway	Acres	2	0.78		
			28	South Rancho Way	Laurel Park Road	Del Amo Boulevard	Rancho Dominguez	2
29	La Mirada Boulevard	Colima Road	Leffingwell Road	South Whittier-Sunshine Acres	2	1.1	4	65
30	Milan Creek Proposed Bicycle Path	Marquardt Avenue	Telegraph Avenue	South Whittier-Sunshine Acres, City of La Mirada	1	1.8	4	30
<b>Total Mileage</b>						<b>39.4</b>		
						<b>40.9</b>		

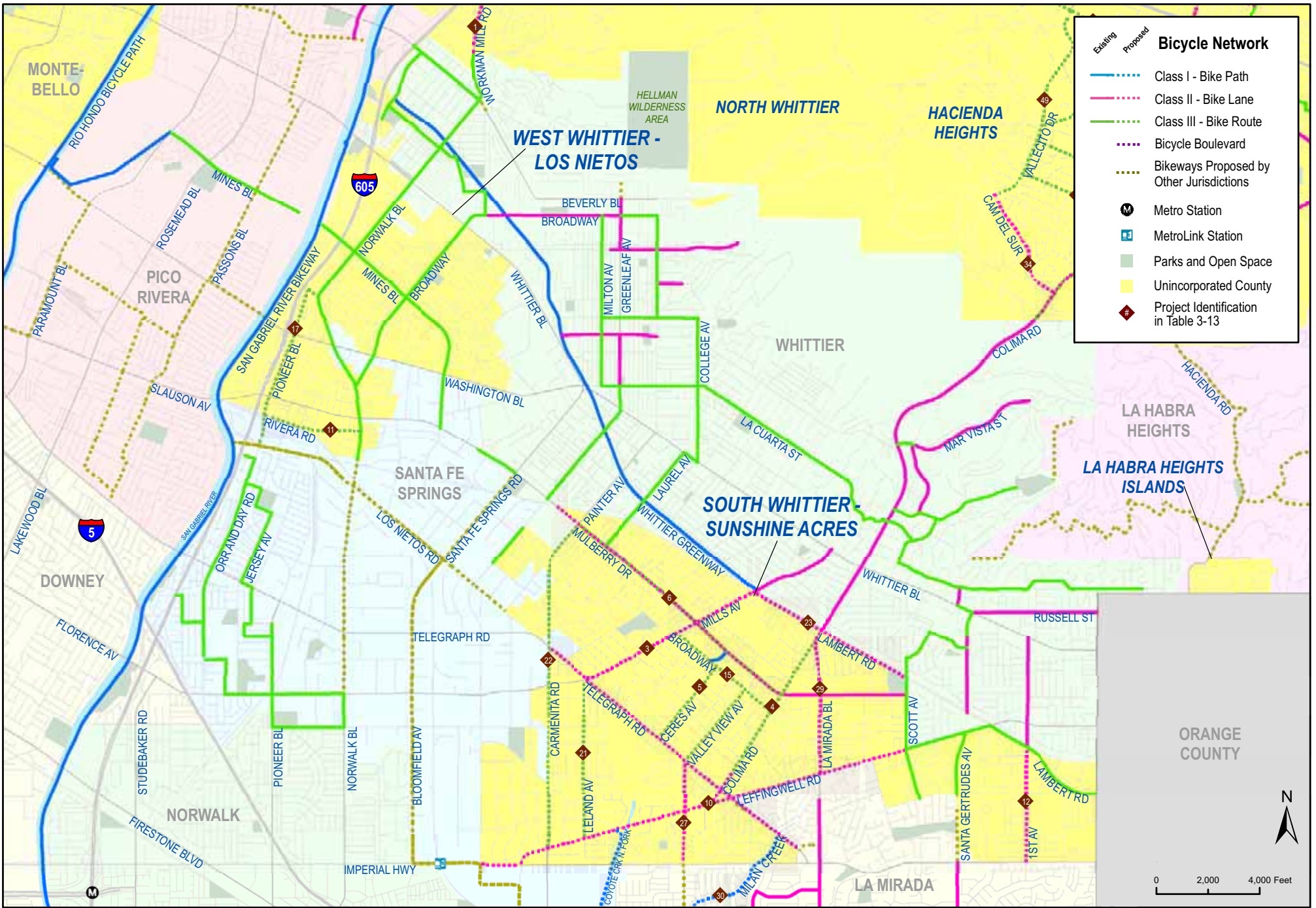
<sup>A</sup> Part of project traverses through or along boundary of incorporated city

<sup>B</sup> *Proposed project requires on-street alignment between Washington Boulevard and Bandini Boulevard and between Downey Road and Bandini Boulevard*



**Figure 3-15: Gateway Planning Area Proposed Bicycle Facilities**

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**Figure 3-16: South Whittier-Sunshine Acres and West Whittier-Los Nietos Proposed Bicycle Facilities**

### 3.5 Metro Planning Area

The Metro Planning Area is located in a dense urban area of central County of Los Angeles. The planning area’s unincorporated communities include East Los Angeles, Florence-Firestone, Walnut Park, West Athens-Westmont, West Rancho Dominguez-Victoria, and Willowbrook. This planning area also contains a large portion of the incorporated City of Los Angeles, including Downtown Los Angeles and South Los Angeles.

The planning area is ethnically diverse and densely populated with an estimated 317,000 people living within the approximately 21 square miles combined of unincorporated communities alone.<sup>26</sup> The communities are also transit-rich, transected by light-rail lines. Figure D-4 in Appendix D displays the Metro Planning Area’s mix of primarily commercial, mixed use, multi-family, and single-family residential and industrial land uses.

#### 3.5.1 Existing Bicycling Conditions

The Metro Planning Area unincorporated communities have 2.3 miles of existing bikeways. Table 3-14 presents the location, classification, and mileage of existing bikeways within the communities.

**Table 3-14: Metro Planning Area Existing Bikeways**

Community	Segment	From	To	Classes	Mileage
East Los Angeles	City Terrace Drive	Alma Avenue	Marengo Avenue	2	0.6
East Los Angeles	Gerhart Avenue	Via San Delarro	Via Campo	2	0.4
East Los Angeles	Herbert Avenue	Medford Street	Whiteside Street	2	0.2
Florence-Firestone	Holmes Avenue	Florence Avenue	Gage Avenue	2	0.5
West Athens-Westmont	98 <sup>th</sup> Street	Halldale Avenue	Vermont Avenue	2	0.6
				<b>Total</b>	<b>2.3</b>

*\*County-maintained bikeways only*

Figure 3-17 displays the existing bicycle network along with major transit stations and bicycle collision sites in the Metro Planning Area reported from 2004 through 2009.

Los Angeles County Metropolitan Authority (LACMTA) identified one key gap in the 2006 Metro Bicycle Transportation Strategic Plan, as shown in Table 3-15.

<sup>26</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections

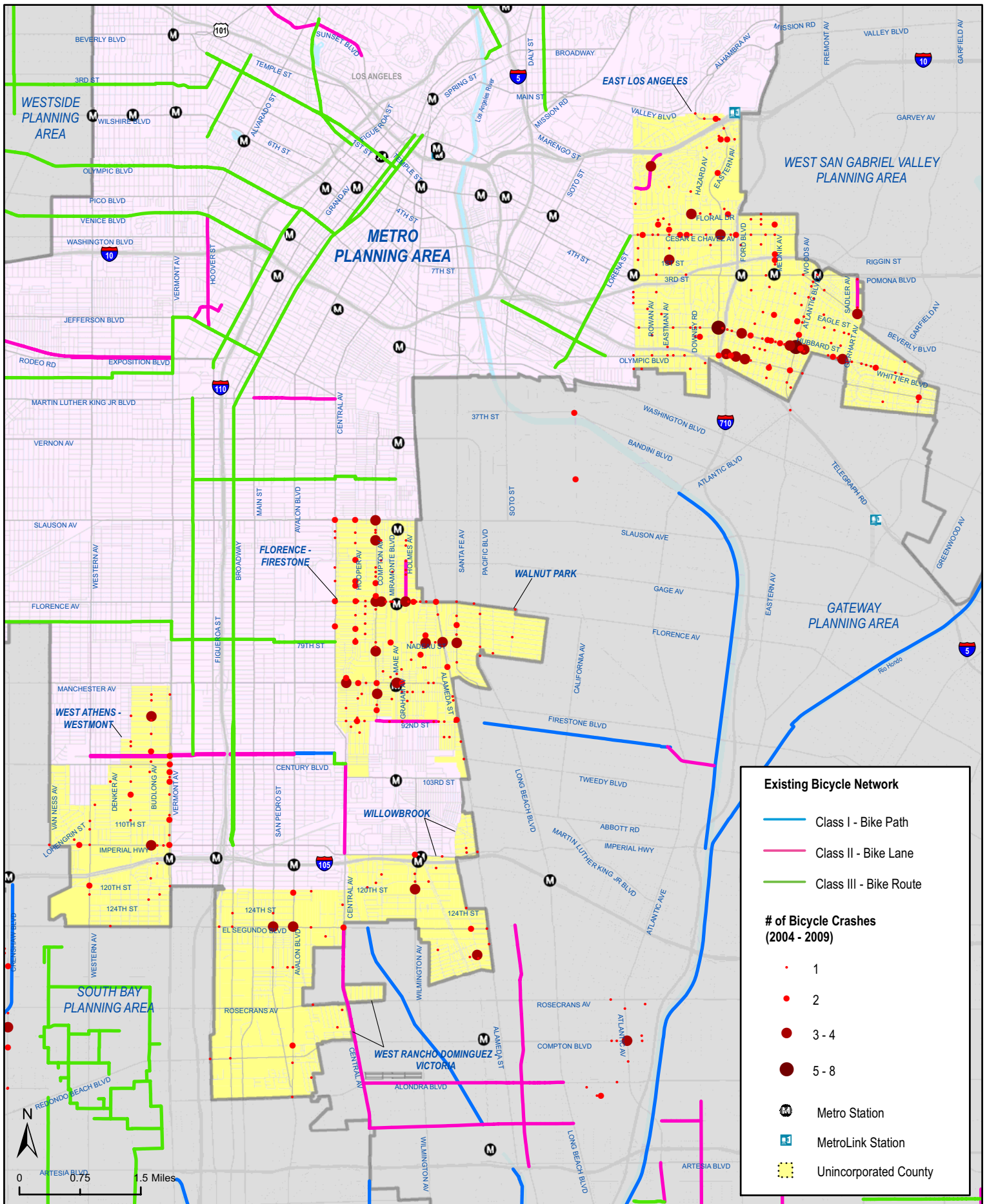
**Table 3-15: MTA Identified Gaps in the Metro Planning Area Inter-Jurisdictional Bikeway Network**

MTA #	Corridor	Jurisdiction	Description	Constraints
37	LA River	LA County / LA City	Los Angeles River through central LA, corridor being studied as part of Los Angeles River Revitalization	Active railroad and industrial uses

*Source: Los Angeles County Metropolitan Transportation Authority: 2006 Metro Bicycle Transportation Strategic Plan, p. 103-104*

According to the California Highway Patrol SWITRS data, a total of 530 bicycle collisions were reported within the unincorporated parts of the Metro Planning Area between 2004 and 2009. Two hundred and twenty-eight of these collisions occurred within East Los Angeles. There were six collisions at the intersection of Eastern Avenue and Whittier Boulevard, the single greatest crash location within the unincorporated parts of the planning area between 2004 and 2009. Locations within the Metro Planning Area have some of the highest bicycle crash rates in unincorporated Los Angeles County. The high crash rates are attributed to the high ridership within the planning area and a corresponding urgent need for improved bicycle infrastructure. The Plan contains a policy that prioritizes improvements at locations with high crash rates, and certain state and federal programs provide funding opportunities for mitigating dangerous conditions.

Also shown in Figure 3-17, the Metro Planning Area is transit-rich, providing opportunities to support multimodal trips between the planning area and locations throughout the region. All of the unincorporated communities are served by Metro Rail Lines. East Los Angeles is served by four stations along the Gold Line. Florence-Firestone and Willowbrook combined have several stations along the Blue and Green Line. The southernmost unincorporated communities, West Athens-Westmont and West Rancho Dominguez-Victoria, are served by the Green Line.



**Figure 3-17: Metro Planning Area Existing Bicycle Network, Major Transit Stations, and Bicycle Crashes (2004-2009)**

### 3.5.2 Proposed Network

Table 3-16 summarizes the proposed bicycle network mileage by classification type within the Metro Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would provide approximately 88 miles of facility across the planning area to bolster its total of 2.3 existing miles of bicycle facility within the unincorporated parts of the planning area.

**Table 3-16: Metro Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class I – Bicycle Path	0.70.6	0.8%0.7%
Class II – Bicycle Lane	48.148.2	54.6%54.9%
Class III – Bicycle Route	26.926.8	30.5%30.5%
Bicycle Boulevard	12.412.2	14.1%13.9%
<b>Total</b>	<b>88.187.8</b>	<b>100%100%</b>

Table 3-17 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-18 displays the proposed bicycle network as well as existing bicycle facilities and major transit stops within the Metro Planning Area. Figure 3-19 provides a more detailed view of the proposed bicycle network within the community of East Los Angeles. Figure 3-20 provides a more focused view of the proposed bicycle network within the communities comprising the central and southern portion of the planning area: Florence-Firestone, Walnut Park, West Athens-Westmont, West Rancho Dominguez-Victoria, and Willowbrook.

**Table 3-17: Metro Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority	Score
1	Crocket Boulevard	76 <sup>th</sup> Place	83 <sup>rd</sup> Street	Florence-Firestone	3	0.6	4,2	145	
2	Cesar Chavez Avenue	Indiana Street	Mednik Avenue	East Los Angeles	3	1.68	1	145	
	Cesar Chavez Avenue	Mednik Avenue	Vancouver Avenue		2	0.43			
3	Woods Avenue <sup>A</sup>	1 <sup>st</sup> Avenue	Olympic Boulevard	East Los Angeles	BB	1.35	1	145	
4	Normandie Avenue	98 <sup>th</sup> Street	El Segundo Boulevard	West Athens-Westmont	2	2.1	2	140	
5	East 68 <sup>th</sup> Street	Central Avenue	Compton Avenue	Florence-Firestone	3	0.5	4,2	135	

6	Maie Avenue/ Miramonte Boulevard	Slauson Avenue	92 <sup>nd</sup> Street	Florence-Firestone	BB	2.5	4, 2	135
7	Redondo Beach Boulevard	South Figueroa Street	Avalon Boulevard	West Rancho Dominguez-Victoria	2	1.0	2	135

**Table 3-17: Metro Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
8	Florence Avenue <sup>B</sup>	Central Avenue	Mountain View Avenue	Florence-Firestone and City of Huntington Park <sup>C</sup>	2	2.2	1, 2	135
9	Vermont Avenue	87 <sup>th</sup> Street	El Segundo Boulevard	West Athens-Westmont and City of Los Angeles <sup>C</sup>	2	2.9	2	135
10	Budlong Avenue	Manchester Avenue	El Segundo Boulevard	West Athens-Westmont	BB	3.0	2	130
11	El Segundo Boulevard	Figueroa Street	Central Avenue	Willowbrook	2	1.6	2	130
12	Compton Avenue	Slauson Avenue	92 <sup>nd</sup> Street	Florence-Firestone and City of Los Angeles <sup>C</sup>	2	2.5	4, 2	130
13	Broadway	East 121 Street	East Alondra Boulevard	West Rancho Dominguez-Victoria	2	2.5	2	130
14	Firestone Boulevard <sup>B</sup>	Central Avenue	Alameda Street	Florence-Firestone	2	1.4	4, 2	130
15	Imperial Highway	Van Ness Avenue	Vermont Avenue	West Athens-Westmont	2	1.5	2	130
16	Denker Avenue	Century Boulevard	Imperial Highway	West Athens-Westmont	3	1.0	2	125
17	Holmes Avenue	Slauson Avenue	Gage Avenue	Florence-Firestone	2	0.5	4, 2	125
18	Rosecrans Avenue	Figueroa Street	Central Avenue	Willowbrook and City of Compton <sup>C</sup>	2	1.7	2	125
19	Hazard Avenue	City Terrace Drive	Cesar Chavez Avenue	East Los Angeles	3	1.1	1	120
20	6 <sup>th</sup> Street	Ford Boulevard	Harding Avenue	East Los Angeles	3	1.8	1	120
21	92 <sup>nd</sup> Street	Central Avenue	Compton Avenue	Florence-Firestone	3	0.5	4, 2	120
	92 <sup>nd</sup> Street	Miner Street	Alameda Street	and City of Los Angeles <sup>C</sup>	3	0.3		
22	Ford Boulevard <sup>A</sup>	Floral Drive	Olympic Boulevard	East Los Angeles	3	1.8	1	120
23	Nadeau Street/	Central Avenue	State Street	Florence-Firestone	2	2.6	1, 2	120

Broadway								
24	Whiteside Street	Hebert Avenue	Eastern Avenue	East Los Angeles	3	0.6	1	115
25	Seville Avenue	East Florence Avenue	Broadway	Florence-Firestone	2	0.5	1,2	115
26	124 <sup>th</sup> Street	Slater Avenue	Alameda Street	Willowbrook and City of Compton <sup>c</sup>	3	1.5	2	110
27	Whitter Boulevard	Indiana Street	Ford Boulevard	East Los Angeles	3	1.2	1	110
28	Success Avenue/ Slater Avenue	Imperial Highway	El Segundo Boulevard	Willowbrook and City of Compton <sup>c</sup>	3	0.9	2	110
29	Avalon Boulevard	121st Street	Alondra Boulevard	West Rancho Dominguez-Victoria	2	2.5	2	110
30	Mednik Avenue/ Arizona Avenue A	Floral Drive	Olympic Boulevard	East Los Angeles	2	1.9	1	110

**Table 3-17: Metro Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
31	Whitter Boulevard	Ford Boulevard	Via Clemente Street	East Los Angeles	3	2.4	1	105
32	Imperial Highway	Central Avenue	Wilmington Avenue	Willowbrook and City of Los Angeles <sup>c</sup>	2	0.9	2	105
33	Alondra Boulevard	Figueroa Street	Avalon Boulevard	Rancho Dominguez-Victoria, and City of Carson <sup>c</sup>	2	1.0	2	105
34	Beverly Boulevard	Pomona Boulevard	Gerhart Avenue	East Los Angeles	3	0.8	21	100
35	Rowan Avenue/ Dennison Street/ Eastman Avenue <sup>A</sup>	Floral Drive	Olympic Boulevard	East Los Angeles	BB	1.8	1	100
36	Hubbard Street	Ford Boulevard	Mobile Street	East Los Angeles	BB	2.2	1	100
37	Gerhart Avenue	Via San Delarro Street	Eagle Street	East Los Angeles	2	0.2	1	100
	Gerhart Avenue	Eagle Street	Whittier Boulevard		3			
38	120th Street/ 119th Street <sup>A</sup>	Central Avenue	Wilmington Avenue	Willowbrook	2	0.8	2	100
	119th Street	Wilmington Avenue	Mona Boulevard		3			
39	Eastern Avenue	0.1 miles north of Whiteside Street	Olympic Boulevard	East Los Angeles	2	3.1	1	100
40	Olympic Boulevard	Indiana Street	Concourse Avenue	East Los Angeles	2	3.3	1	100

Chapter 3: Existing Conditions and Proposed Network

41	Wilmington Avenue	119th Street	El Segundo Boulevard	Willowbrook and City of Compton <sup>c</sup>	2	0.6	2	100
42	Western Avenue	108 <sup>th</sup> Street	El Segundo Boulevard	West Athens-Westmont	2	1.5	2	100
43	Medford Street	Indiana Street	Hebert Avenue	East Los Angeles	2	0.5	1	95
	Hebert Avenue	Whiteside Street	City Terrace Drive		3	0.1		
44	1 <sup>st</sup> Street	Indiana Street	Mednik Avenue	East Los Angeles	2	1.8	1	95
45	Margaret Avenue	Sadler Avenue	Hubbard Street	East Los Angeles	3	0.8	1	90
46	Willowbrook Avenue	119 <sup>th</sup> Street	Oris Street	Willowbrook	3	1.2	2	90
47	La Verne Avenue/ Gratian Street/ Ferris Avenue	3 <sup>rd</sup> Street	Telegraph Road	East Los Angeles	3	1.5	1	90
48	Floral Drive	Indiana Street	Mednik Avenue	East Los Angeles and City of Monterey Park <sup>c</sup>	3	1.8	1	90
49	Lohengrin Avenue/ 110 <sup>th</sup> Street	Imperial Highway	Budlong Avenue	West Athens-Westmont	BB	1.3	2	90

**Table 3-17: Metro Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
50	City Terrace Drive	0.1 miles east of Rowan Avenue	Hazard Avenue	East Los Angeles	3	0.5	1	90
	City Terrace Drive	Hazard Avenue	Eastern Avenue		2	0.4		
51	Willowbrook Avenue Proposed Bicycle Path <sup>A</sup>	Imperial Highway (at Rosa Parks Metro Station)	119 <sup>th</sup> Street	Willowbrook	1	0.34	2	90
52	Hooper Avenue	Slauson Avenue	95th Street	Florence-Firestone	2	2.7	2	90
53	Slauson Avenue	Central Avenue	Alameda Street	Florence-Firestone and City of Los Angeles <sup>c</sup>	2	1.1	1, 2	90
54	Central Avenue	121 <sup>st</sup> Street	127 <sup>th</sup> Street	West Rancho Dominguez-Victoria	2	0.5	2	85
55	Arroyo Seco Proposed Bicycle Path <sup>A</sup>	San Fernando Road	Avenue 26	City of Los Angeles	1	0.3	1	85
56	Hendricks Avenue	0.1 miles north of Hubbard Street	Ferguson Drive	East Los Angeles	3	0.8	1	80
57	Sadler Avenue	Pomona Boulevard	Whittier Boulevard	East Los Angeles	3	1.0	1	80
58	Downey Road	3 <sup>rd</sup> Avenue	Noakes Street	East Los Angeles	3	1.5	1	80
59	120 <sup>th</sup> Street	Western Avenue	Vermont Avenue	West Athens-	2	1.0	2	80

					Westmont			
60	El Segundo Boulevard	Wilmington Avenue	Alameda Street	Willowbrook	2	0.9	2	80
<b>Total Mileage</b>						<u>87.88</u>	<u>8.1</u>	

<sup>A</sup> Proposed segment overlaps with Early Action bicycle project identified by County of Los Angeles

<sup>B</sup> Proposed segment will be developed as part of the County's Transit Oriented District (TOD) development plan

<sup>C</sup> Part of project traverses through or along boundary of incorporated city



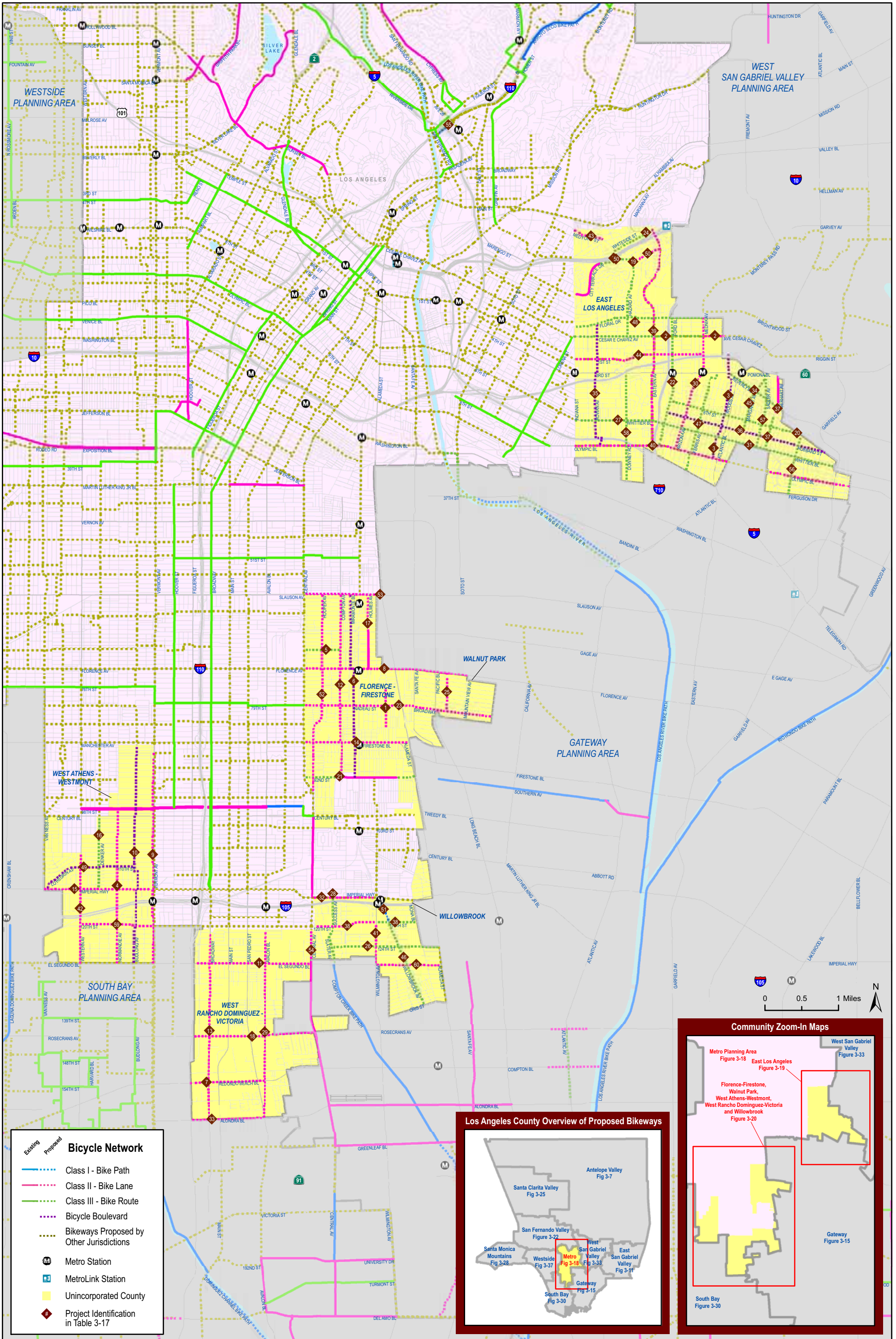
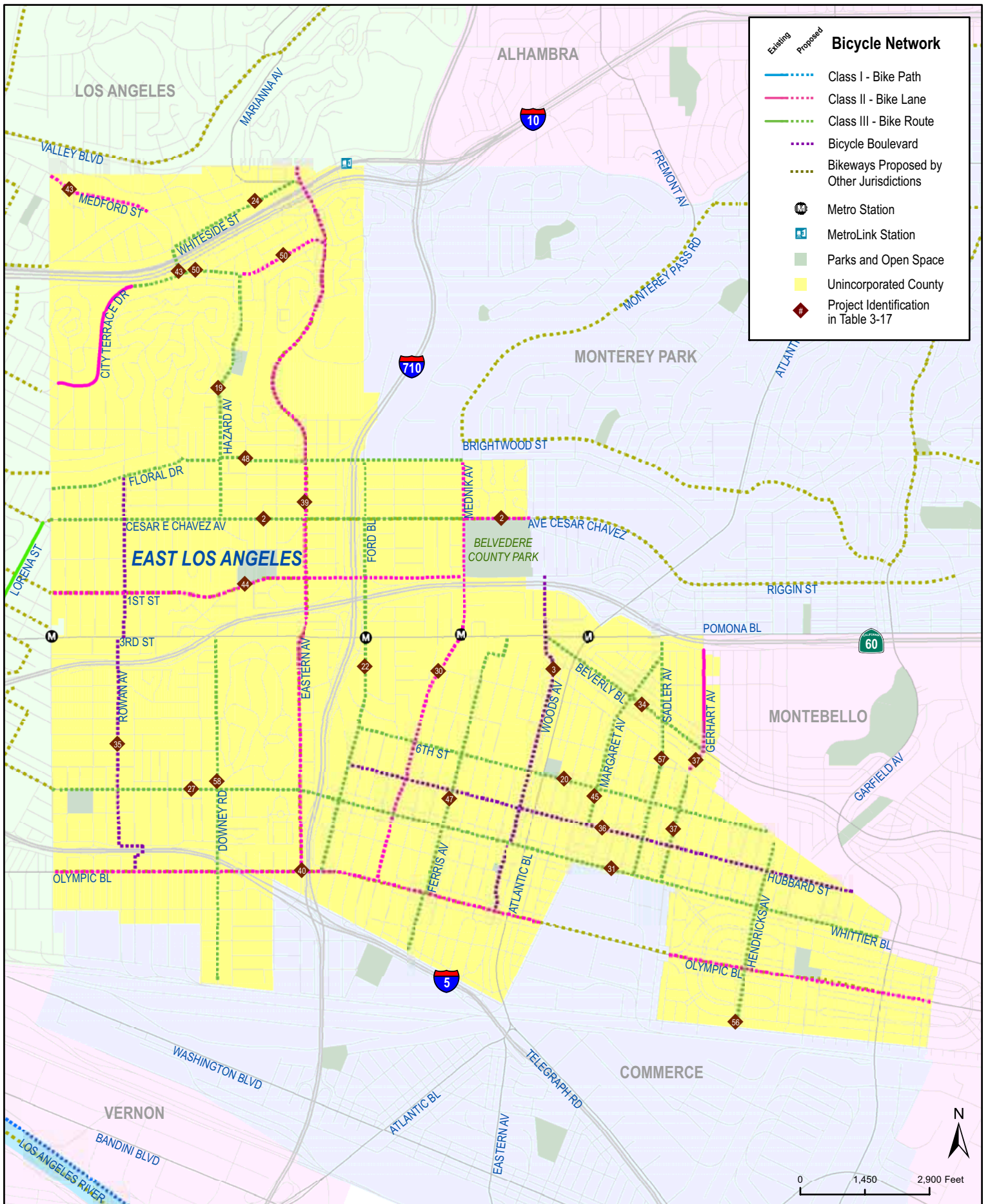


Figure 3-18: Metro Planning Area Proposed Bicycle Facilities

Los Angeles County Bicycle Master Plan

Source: Los Angeles Metro (2006; 2010); Alta Planning + Design (2010)  
Date: 10/13/11

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**Figure 3-19: East Los Angeles Proposed Bicycle Facilities**



## 3.6 San Fernando Valley Planning Area

The San Fernando Valley Planning Area is mostly incorporated with only a few small unincorporated communities scattered along the periphery of the planning area in the foothills of the mountain ranges surrounding San Fernando Valley. The planning area's unincorporated communities include Kagel Canyon, La Crescenta-Montrose, Lopez Canyon, Oat Mountain, Sylmar Island, Twin Lakes, Universal City, West Chatsworth, and West Hills. The unincorporated parts of the San Fernando Valley have an estimated population of 28,000 residents.<sup>27</sup> These communities encircle the incorporated San Fernando Valley, which includes the cities of Los Angeles (San Fernando Valley portion), Burbank, Glendale, and San Fernando.

The San Fernando Valley is demarcated by the Santa Susana Mountains to the northwest, San Gabriel Mountains to the northeast, Verdugo Mountains to the east, and the Santa Monica Mountains to the south separating the San Fernando Valley from the Los Angeles Basin. The Chalk Hills to the south and the Simi Hills to the west also define the valley area. The planning area unincorporated communities are, for the most part, sparsely populated, with only La Crescenta-Montrose having a sizable population (18,907).

Figure D-5 in Appendix D displays the land uses within the planning area. The communities of Kagel Canyon, Lopez Canyon and Sylmar Island are mountainous with predominantly rural residential, open space, and park land uses. Industrial uses occupy the southern portion of Lopez Canyon. La Crescenta-Montrose is primarily low to medium density single-family residential with commercial activity concentrated along Foothill Boulevard. Oat Mountain and Twin Lakes have a combined population of 1,358. Whereas Oat Mountain is mainly rural, park, and open space, Twin Lakes is dominated by single-family residential land uses. Universal City is exclusively occupied by Universal Studios property. The unincorporated area has no residences and is designated for commercial and industrial land uses only. Located on the western boundary of the planning area, West Chatsworth and West Hills encompass two square miles of rural residential and single family residential land. West Chatsworth is largely rural residential with a sparsely populated hillside community located in the northern portion of the community. By comparison, the incorporated cities of San Fernando Valley are mostly built out, with strong patterns of urban and suburban development.

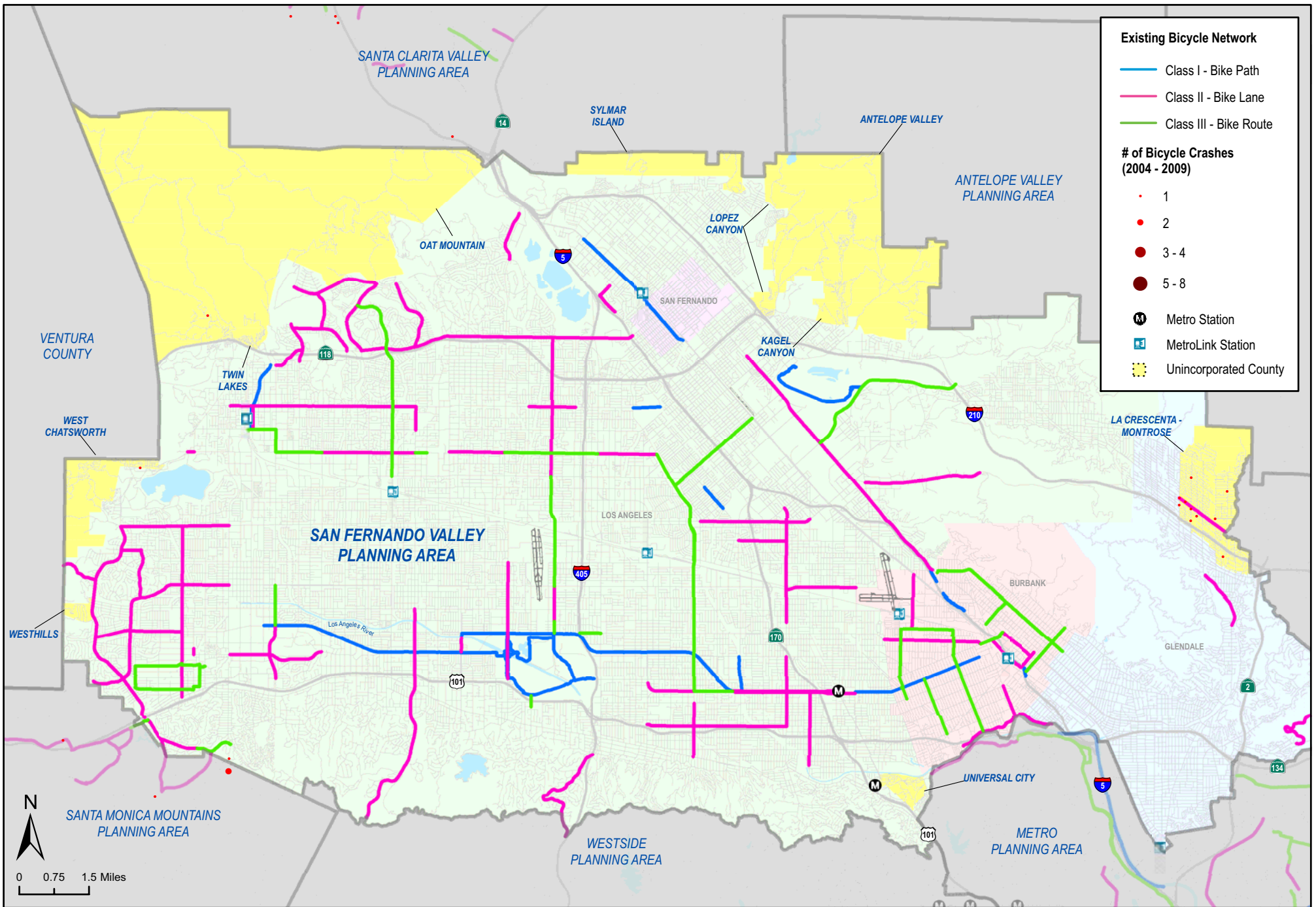
### 3.6.1 Existing Bicycling Conditions

Of these nine communities, only La Crescenta-Montrose has an existing bikeway, which runs through the community along Foothill Boulevard. The community of West Hills contains a portion of a bikeway on Valley Circle Boulevard, which runs along the boundary of the community for one third of a mile.

Table 3-18 presents the location, classification, and mileage of existing bikeways within the communities. Figure 3-21 displays major transit, existing bicycle network, and reported bicycle collisions in the planning area.

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<sup>27</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections



**Figure 3-21: San Fernando Valley Planning Area Existing Bicycle Network, Major Transit and Bicycle Crashes (2004-2009)**

**Table 3-18: San Fernando Planning Area Existing Bicycle Facilities**

Community	Segment	From	To	Class	Mileage
San Fernando Valley Planning Area	Foothill Boulevard	Pennsylvania Avenue	Briggs Avenue	2	1.2
San Fernando Valley Planning Area	Valley Circle Boulevard	0.1 miles north of Vanowen Street	Corrie Lane	2	0.3
				<b>Total</b>	<b>1.5</b>

*\*County-maintained bikeways only*

Los Angeles County Metropolitan Authority (LACMTA) identified two key gaps in the 2006 Metro Bicycle Transportation Strategic Plan, as shown in Table 3-19.

**Table 3-19: MTA Identified Gaps in the San Fernando Inter-Jurisdictional Bikeway Network**

MTA #	Corridor	Jurisdiction	Description	Constraints
24	Foothill Blvd	LA City / Glendale / LA County/ La Cañada-Flintridge	Connection between Wentworth (LA City) and Oak Grove (La Cañada)	Urban Arterial

*Source: Los Angeles County Metropolitan Transportation Authority: 2006 Metro Bicycle Transportation Strategic Plan, p. 103-104*

Several factors hinder bicycling opportunities in the San Fernando Valley Planning Area. Many of the communities are characterized by steep topography, undulating street networks, and minimal bicycle trip generators. However, opportunities do exist to provide recreational facilities, connect these communities with adjacent cities, and foster multimodal trip-taking.

La Crescenta-Montrose includes both flat and hilly terrain. While it has a grid street network, connectivity to the east and south are respectively hindered by the Pickens Canyon Channel and the Foothill Freeway (I-210). Both barriers currently create choke points requiring identification of potential new crossings or enhancements to existing crossings.

Universal City consists of hilly private land and streets, except for access roads that connect visitors to the Universal Studios Theme Park and Universal City Walk. Although the community has no residents, the area is a major employee and tourist destination. Shuttles transport workers and visitors between the area and the nearby Universal City Red Line Metro Station.

Due to topographical barriers and the relative absence of major bicycle trip generators, improvements are focused on facilitating connections to bicycle networks and transit hubs in adjacent cities. Six MetroLink and two Metro Stations are located in San Fernando Valley incorporated communities.

According to the California Highway Patrol SWITRS data, 12 bicycle collisions were reported in the unincorporated communities of San Fernando Valley Planning Area from 2004 through 2009. Figure 3-21 identifies bicycle crash locations for this time period. Of the 12 collisions, ten occurred in La Crescenta-

Montrose. This high number of collisions may be a result of La Crescenta-Montrose having higher population and more bicycling activity than the other communities in the planning area.

### 3.6.2 Proposed Network

Table 3-20 summarizes the proposed bicycle network mileage by classification type within the San Fernando Valley Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would provide approximately ~~10-11~~ miles of facility across the planning area including 2 miles of bicycle path and 7 miles of bicycle route. Currently, there are only 1.5 miles of existing bicycle facility within the unincorporated parts of the San Fernando Valley Planning Area.

**Table 3-20: San Fernando Valley Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class I – Bicycle Path	2.2	<del>20.8</del> 19.3%
Class II – Bicycle Lane	<del>0.9</del> 1.7	<del>8.6</del> 14.9%
Class III – Bicycle Route	7.5	<del>70.6</del> 65.8%
<b>Total</b>	<b><del>10.6</del>11.4</b>	<b>100%</b>

Table 3-21 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-22 displays the proposed bicycle network as well as existing bicycle facilities and major transit stops in the San Fernando Valley planning area. Figure 3-23 provides a more detailed view of the proposed bicycle network within the La Crescenta-Montrose community.

**Table 3-21: San Fernando Valley Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	Los Angeles River Proposed Bicycle Path	Lankershim Boulevard	0.2 miles west of Barham Boulevard	Universal City	1	1.0	<del>3-5</del>	145
2	Rosemount Avenue	Rockdell Street	Honolulu Avenue	La Crescenta-Montrose and City of Glendale <sup>A</sup>	3	1.9	5	135
3	La Crescenta Avenue	Orange Avenue	Foothill Boulevard	La Crescenta-Montrose	3	0.6	5	130
4	Altura Avenue	La Crescenta Avenue	Rosemount avenue	La Crescenta-Montrose	3	0.3	5	120
5	La Crescenta	Foothill Boulevard	Montrose Avenue	La Crescenta-	3	0.6	5	120

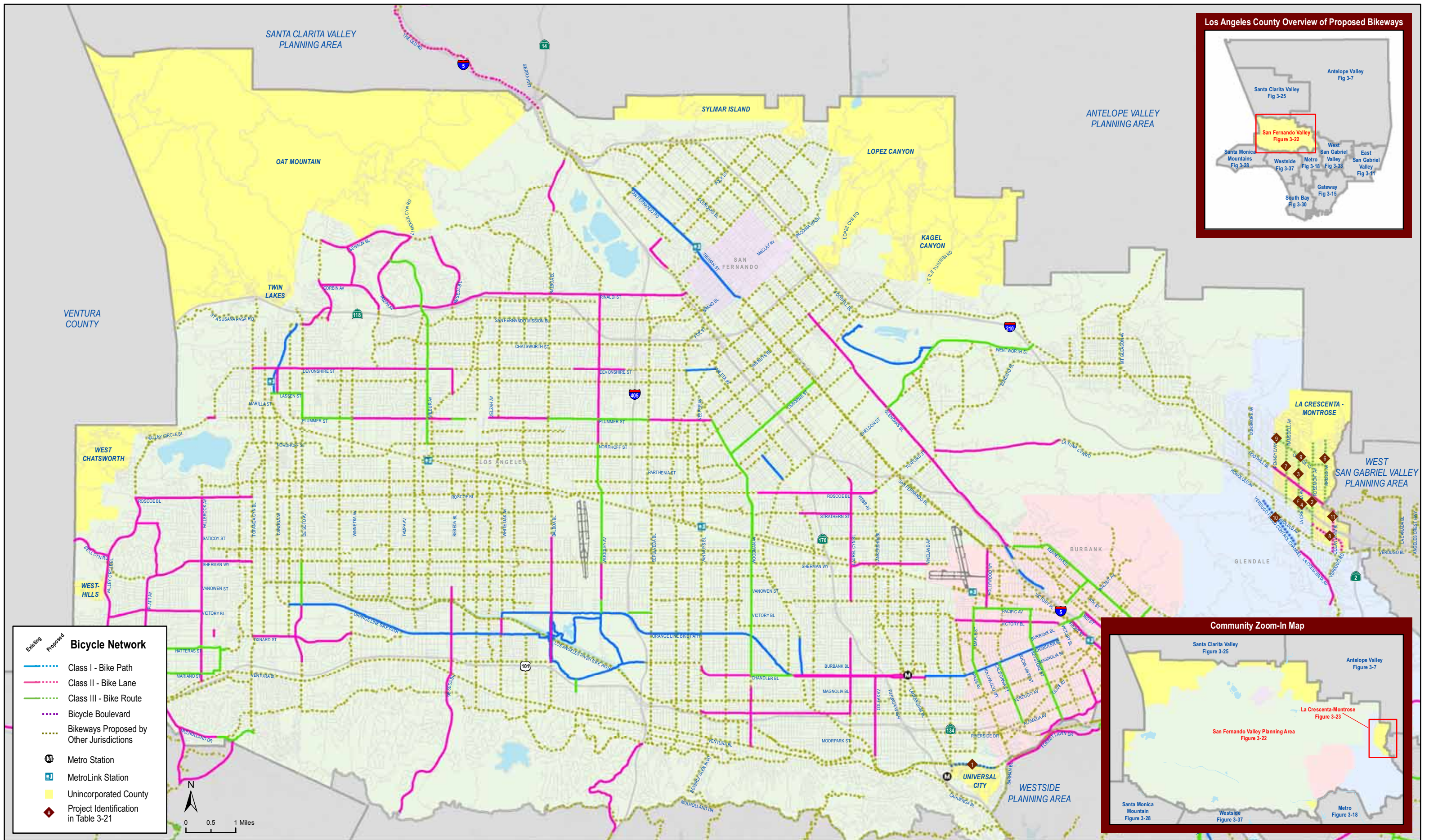
Avenue				Montrose and City of Glendale <sup>A</sup>				
6	Briggs Avenue	Shields Street	Foothill Boulevard	La Crescenta-Montrose	3	1.3	5	110
7	Ramsdell Avenue	Markridge Road	Montrose Avenue	La Crescenta-Montrose and City of Glendale <sup>A</sup>	3	1.6	5	95

**Table 3-21: San Fernando Valley Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority	Score
<del>18</del>	<u>Montrose Avenue</u>	<u>Rosemont Ave</u>	<u>Montrose Lane</u>	<u>La Crescenta-Montrose</u>	<u>2</u>	<u>0.8</u>	<u>5</u>		<u>95</u>
<del>98</del>	Orange Avenue/Whittier Drive	Pennsylvania Avenue	Briggs Avenue	La Crescenta-Montrose	3	1.2	5		80
<del>91</del>	Verdugo Flood Control Channel Bicycle Path	New York Avenue	Shirley Jean Street	City of Glendale	1	1.2	5		70
<del>10</del>	<del>11</del> Ocean View Boulevard	Foothill Boulevard	Honolulu Avenue	La Crescenta-Montrose and City of Glendale <sup>A</sup>	2	0.9	5		50
<b>Total Mileage</b>						<b><u>40.611.4</u></b>			

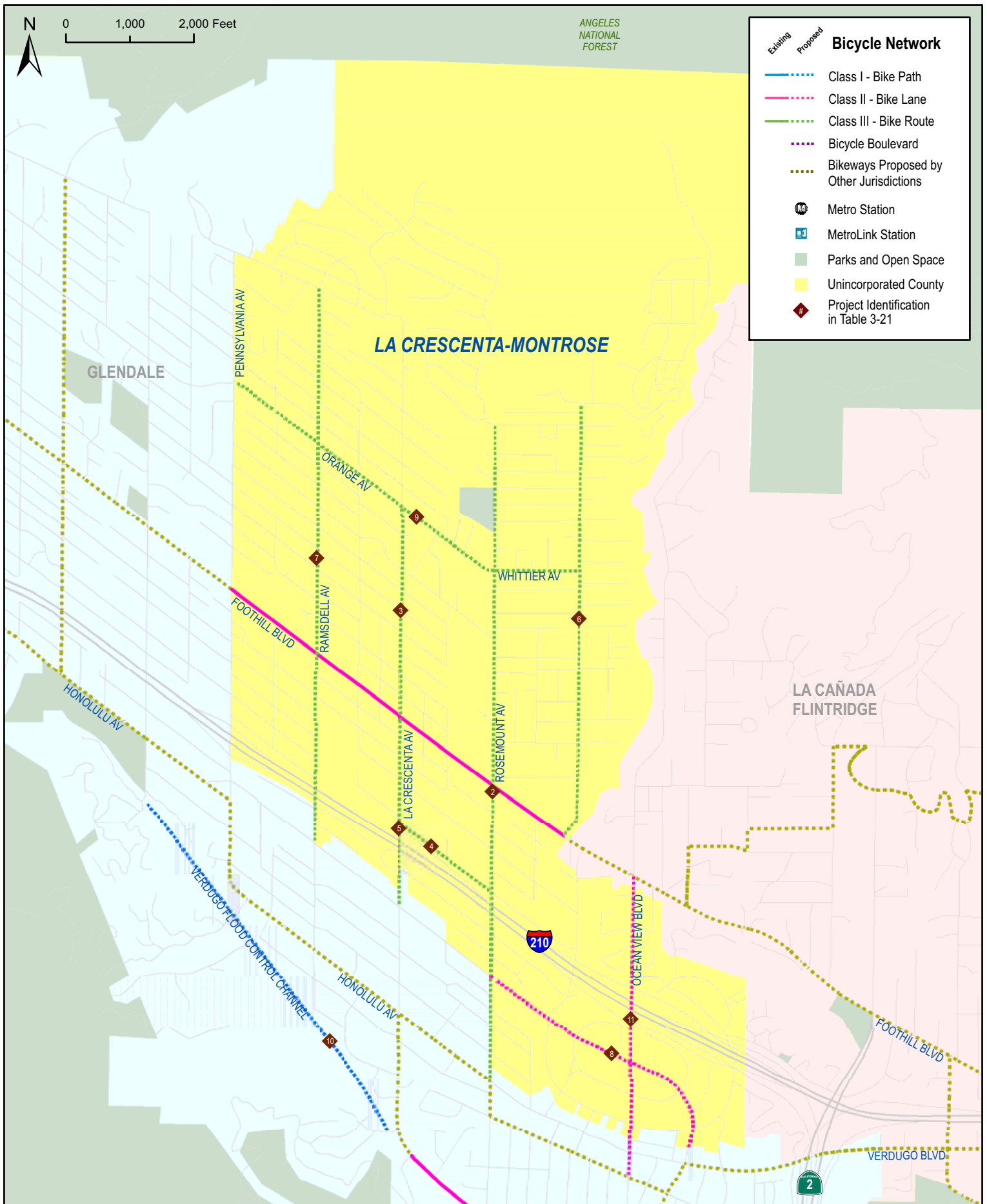
<sup>A</sup> Part of project traverses through or along boundary of incorporated city

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**Figure 3-22: San Fernando Valley Planning Area Proposed Bicycle Facilities**

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**Figure 3-23: La Crescenta-Montrose Proposed Bicycle Facilities**

### 3.7 Santa Clarita Valley Planning Area

The unincorporated County covers around 195 square miles of the Santa Clarita Valley Planning Area’s total 484 square miles. The Planning Area is located in northern Los Angeles County, bounded by Ventura County to the west, the Antelope Valley Planning Area to the north and east, and the San Fernando Valley Planning Area to the south.<sup>28</sup>

The planning area is characterized by several village-like communities with distinct development patterns and histories of development. Many of these communities are isolated from each other by built and natural barriers such as topography, the Santa Clarita River, and Interstate 5. The valley features a significant amount of County park and open space. The Los Padres and Angeles National Forests comprise about 235 square miles of the planning area. Urban development is focused within and just outside of the City of Santa Clarita, while the surrounding unincorporated communities are suburban-rural. **Figure D-6 in Appendix D** displays the Santa Clarita Valley Planning Area communities and designated land uses. The unincorporated parts of Santa Clarita Valley have an estimated population of 85,000 residents compared to the 178,062 residents living in the more densely populated incorporated City of Santa Clarita.<sup>29</sup>

There are 10 unincorporated suburban/rural communities within Santa Clarita Valley Planning Area. They include: Agua Dulce, Alpine, Bouquet Canyon, Castaic, Forest Park, Hasley Canyon, Lang, Soledad-Sulphur Springs, Stevenson Ranch, and Val Verde. The following subsections describe current bicycling conditions within unincorporated Santa Clarita Valley Planning Area.

#### 3.7.1 Existing Bicycling Conditions

There are three existing County-maintained bikeway segments accounting for approximately 3.3 miles in unincorporated Santa Clarita Valley. **Table 3-22** summarizes the location, classification, and mileage of existing bikeways. **Figure 3-24** displays the existing bicycle network along with major transit stations and bicycle collision locations in Santa Clarita Valley.

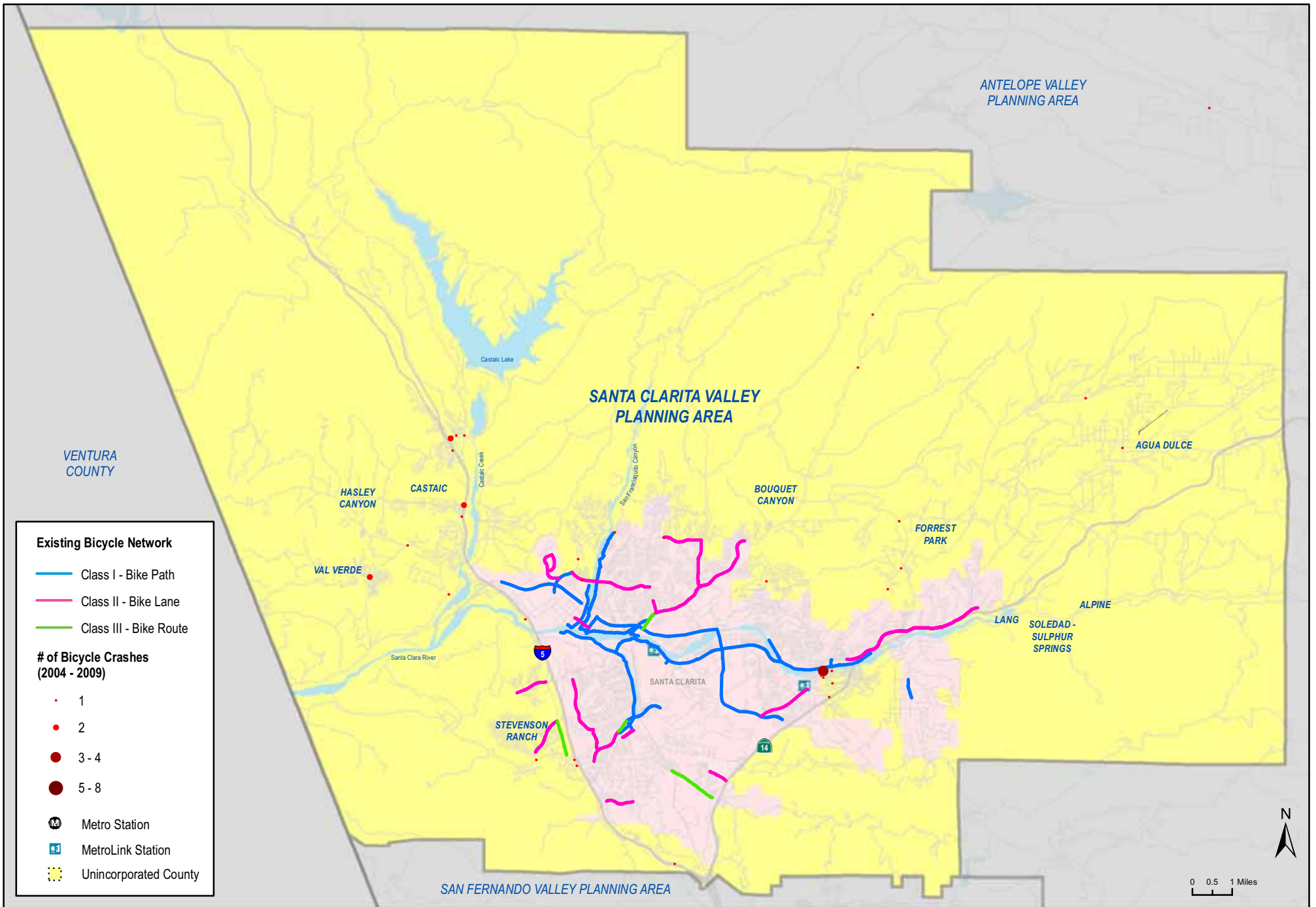
**Table 3-22: Santa Clarita Valley Existing Bikeways**

Community	Segment	From	To	Classes	Mileage
Stevenson Ranch	Stevenson Ranch Parkway	Poe Parkway	The Old Road	2	1.4
Stevenson Ranch	The Old Road	Stevenson Ranch Parkway	Pico Canyon Road	3	0.9
Stevenson Ranch	Valencia Boulevard	0.2 miles west of Old Rock Road	The Old Road	2	1.0
				<b>Total</b>	<b>3.3</b>

*\*County-maintained bikeways only*

<sup>28</sup> Los Angeles County, Draft Santa Clarita Valley Area Plan: “One Valley One Vision”, 2009

<sup>29</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections; 2006-2008 American Community Survey, B00001 3-Year Estimates



**Figure 3-24: Santa Clarita Valley Planning Area Existing Bicycle Network, Major Transit and Bicycle Crashes (2004-2009)**

The planning area possesses both opportunities and constraints in expanding the existing bicycle network and increasing bicycling activity. Constraints, including medium-to-low residential density and undulating street network nestled in hilly terrain, serve as barriers to bicycling. There are also several constrained gaps in the inter-jurisdictional bikeway network. LACMTA identified four key gaps in the 2006 Metro Bicycle Transportation Strategic Plan, as shown in Table 3-23.

**Table 3-23: MTA Identified Gaps in the Santa Clarita Inter-Jurisdictional Bikeway Network**

MTA #	Corridor	Jurisdiction	Description	Constraints
30	Old Road	Los Angeles County	Located along Old Road adjacent to Golden State Freeway. Connection between Valencia, Santa Clarita and San Fernando Road MetroLink right-of-way bike path in the San Fernando Valley	May require shoulder improvements and road widening in some places to create Class II or III bikeway.
31	Route 126	Los Angeles County	Connection between Santa Clarita and the Ventura County Line	May require shoulder improvements and road widening in some places to create Class II or III bikeway.
49	Castaic/San Francisquito Creek	Santa Clarita/Los Angeles County	Connection between Santa Clarita and Castaic Lake along Castaic Creek, San Francisquito Creek, and the Golden State Freeway	May require shoulder improvements and road widening in some places to create Class II or III bikeway.
50	Sierra Highway	Santa Clarita/Los Angeles County	Connection between the Old Road and Soledad Canyon Bike Path	May require shoulder improvements and road widening in some places to create Class II or III bikeway.

*Source: Los Angeles County Metropolitan Transportation Authority: 2006 Metro Bicycle Transportation Strategic Plan, p. 103-104*

Providing connections to the City of Santa Clarita, which the unincorporated area surrounds completely, is an essential consideration for improving the bicycling connectivity in the unincorporated portions of the Santa Clarita Valley Planning Area. The City of Santa Clarita also has three MetroLink Stations and an extensive bike path system along its rivers. Opportunities exist to extend the bike path system through to the unincorporated area along the Santa Clara River and Castaic Creek.

According to the California Highway Patrol SWITRS data, 38 bicycle collisions were reported within unincorporated Santa Clarita Valley between 2004 and 2009. Of these 38 instances, four occurred at the intersection of Sierra Highway and Sandy Drive, which is the greatest number of crashes at a single location in the planning area.

### 3.7.2 Proposed Network

Table 3-24 presents the proposed bicycle network mileage by classification type within the Santa Clarita Valley Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would add approximately 158 miles to the existing 3.3 miles of bicycle facility across the unincorporated parts of the planning area—including 108 miles of proposed Class III. A vast majority of the 108 miles of Class III bikeways are proposed along the shoulders of rural roadways. The shoulders of rural Class III bikeways provide the same physical separation as bike lanes do, while maintaining the legality of the shoulder as space for emergency vehicle stops. Class IIIs on shoulders do not require curb and gutter, which helps preserve the rural characteristic of the roadway.

**Table 3-24: Santa Clarita Valley Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class I – Bicycle Path	16.5	10.4%
Class II – Bicycle Lane	33.4	36.521.1%
Class III – Bicycle Route	108.35	53.168.5%
<b>Total</b>	<b>158.24</b>	<b>100%</b>

Table 3-25 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-25 displays the proposed bicycle network as well as existing bicycle facilities and major transit stops in the Santa Clarita Valley Planning Area. Figure 3-26 displays a closer view of the proposed bicycle facilities for the Castaic neighborhood.

**Table 3-25: Santa Clarita Valley Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	Pico Canyon Road	Whispering Oaks Drive	The Old Road	Stevenson Ranch	2	1.2	5	115
2	Sierra Highway <sup>A, B</sup>	0.3 miles south of Ryan Lane	Pearblossom Highway	Forest Park, Agua Dulce,, Acton	3	24.3	5	105
3	Stevenson Ranch Parkway	Poe Parkway	Pico Canyon Road	Stevenson Ranch	2	0.2	5	100
4	Old Road	Weldon Canyon Road	Sierra Highway	Castaic	2	1.2	5	100
5	San Francisquito Creek Trail	Copper Hill	San Francisquito Canyon Road	Green Valley	1	0.6	5	95

6	Hillcrest Parkway	Sloan Canyon Road	The Old Road	Castaic	2	2.0	5	90
7	Magic Mountain Parkway <sup>A</sup>	0.4 miles west of The Old Road	The Old Road	Santa Clarita Valley Planning Area	2	0.5	5	90

**Table 3-25: Santa Clarita Valley Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
8	The Old Road <sup>A, B</sup>	Sloan Canyon Road	Weldon Canyon Road	Castaic and City of Santa Clarita <sup>C</sup>	2	13.4	5	90
9	Castaic Road	Lake Hughes Road	Parker Road	Castaic	3	0.5	5	80
10	Sloan Canyon Road	Quail Valley Road	Lake Hughes Road	Castaic	2	0.8	5	80
11	Jakes Way	Canyon Park Boulevard	Eleanor Circle	Santa Clarita Valley Planning Area	2	1.0	5	80
12	Escondido Canyon Road	Agua Dulce Canyon	Red Rover Mine	Forest Park, Agua Dulce	3	6.9	5	80
13	<a href="#">Palm Plum</a> Canyon Road	Via <a href="#">Joice Joyce</a> Drive	Ashboro Drive	Bouquet Canyon, Leona Valley, Antelope Valley Planning Area	2	1.7	5	75
14	Bouquet Canyon Road <sup>B</sup>	Hob Court	Elizabeth Lake Road	Bouquet Canyon, Leona Valley, Antelope Valley Planning Area	3	19.68	5	75
15	Soledad Canyon Road <sup>A</sup>	Mammoth Lane	Sierra Highway	Lang, Soledad-Sulphur Springs, Alpine, Acton and City of Santa Clarita <sup>C</sup>	3	17.5	5	75
16	Parker Road/Ridge Route Road	Sloan Canyon Road	Lake Hughes Road	Castaic	2	1.2	5	70
17	Lost Canyon Road	Via Princessa Road	Canyon Park Boulevard	Fair Oaks Ranch	2	0.5	5	70
18	Agua Dulce Canyon Road <sup>A</sup>	Sierra Highway	Soledad Canyon Road	Agua Dulce, Alpine	3	6.5	5	70
19	Santa Clara River Proposed Bicycle Path <sup>B, D</sup>	Ventura County limit	McBean Parkway	Santa Clarita Valley Planning Area, City of Santa Clarita	1	10.2	5	70
20	Oak Springs	Soledad Canyon	Lost Canyon Road	City of Santa Clarita	1	0.2	5	65

	Canyon Road Proposed Bicycle Path <sup>D</sup>	Road						
21	Via Princessa Road <sup>C</sup>	Sierra Highway	Lost Canyon Road	Fair Oaks Ranch and City of Santa Clarita	2	0.8	5	65
22	Canyon Park Boulevard	Sierra Highway	Lost Canyon Road	Santa Clarita Valley Planning Area	2	0.8	5	60
23	Henry Mayo Drive <sup>A</sup>	Commerce Center Drive	The Old Road	Santa Clarita Valley Planning Area	2	0.8	5	60

**Table 3-25: Santa Clarita Valley Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
24	Vasquez Canyon Road	Bouquet Canyon Road	Sierra Highway	Bouquet Canyon, Forest Park	2	3.6	5	60
25	Castaic Creek Proposed Bicycle Path <sup>D</sup>	Lake Hughes Road	Henry Mayo Drive	Santa Clarita Valley Planning Area	1	5.5	5	60
26	Davenport Road <sup>A</sup>	Sierra Highway	Agua Dulce Canyon Road	Agua Dulce	2	3.7	5	55
27	Lake Hughes Road	Sloan Canyon Road	Elizabeth Lake Road	Castaic, Lake Hughes, Antelope Valley Planning Area	3	23.0	5	55
28	Sand Canyon Road	Sierra Highway	Vista Point Lane	Forrest Park and City of Santa Clarita <sup>C</sup>	3	1.0	5	50
29	Hasley Canyon Road/ Del Valle Road/ Hunstock Street/ Chiquito Canyon Road	Sloan Canyon Road	Henry Mayo Drive	Val Verde	3	4.0	5	50
30	Placerita Canyon Road	Sierra Highway	Sand Canyon Road	Santa Clarita Valley Planning Area and City of Santa Clarita <sup>C</sup>	3	5.0	5	45

**158.2**

**4**

**Total Mileage**

<sup>A</sup> Proposed segment has been identified as a roadway widening project in the Santa Clarita Valley One Valley One Vision Plan

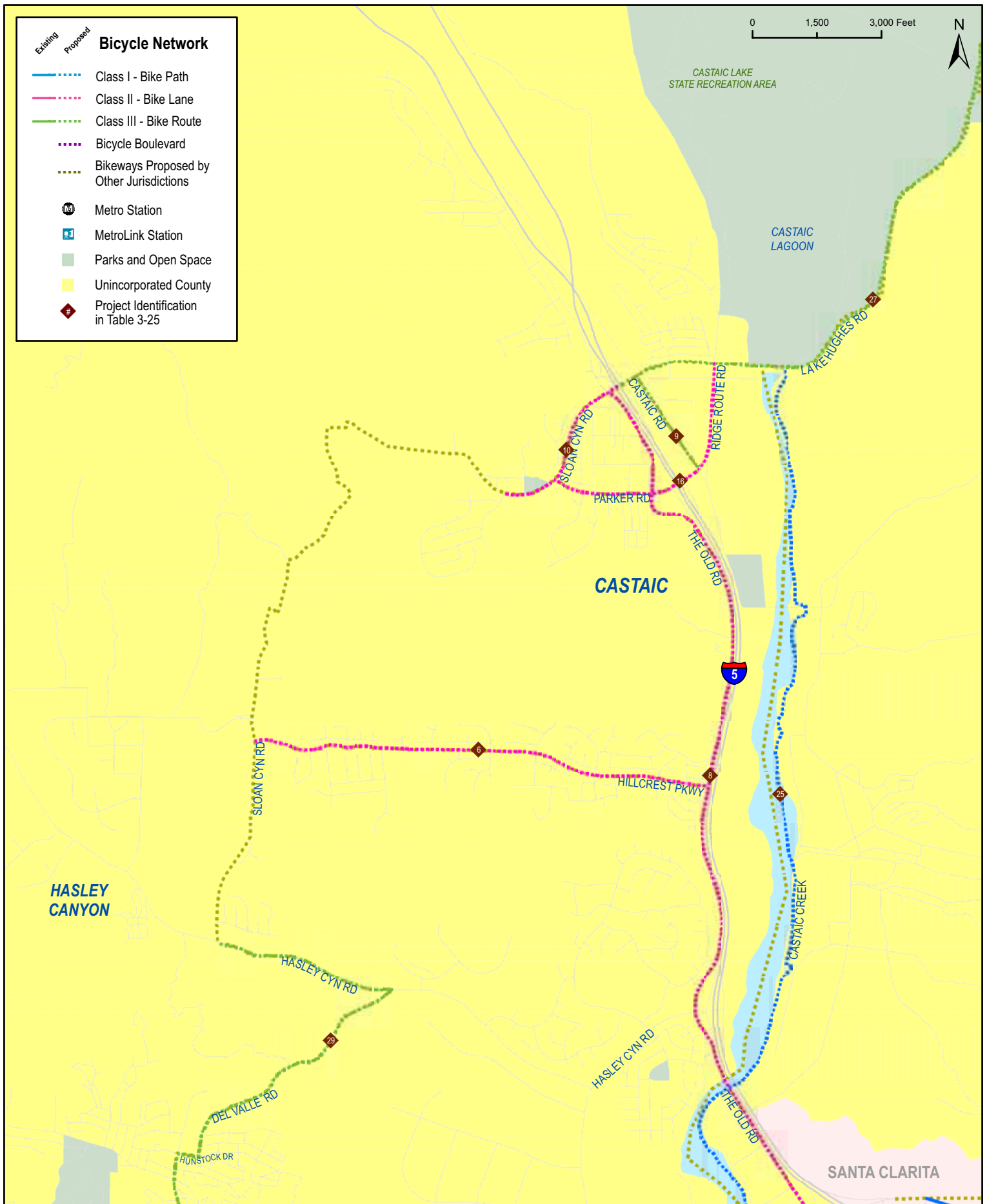
<sup>B</sup> Proposed segment overlaps with Early Action bicycle project identified by County of Los Angeles

<sup>C</sup> Part of project traverses through or along boundary of incorporated city

<sup>D</sup> *Alignment of bicycle path is conceptual and does not represent alignment at implementation phase*



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**Figure 3-26: Castaic Proposed Bicycle Facilities**

Los Angeles County Bicycle Master Plan

Source: Los Angeles Metro (2006; 2010); Alta Planning + Design (2010)  
 Date: 10/13/11

### 3.8 Santa Monica Mountains Planning Area

The Santa Monica Mountains Planning Area is located in a biologically diverse and sensitive mountainous area of western County of Los Angeles. The planning area borders Ventura County, San Fernando Valley Planning Area, and Westside Planning Area. Along the northern portion of the planning area are several incorporated cities: Westlake Village, Agoura Hills, Calabasas, and Hidden Hills. Along the coastal portion of the planning area to the south is the City of Malibu. The Santa Monica Mountains National Recreational Area encompasses a vast area of the mountain range. The remaining 113 approximate square miles of unincorporated areas are comprised of the Santa Monica Mountains Coastal Zone and Santa Monica Mountains North Area.

In 2010, approximately 22,000 people resided within the unincorporated parts of Santa Monica Mountains Planning Area.<sup>30</sup> Multi-agency conservation-based planning efforts have helped maintain a low population density throughout the planning area. The Santa Monica Mountains Planning Area land uses are predominately open space, park, and rural residential. There are also discrete pockets of single-family residential and commercial areas dispersed throughout the planning area. Figure D-7 in Appendix D displays the planning area's location and land uses.

#### 3.8.1 Existing Bicycling Conditions

There is one existing County-maintained Class II bikeway of 0.5 miles within the unincorporated Santa Monica Mountains Planning Area. Table 3-26 summarizes the location and extent of this facility.

**Table 3-26: Santa Monica Mountains Planning Area Existing Bikeways**

Community	Segment	From	To	Class	Mileage
Santa Monica Mountains North Area	Agoura Road	Liberty Canyon Road	0.1 miles west of Malibu Hills Road	2	0.5
				<b>Total</b>	<b>0.5</b>

*\*County-maintained bikeways only*

Figure 3-27 shows the existing bicycle facilities along with bicycle collision locations in the Santa Monica Mountains Planning Area.

The LACMTA identified one key gap in the 2006 Metro Bicycle Transportation Strategic Plan, as shown in Table 3-27.

<sup>30</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections

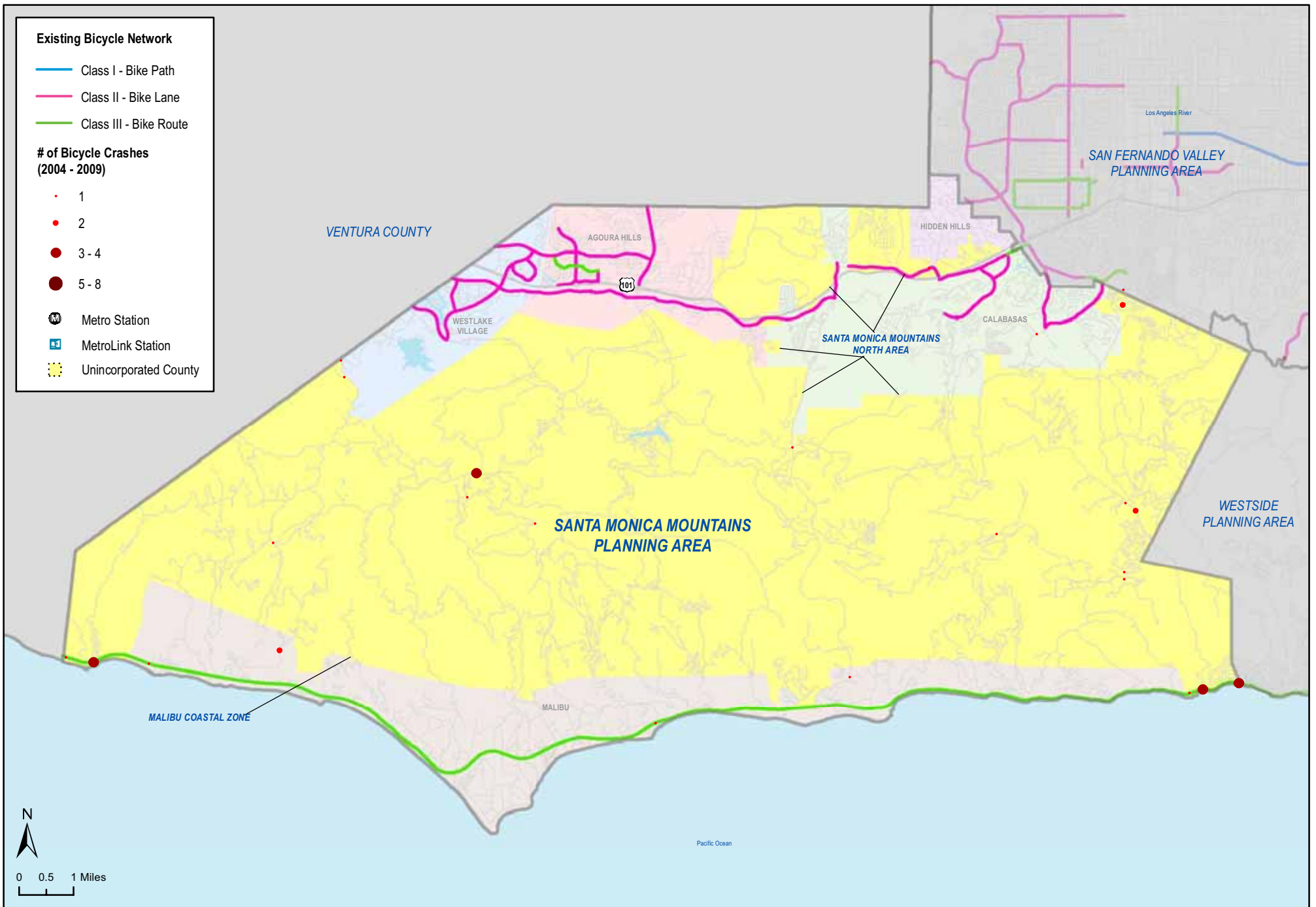
**Table 3-27: MTA Identified Gaps in the Santa Monica Mountains Inter-Jurisdictional Bikeway Network**

MTA #	Corridor	Jurisdiction	Description	Constraints
28	Beach	Los Angeles County	Northern extension of South Bay Beach Bike Path through Malibu	Requires feasibility study

*Source: Los Angeles County Metropolitan Transportation Authority: 2006 Metro Bicycle Transportation Strategic Plan, p. 103-104*

Opportunities to expand the existing bicycle network include creating connections to recreational areas and between residential and commercial pockets. There is no mass transit servicing the planning area, which limits multimodal trip-taking potential.

According to the California Highway Patrol SWITRS data, a total of 31 bicycle collisions were reported in the Santa Monica Mountains/Coastal Planning Area between 2004 through 2009. Twelve of these collisions occurred in the Santa Monica Mountains North Area, with four crashes reported at the intersection of Kanan Road and Mulholland Highway. Nineteen took place within the Malibu Coastal Zone, four of which occurred at the Mulholland Highway and Pacific Coast Highway intersection.



**Figure 3-27: Santa Monica Mountains Existing Bicycle Network, Major Transit and Bicycle Crashes (2004-2009)**

### 3.8.2 Proposed Network

Table 3-28 summarizes the proposed bicycle network mileage by classification type within the Santa Monica Mountains Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would provide approximately 95-96 miles of facility across the planning area to bolster the 0.5 existing miles of bicycle facility within the unincorporated communities.

Table 3-29 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area. Figure 3-28 displays the proposed bicycle network, as well as existing bicycle facilities and major transit stops in the Santa Monica Mountains planning area.

**Table 3-28: Santa Monica Mountains Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class II – Bicycle Lane	1.8	2%
Class III – Bicycle Route	<u>92.993.8</u>	98%
<b>Total</b>	<b><u>94.795.6</u></b>	<b>100%</b>

**Table 3-29: Santa Monica Mountains Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	Las Virgenes Road/ Malibu Canyon Road	0.1 miles south of Lost Hills Road	Pacific Coast Highway	Santa Monica Mountains North Area, Malibu Coastal Zone and Cities of Calabasas and Malibu <sup>A</sup>	3	7.9	3	110
2	Mureau Road	0.2 miles west of Las Virgenes Road	Calabasas Road	Santa Monica Mountains North Area	2	1.8	3	105
3	Lake Vista Drive	Mulholland Highway	Mulholland Highway	Malibu Coastal Zone	3	1.4	3	90
4	Mulholland Highway	Decker Canyon Road	Pacific Coast Highway	Malibu Coastal Zone	3	7.5	3	85
5	Corral Canyon Road	Mesa Peak Road	Pacific Coast Highway	Santa Monica Mountains and City of Malibu <sup>A</sup>	3	7.7	3	80
6	Latigo Canyon Road	Mulholland Highway	Pacific Coast Highway	Santa Monica Mountains and City of	3	10.6	3	80

					Malibu <sup>A</sup>				
7	Tuna Canyon Road	Fernwood Pacific Drive	Pacific Coast Highway	Santa Monica Mountains North Area and City of Malibu <sup>A</sup>	3	<del>8.3</del> 5.4	3	80	

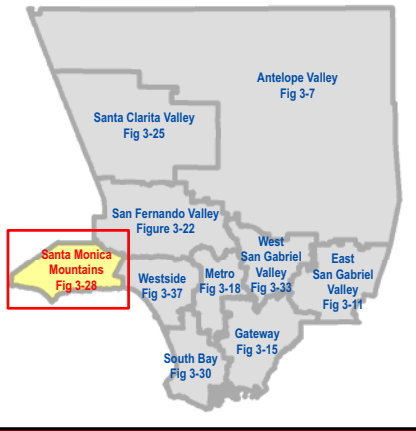
**Table 3-29: Santa Monica Mountains Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
8	Old Topanga Canyon Road	Valdez Road	Topanga Canyon Boulevard	Santa Monica Mountains North Area, Malibu Coastal Zone and City of Los Angeles <sup>A</sup>	3	4.8	3	80
	Topanga Canyon Boulevard <sup>B</sup>	Old Topanga Canyon Road	Pacific Coast Highway		3	<del>3.5</del> 4.3	3	
9	Decker Canyon Road <sup>B</sup> / Lechusa Road/ Encinal Canyon Road	Mulholland Highway	Pacific Coast Highway	Malibu Coastal Zone and City of Malibu <sup>A</sup>	3	5.9	3	75
10	Cornell Road	Kanan Road	Mulholland Highway	Santa Monica Mountains North Area and City of Agoura Hills <sup>A</sup>	3	2.3	3	65
11	Kanan Road/ Kanan Dume Road	Agoura Road	Pacific Coast Highway	Santa Monica Mountains North Area, Malibu Coastal Zone and Cities of Agoura Hills and Malibu <sup>A</sup>	3	12.1	3	60
12	Fernwood Pacific Drive	Topanga Canyon Boulevard	Tuna Canyon Road	Santa Monica Mountains North Area	3	1.7	3	55
13	Decker Canyon Road <sup>B</sup> / Encinal Canyon Road/ Mulholland Highway	Pacific Coast Highway	0.5 miles north of Lyndon Drive	Malibu Coastal Zone and City of Malibu <sup>A</sup>	3	22. <del>42</del>	3	45
<b>Total Mileage</b>						<b>94.795.6</b>		

<sup>A</sup> Part of project traverses through or along boundary of incorporated city

<sup>B</sup> Proposed facility is along a Caltrans-maintained roadway

Los Angeles County Overview of Proposed Bikeways



**Bicycle Network**

- · — · — · Existing Class I - Bike Path
- · — · — · Proposed Class II - Bike Lane
- · — · — · Class III - Bike Route
- · — · — · Bicycle Boulevard
- · — · — · Bikeways Proposed by Other Jurisdictions
- Metro Station
- MetroLink Station
- Unincorporated County
- ◆ Project Identification in Table 3-29

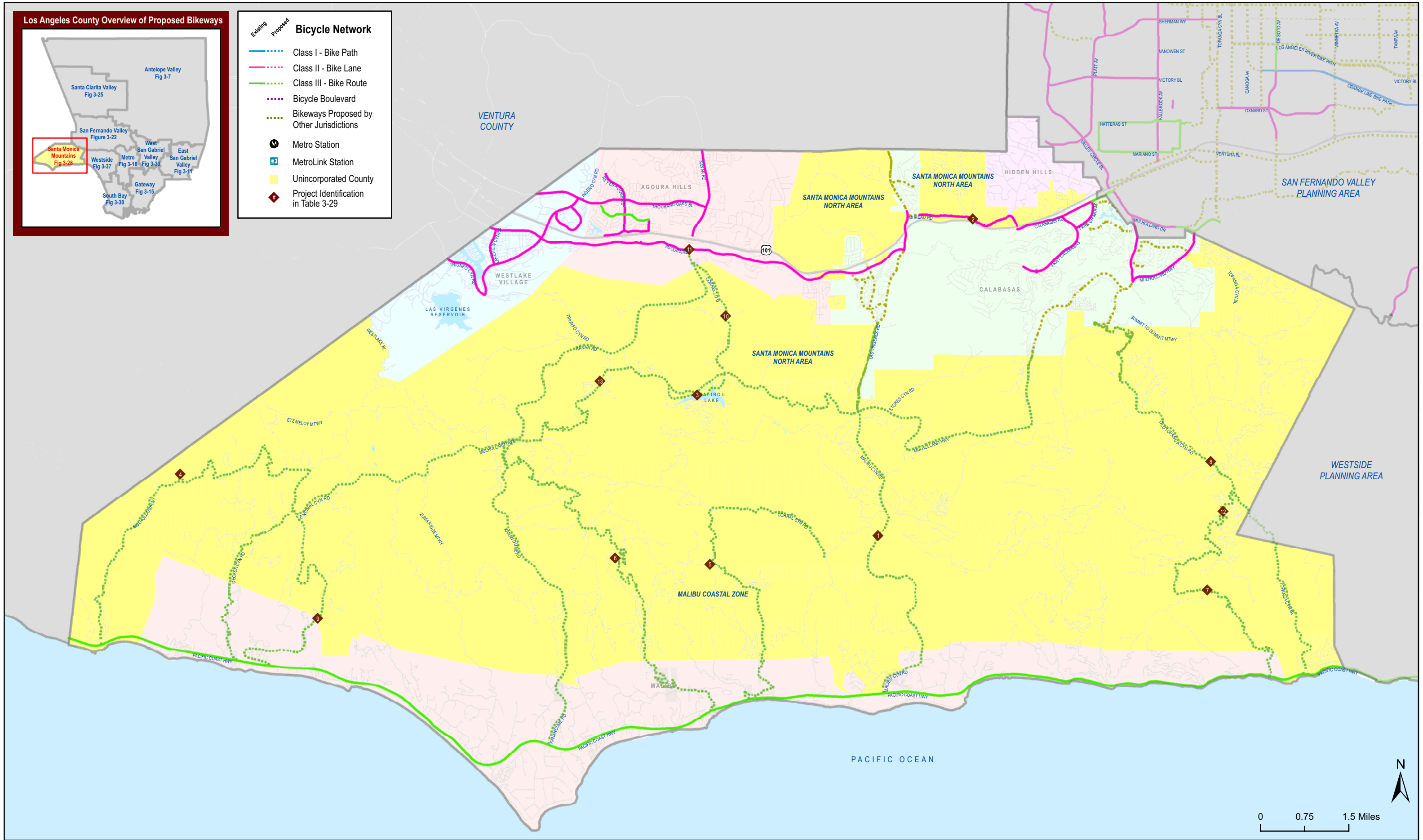


Figure 3-28: Santa Monica Mountains Planning Area Proposed Bicycle Facilities

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### 3.9 South Bay Planning Area

The South Bay Planning Area is located in the southwestern-most portion of Los Angeles County. Approximately 78,000 people resided within the unincorporated parts of the South Bay Planning Area in 2010.<sup>31</sup> The planning area unincorporated communities include Alondra Park, Hawthorne Island, Del Aire, Lennox, Westfield, La Rambla, and West Carson.

These relatively dense communities host a broad spectrum of land uses including residential, commercial, office, education, industrial, open space, and recreational. Figure D-8 in Appendix D displays the South Bay Planning Area’s current land use patterns.

#### 3.9.1 Existing Bicycling Conditions

The South Bay Planning Area contains 10.5 miles of County-maintained bicycle facilities. Table 3-30 presents the location, classification, and mileage of existing bikeways within the communities. Figure 3-29 illustrates the existing bicycle facilities of the planning area and regionally significant transit stations in the area, as well as bicycle collision sites within the unincorporated communities reported from 2004 through 2009.

**Table 3-30: South Bay Planning Area Existing Bicycle Facilities**

Community	Segment	From	To	Class	Mileage
Alondra Park, Cities of Gardena and Hawthorne	Laguna Dominguez Bicycle Path	120 <sup>th</sup> Street	Redondo Beach Boulevard	1	3.2
Cities of El Segundo, Hermosa Beach and Manhattan Beach	Marvin Braude Bicycle Path	Grand Avenue	35 <sup>th</sup> Street	1	2.9
Cities of Redondo Beach and Torrance	Marvin Braude Bicycle Path	Coral Way	Via Riviera	1	2.0
City of Los Angeles	Dominguez Channel Bicycle Path	Vermont Avenue	190 <sup>th</sup> Street	1	0.8
West Carson	Normandie Avenue	Sepulveda Boulevard	Lomita Boulevard	2	1.1
City of Carson	Dominguez Channel Bicycle Path	190 <sup>th</sup> Street	Main Street	1	0.5
				<b>Total</b>	<b>10.5</b>

*\*County-maintained bikeways only*

The LACMTA identified one key gap in the 2006 Metro Bicycle Transportation Strategic Plan, as shown in Table 3-31.

<sup>31</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections

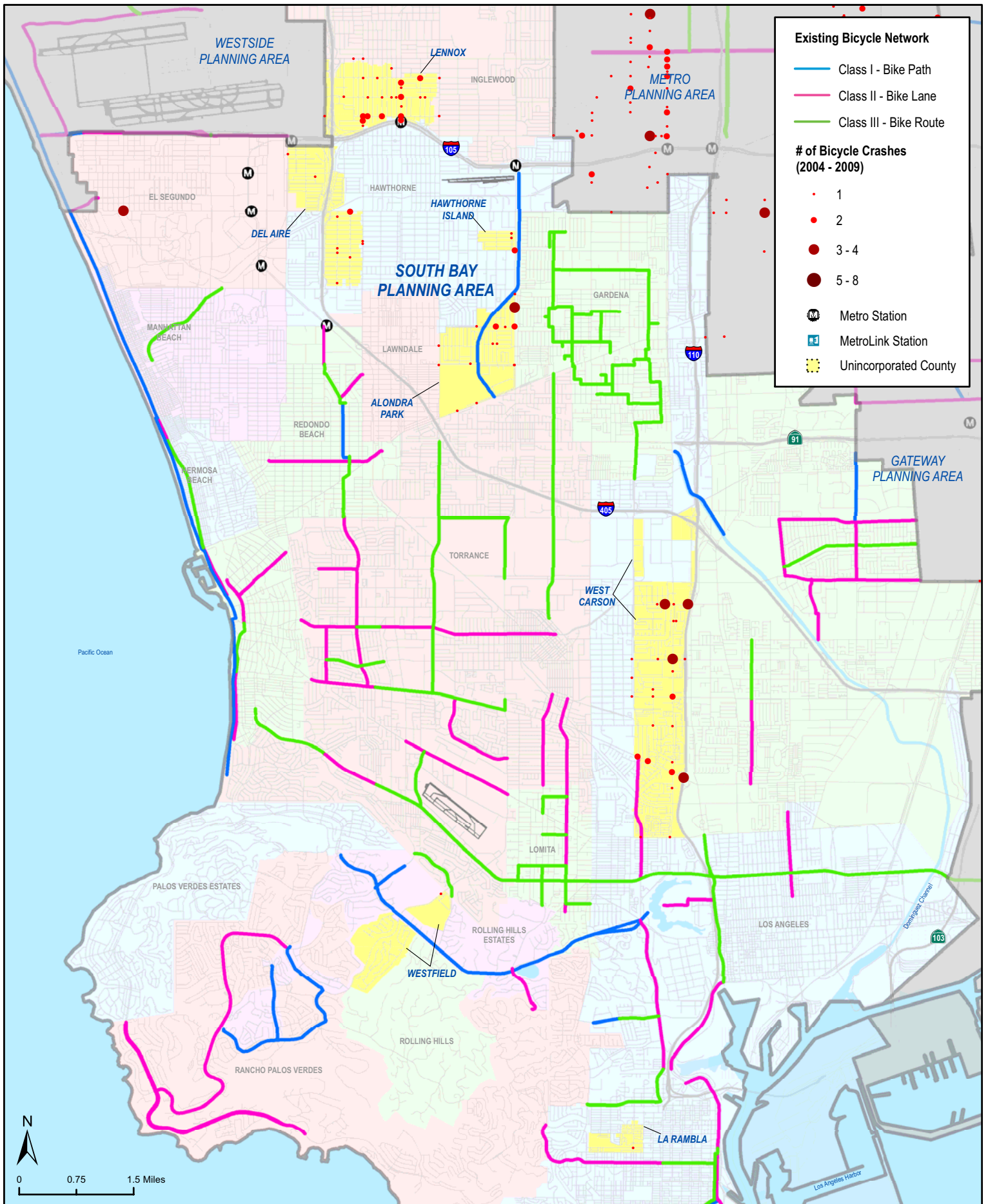
**Table 3-31: MTA Identified Gaps in the South Bay Inter-Jurisdictional Bikeway Network**

MTA #	Corridor	Jurisdiction	Description	Constraints
39	Beach	Los Angeles County / Palos Verdes Estates	Southern extension of beach bikeway, connector to Palos Verdes Dr. path	Route not identified

*Source: Los Angeles County Metropolitan Transportation Authority: 2006 Metro Bicycle Transportation Strategic Plan, p. 103-104*

There are opportunities to facilitate multi-modal trip-making in the unincorporated communities of Lennox and Del Aire by linking the nearby Metro transit stations servicing the neighborhood with bicycle facilities. Opportunities also exist to provide connections to El Camino College and UCLA Harbor Medical Center, two key land uses in the unincorporated South Bay Planning Area, as well as employment centers in neighboring Torrance and El Segundo. As islands dispersed between incorporated cities, developing a cohesive bicycle network for the unincorporated communities of the South Bay Planning Area will be difficult without additional bicycle connections being provided by neighboring cities. While neighboring cities of Torrance and Gardena have developed bikeways, most neighboring cities have yet to begin developing comprehensive bicycle networks. The Dominguez Channel provides an excellent opportunity to create a continuous bicycle path system from the City of Hawthorne to downtown Long Beach if it were to connect with the existing Laguna Dominguez bicycle path to the north and the existing Los Angeles River bicycle path to the south.

According to the California Highway Patrol SWITRS data, a total of 109 bicycle collisions were reported within the unincorporated communities of South Bay Planning Area between 2004 and 2009, 41 of which occurred in West Carson.



**Figure 3-29: South Bay Planning Area Existing Bicycle Network, Major Transit and Bicycle Crashes (2004-2009)**

### 3.9.2 Proposed Network

Table 3-32 summarizes the proposed bicycle network mileage by classification type within the South Bay Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would add 3334.45 miles of bicycle facility to the 10 miles already maintained by the County. Table 3-33 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-30 displays the proposed bicycle network, as well as existing bicycle facilities and major transit stops within the South Bay Planning Area. Figure 3-31 provides a more focused view of the proposed bicycle network within the communities comprising the northern and central portion of the planning area: Alondra Park, Del Aire, Hawthorne Island, and Lennox.

**Table 3-32: South Bay Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class I – Bicycle Path	9.02	26.97%
Class II – Bicycle Lane	14.28	42.59%
Class III – Bicycle Route	9.36	27.88%
Bicycle Boulevard	0.9	2.86%
<b>Total</b>	<b>33.434.5</b>	<b>100%</b>

**Table 3-33: South Bay Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	Hawthorne Boulevard	104 <sup>th</sup> Street	111 <sup>th</sup> Street	Lennox	2	0.56	2	145
2	Redondo Beach Boulevard	Prairie Avenue	Crenshaw Boulevard	Alondra Park and City of Torrance <sup>A</sup>	2	1.1	2,4	145
3	111 <sup>th</sup> Street	Buford Avenue	Prairie Avenue	Lennox and City of Inglewood <sup>A</sup>	3	1.1	2	130
4	Manhattan Beach Boulevard	Prairie Avenue	Crenshaw Boulevard	Alondra Park	2	1.0	2	125
5	104 <sup>th</sup> Street	Buford Avenue	Prairie Avenue	Lennox and City of Inglewood <sup>A</sup>	3	1.1	2	120
6	Marine Avenue	Prairie Avenue	Crenshaw	Alondra Park and City	3	0.9	2	120

Boulevard of Hawthorne<sup>A</sup>

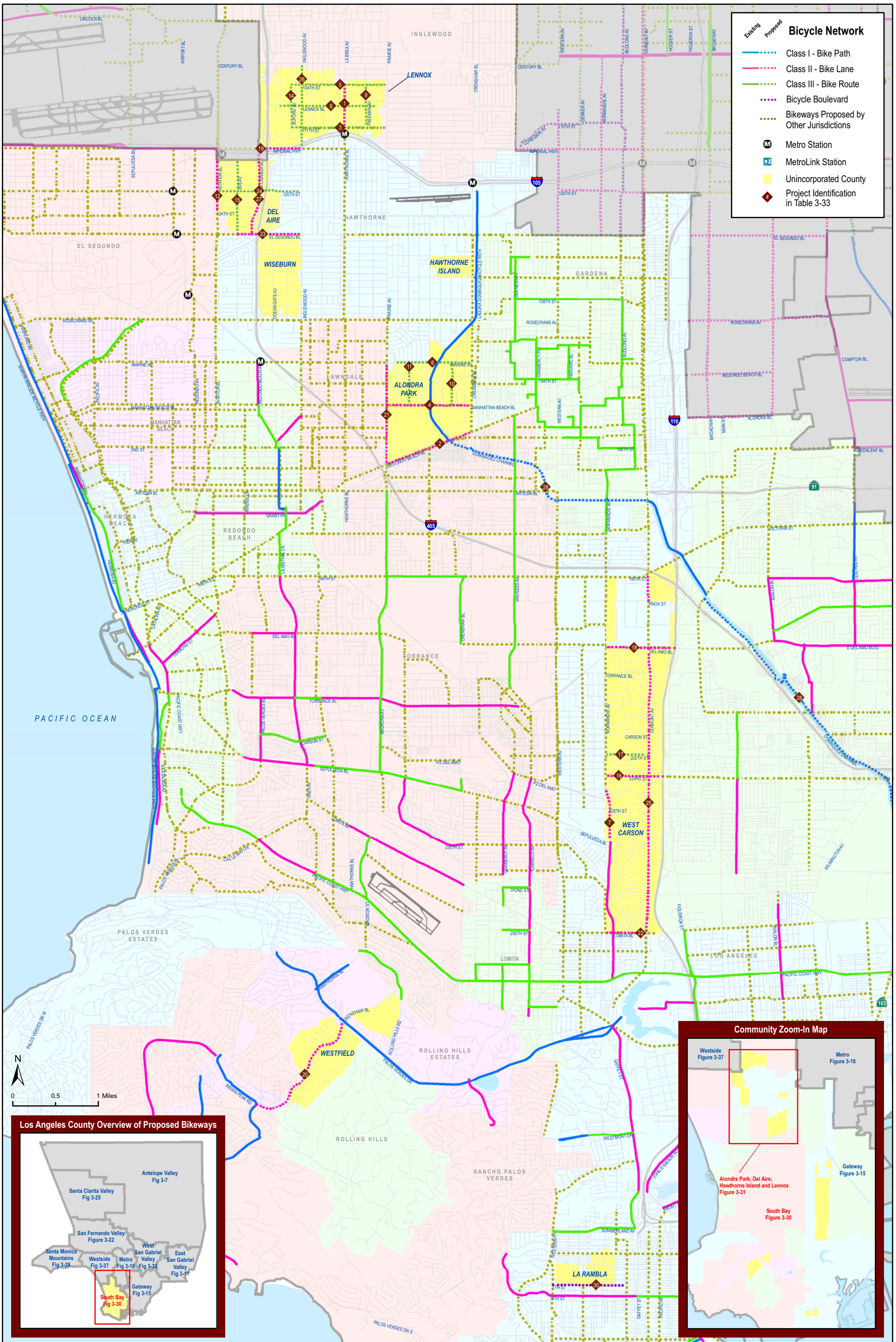
**Table 3-33: South Bay Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
7	Normandie Avenue	225 <sup>th</sup> Street	Sepulveda Boulevard	West Carson	2	0.6	2	115
8	Lennox Boulevard	Felton Avenue	Osage Avenue	Lennox	3	1.1	2	110
9	Freeman Avenue	104 <sup>th</sup> Street	111 <sup>th</sup> Street	Lennox	3	0.5	2	105
10	South Lemoli Avenue	Marine Avenue	Manhattan Beach Boulevard	Alondra Park	3	0.5	2	105
11	Doty Avenue	Marine Avenue	Manhattan Beach Boulevard	Alondra Park	3	0.5	2	105
12	Aviation Boulevard	Imperial Highway	154 <sup>th</sup> Street	Del Aire and City of El Segundo <sup>A</sup>	2	0.7	2, 4	105
13	Dominguez Channel Proposed Bicycle Path	Redondo Beach Boulevard	Pacific Coast Highway	City of Torrance, City of Gardena	1	2.78	2, 4	105
14	Buford Avenue	104 <sup>th</sup> Street	111 <sup>th</sup> Street	Lennox	3	0.5	2	100
15	Isis Avenue	116 <sup>th</sup> Street	El Segundo Boulevard	Del Aire and City of El Segundo <sup>A</sup>	3	0.9	2, 4	100
16	223 <sup>rd</sup> Street	Normandie Avenue	Interstate 110	West Carson	2	0.7	2	100
17	220 <sup>th</sup> Street	Normandie Avenue	Vermont Avenue	West Carson	3	0.5	2	90
18	Del Amo Boulevard	Normandie Avenue	Interstate 110	West Carson and City of Los Angeles <sup>A</sup>	2	0.8	2, 4	90
19	Imperial Highway	La Cienega Boulevard	Inglewood Avenue	Lennox and Cities of Hawthorne and Los Angeles <sup>A</sup>	2	0.5	2	90
20	Crenshaw Boulevard	Palos Verdes Drive	Indian Peak Road	Westfield and Cities of Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates <sup>A</sup>	2	1.26	2, 4	90
21	Prairie Avenue	Redondo Beach Boulevard	South Marine Avenue	Alondra Park	2	1.2	2	85
22	Lomita Boulevard	Frampton Avenue	Vermont Avenue	West Carson and City of Los Angeles <sup>A</sup>	2	0.5	2, 4	85
23	El Segundo Boulevard	Isis Avenue	Inglewood Avenue	Del Aire and City of Hawthorne <sup>A</sup>	2	0.8	2	85

**Table 3-33: South Bay Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
24	120 <sup>th</sup> Street	Aviation Boulevard	Inglewood Avenue	Del Aire and City of Hawthorne <sup>A</sup>	3	<del>0.71</del> .0	2	80
25	Vermont Avenue	190 <sup>th</sup> Street	Lomita Boulevard	West Carson and City of Los Angeles <sup>A</sup>	2	3.7	2, 4	80
26	Inglewood Avenue	Century Boulevard	Imperial Highway	Lennox and Cities of Hawthorne and Inglewood <sup>A</sup>	3	1.0	2	75
27	La Cienega Boulevard	Imperial Highway	El Segundo Boulevard	Del Aire and City of Los Angeles <sup>A</sup>	2	1.0	2, 4	75
28	Dominguez Creek Proposed Bicycle Path	Main Street	Pacific Coast Highway	City of Los Angeles	1	6.34	2, 4	75
29	223 <sup>rd</sup> Street	<del>Normandie Avenue</del> Harbor Fwy	<del>Interstate 440</del> Vermont Avenue	<del>West Carson</del> West Carson	2	0.2	2, 4	65
30	West 7 <sup>th</sup> Street	South Weymouth Avenue	South Cabrillo Avenue	City of Los Angeles <sup>A</sup>	BB	0.9	2, 4	60
<b>Total Mileage</b>						<del>33.4</del> <u>34.5</u>		

<sup>A</sup> Part of project traverses through or along boundary of incorporated city

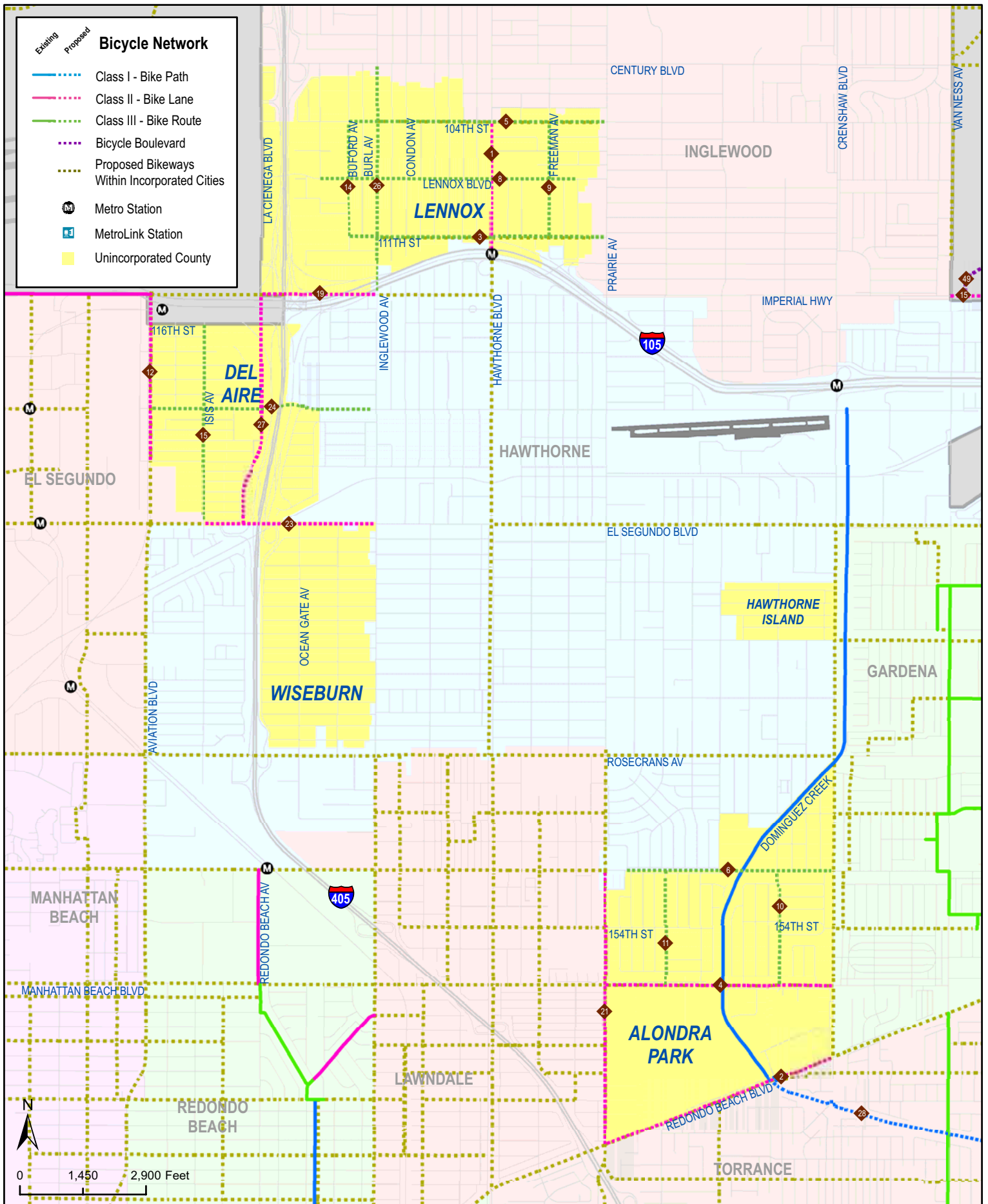


**Figure 3-30: South Bay Planning Area Proposed Bicycle Facilities**

**Los Angeles County Bicycle Master Plan**

Source: Los Angeles Metro (2006; 2010); Alta Planning + Design (2010)  
Date: 1/30/2011

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**Figure 3-31: Alondra Park, Del Aire, Hawthorne Island and Lennox Recommended Bicycle Facilities**

## 3.10 West San Gabriel Valley Planning Area

The West San Gabriel Valley Planning Area is comprised of a cluster of communities located east of downtown Los Angeles and intermingled with numerous cities, including Pasadena, South Pasadena, Monterey Park, and El Monte. Approximately 118,000 people resided within the unincorporated parts of the West San Gabriel Valley in 2010.<sup>32</sup> The planning area communities include Altadena, East Pasadena-East San Gabriel, Kinneloa Mesa, San Pasqual, South Monrovia Islands, South San Gabriel, South El Monte Islands, and Whittier Narrows.

The San Gabriel Valley has undergone dramatic population and demographic shifts over the last 30 years. Previously a bedroom community, it now hosts employment centers and major regional transit access. Mixed-use infill and transit-oriented development are planned for East Pasadena and it is envisioned as a model for unincorporated communities in this area. Figure D-9 in Appendix D shows the West San Gabriel Valley Planning Area's current land use patterns, which are predominately single-family residential.

### 3.10.1 Existing Bicycle Conditions

The unincorporated parts of West San Gabriel Valley Planning Area currently contain 25.9 miles of existing bikeways, including 23 miles of Class I bicycle path. Table 3-34 summarizes the location, classification, and mileage of existing bikeways.

Figure 3-32 displays the existing bicycle network along with mass transit stations and bicycle collision sites<sup>33</sup> in the West San Gabriel Valley Planning Area.

There are multiple Metro and MetroLink Stations in the planning area that provide residents and commuters with the option to take multimodal trips. Altadena, East Pasadena-East San Gabriel, and San Pasqual also have Metro Gold Line stations nearby. The South Monrovia Islands and Whittier Narrows have connections to the El Monte MetroLink station and the El Monte Bus Terminal via the Rio Hondo bike path.

Numerous opportunities exist to expand the existing bicycle network and, therefore, improve bicycle-transit integration and access to commercial, recreational, and other key destinations. The unincorporated communities of Altadena, East Pasadena-East San Gabriel, San Pasqual, and the South Monrovia Islands have excellent opportunities to enhance their bicycling mobility by developing facilities that tie in to the relatively dense bicycle networks of adjacent cities of Pasadena and Arcadia.

According to the California Highway Patrol SWITRS data, a total of 87 bicycle collisions were reported in the West San Gabriel Valley Planning Area from 2004 through 2009, 40 of which occurred in Altadena.

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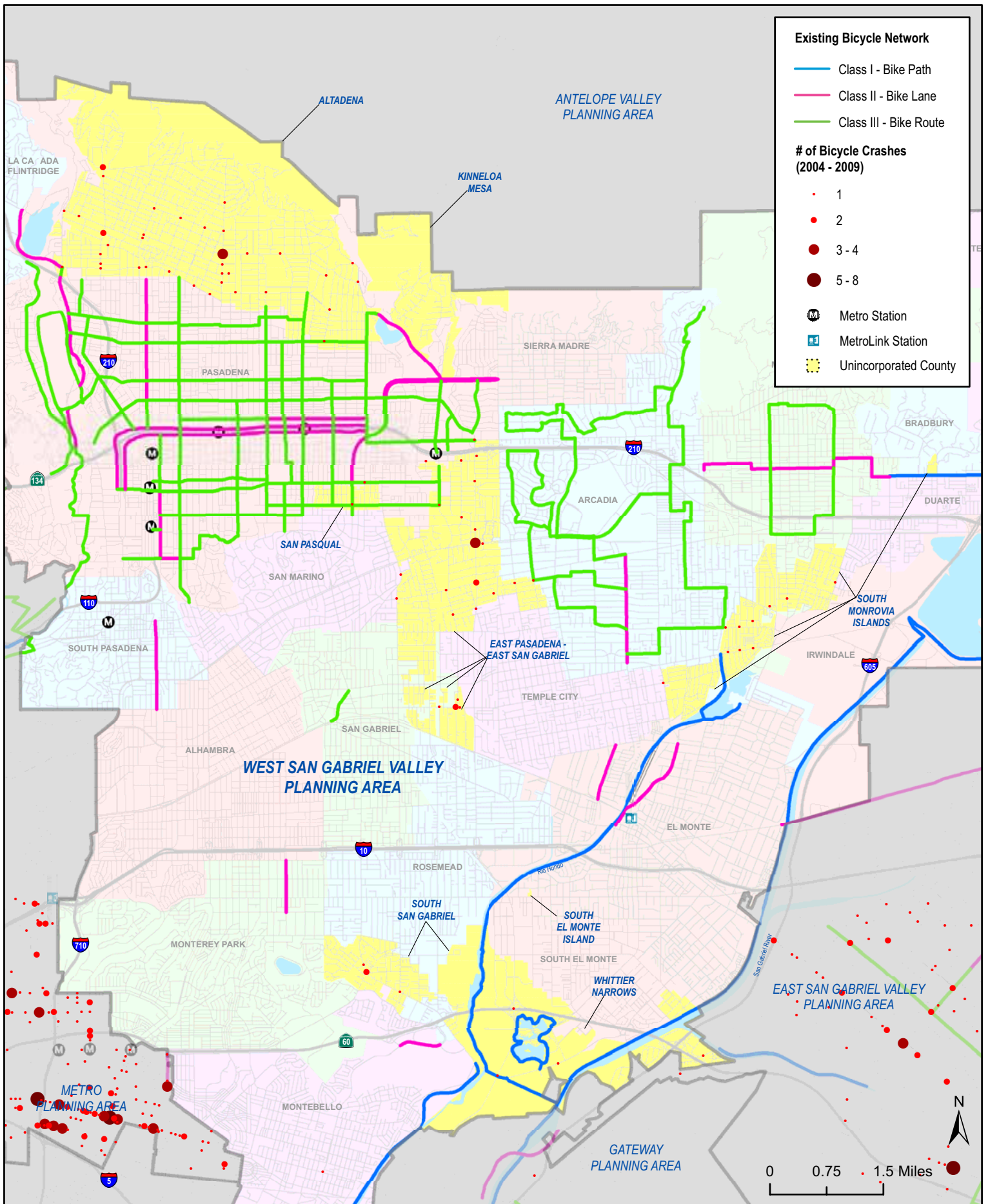
<sup>32</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections

<sup>33</sup> Bicycle collision locations displayed for unincorporated county only.

**Table 3-34: West San Gabriel Valley Existing Bikeways**

Community	Segment	From	To	Class	Mileage
Altadena	Allen Avenue	New York Drive	Washington Boulevard	3	0.7
Altadena	Elizabeth Street	Oxford Avenue	Allen Avenue	3	0.2
Cities of Arcadia and El Monte	Santa Anita Wash Bicycle Path	Live Oak Avenue	Rio Hondo Bicycle Path	1	1.0
Cities of Arcadia, El Monte, Rosemead and South El Monte, and Whittier Narrows	Upper Rio Hondo Bicycle Path	Rio Hondo Parkway	San Gabriel Boulevard	1	6.9
City of Irwindale	San Gabriel River Bicycle Path	Huntington Drive	Ramona Boulevard	1	8.2
City of Montebello and Whittier Narrows	Rio Hondo Bicycle Path	San Gabriel Boulevard	0.2 miles north of Washington Boulevard	1	3.7
East Pasadena-East San Gabriel	Madre Street	Del Mar Boulevard	Green Street	3	0.2
East Pasadena-East San Gabriel	Madre Street	Thorndale Road	San Pasqual Street	3	0.2
East Pasadena-East San Gabriel	San Pasqual Street	0.1 miles west of Oneida Drive	Madre Street	3	0.1
San Pasqual	San Pasqual Street	Berkeley Avenue	San Gabriel Boulevard	3	0.9
San Pasqual	Sierra Madre Boulevard	0.1 miles south of Del Mar Boulevard	0.1 miles north of California Boulevard	3	0.3
Whittier Narrows	Rio Hondo-San Gabriel River Connector	Upper Rio Hondo Bicycle Path	San Gabriel River Bicycle Path	1	1.0
Whittier Narrows	San Gabriel River Bicycle Path	0.1 miles south of Fineview Street	0.2 miles south of Siphon Road	1	2.5
				<b>Total</b>	<b>25.9</b>

\*County-maintained bikeways only



**Figure 3-32: West San Gabriel Valley Planning Area Existing Bicycle Network, Major Transit and Bicycle Crashes (2004-2009)**

### 3.10.2 Proposed Network

Table 3-35 summarizes the proposed bicycle network mileage by classification type within the West San Gabriel Valley Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would provide ~~62~~66 miles of facility across the planning area. Under current conditions, unincorporated West San Gabriel Valley contains nearly 26 miles of bicycle facility.

Table 3-36 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-33 displays the proposed bicycle network as well as existing bicycle facilities and major transit stops in the West San Gabriel Valley Planning Area. Figure 3-34 provides a more detailed view of the proposed bicycle network within the Altadena and Kinneloa Mesa communities. Figure 3-35 provides a closer view of the proposed bicycle network within the communities of East Pasadena-East San Gabriel, San Pasqual, and the South Monrovia Islands.

**Table 3-35: West San Gabriel Valley Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class I – Bicycle Path	<del>8.4</del> <u>9.1</u>	<del>13.4</del> <u>13.9</u> %
Class II – Bicycle Lane	<del>46.8</del> <u>17.1</u>	<del>77.4</del> <u>26.0</u> %
Class III – Bicycle Route	<del>32.0</del> <u>34.3</u>	<del>51.7</del> <u>52.2</u> %
Bicycle Boulevard	<del>5.0</del> <u>5.2</u>	<del>8.1</del> <u>7.9</u> %
<b>Total</b>	<del>61.9</del> <u>65.7</u>	<b>100%</b>

**Table 3-36: West San Gabriel Valley Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	Madre Street/ Muscatel Avenue	San Pasqual Street	Longden Avenue	East Pasadena-East San Gabriel	3	1.7	5	145
2	Del Mar Boulevard	Madre Street	Rosemead Avenue	East Pasadena-East San Gabriel and City of Pasadena <sup>A</sup>	3	0.5	5	145
3	Allen Avenue	Altadena Drive	New York Drive	Altadena	3	<del>0.9</del> <u>1.5</u>	5	130

5	Longden Avenue	8 <sup>th</sup> Avenue	Peck Road	South Monrovia Islands	3	1.0	5	115
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**Table 3-36: West San Gabriel Valley Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
4	Eaton Wash Channel Proposed Bicycle Path <sup>B</sup>	New York Drive	E. Foothill Boulevard	East Pasadena-East San Gabriel, City of Pasadena, City of Temple City, City of San Gabriel, City of Rosemead, City of El Monte	1	1.7	1, 5	125
		E. Foothill Boulevard	Del Mar Boulevard		3	0.6		
		Del Mar Boulevard	Rio Hondo Bicycle Path		1	6.0		
5	Longden Avenue	8 <sup>th</sup> Avenue	Peck Road	South Monrovia Islands	3	0.7	5	115
6	Holliston Avenue	Altadena Drive	Lexington Street	Altadena and City of Pasadena <sup>A</sup>	3	1.1	5	115
7	Daines Drive/ 9 <sup>th</sup> Avenue/ Lynd Avenue	Santa Anita Avenue	Mayflower Avenue	South Monrovia Islands and City of Arcadia <sup>A</sup>	3	1.3	5	110
8	Lake Avenue	Loma Alta Drive	Atchison Street	Altadena and City of Pasadena	3	1.9	5	110
9	Santa Anita Wash Proposed Bicycle Path	Longden Avenue	Live Oak Avenue	South Monrovia Islands	1	0.3	5	100
10	Huntington Drive	San Gabriel Boulevard	Michillinda Avenue	East Pasadena-East San Gabriel	2	1.4	5	105
11	Sierra Madre Villa Avenue/ Madre Street	Interstate 210	Green Street	East Pasadena-East San Gabriel and City of Pasadena <sup>A</sup>	3	0.2	5	105
12	Colorado Boulevard	Kinneloa Avenue (Eaton Wash Channel Proposed Bicycle Path)	Michillinda Avenue	East Pasadena-East San Gabriel and City of Pasadena	2	1.1	5	100
13	Woodbury Road	Windsor Avenue	Santa Rosa Avenue	Altadena and City of Pasadena <sup>A</sup>	2	1.7	5	95
	Woodbury Road	Santa Rosa Avenue	Lake Avenue		3	0.5		
14	Foss Avenue/ Center Street	Longden Avenue	Daines Drive	South Monrovia Islands	3	0.6	5	95

15	California Avenue	Hurstview Avenue	Novice Lane	South Monrovia Islands and City of Monrovia <sup>A</sup>	3	0.9	5	95
16	Pepper Drive	Glen Canyon Road	Washington Boulevard	Altadena	3	0.9	5	95
17	Altadena Drive	Allen Avenue	Canyon Close Road	Altadena	3	1.0	5	95
18	Ardendale Avenue/ Oak Avenue/ Naomi Avenue	0.2 miles west of Muscatel Avenue (Eaton Wash Channel Proposed Bicycle Path)	Golden West Avenue	East Pasadena-East San Gabriel	3	1.4	5	95
19	Glenrose Avenue	Loma Alta Drive	Woodbury Road	Altadena	3	1.5	5	95

**Table 3-36: West San Gabriel Valley Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
18	Ardendale Avenue/ Oak Avenue/ Naomi Avenue	0.2 miles west of Muscatel Avenue (Eaton Wash Channel Proposed Bicycle Path)	Golden West Avenue	East Pasadena-East San Gabriel	3	1.4	5	95
19	Glenrose Avenue	Loma Alta Drive	Woodbury Road	Altadena	3	1.5	5	95
20	New York Drive	Lake Avenue	0.1 miles east of Creekside Court	Altadena	3	2.2	5	95
21	Altadena Drive	Crestford Drive	Allen Avenue	Altadena and City of Pasadena <sup>A</sup>	3	3.1	5	95
22	Lincoln Avenue	Loma Alta Drive	Altadena Drive	Altadena	3	0.2	5	95
	Lincoln Avenue	Altadena Drive	Woodbury Road		2	1.1		
23	Ventura/ N. Fair Oaks/ Calaveras/ Mendocino	East Calaveras Street/ Windsor Avenue	Ventura Street/ Allen Avenue	Altadena	BB	3.6	5	95
24	Peck Road	San Gabriel River Bicycle Path	Workman Mill Road	Whittier Narrows, Avocado Heights, North Whittier and	2	0.9	1,4	95

Chapter 3: Existing Conditions and Proposed Network

City of Industry <sup>A</sup>								
25	Duarte Road <sup>C</sup>	San Gabriel Boulevard	Sultana Avenue	East Pasadena-East San Gabriel	3	1.0	5	90
	Duarte Road	Sultana Avenue	Oak Avenue		2	0.4		
26	Windsor Avenue	Ventura Street	Figueroa Drive	Altadena	3	0.5	5	90
27	Loma Alta Drive	Lincoln Avenue	Lake Avenue	Altadena	3	1.6	5	90
28	Glenview Terrace/ Glen Canyon Road/ Roosevelt Avenue	Allen Avenue	Washington Boulevard	Altadena	BB	1.6	5	90
<u>29</u>	<u>Emerald Necklace Gateway</u>	<u>San Gabriel River Path</u>	<u>Park entrance parking lot</u>	<u>Santa Fe Dam Recreational Area</u>	<u>1</u>	<u>1.1</u>	<u>1</u>	<u>90</u>
<u>30</u>	Windsor Avenue	Figueroa Drive	Alberta Street	Altadena and City of Pasadena <sup>A</sup>	3	0.1	5	85
<u>29</u>	Windsor Avenue	Alberta Street	Interstate 210		2	0.3		
<u>31</u>	San Pasqual Street	Madre Street	Rosemead Avenue	East Pasadena-East San Gabriel	2	0.5	5	85
<u>32</u>	<u>Tyler Ave/W. Hondo Parkway</u>	<u>E. Live Oak Avenue</u>	<u>Temple City Limits</u>	<u>South Monrovia Islands</u>	<u>3</u>	<u>1.0</u>	<u>1.5</u>	<u>85</u>
31	<del>Altadena Drive</del>	<del>Canyon Close Road</del>	<del>Washington Boulevard</del>	<del>Altadena</del>	<del>2</del>	<del>1.0</del>	<del>5</del>	<del>85</del>
32	<del>Del Mar Avenue/ Hill Drive/San Gabriel Boulevard<sup>C</sup></del>	<del>Graves Avenue</del>	<del>0.2 miles east of Lincoln Avenue</del>	<del>South San Gabriel, Whittier Narrows and Cities of Montebello and Rosemead<sup>A</sup></del>	<del>2</del>	<del>2.6</del>	<del>4</del>	<del>85</del>
33	<del>Figueroa Drive</del>	<del>Windsor Avenue</del>	<del>Fair Oaks Avenue</del>	<del>Altadena</del>	<del>3</del>	<del>0.8</del>	<del>5</del>	<del>80</del>
34	<del>Las Flores Drive</del>	<del>Glenrose Avenue</del>	<del>Lake Avenue</del>	<del>Altadena</del>	<del>3</del>	<del>1.0</del>	<del>5</del>	<del>80</del>
35	<del>Marengo Avenue</del>	<del>Loma Alta Drive</del>	<del>Altadena Drive</del>	<del>Altadena and City of Pasadena<sup>A</sup></del>	<del>3</del>	<del>0.9</del>	<del>5</del>	<del>80</del>

**Table 3-36: West San Gabriel Valley Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
<u>33</u>	<u>Altadena Drive</u>	<u>Canyon Close Road</u>	<u>Washington Boulevard</u>	<u>Altadena</u>	<u>2</u>	<u>1.0</u>	<u>5</u>	<u>85</u>
<u>34</u>	<u>Del Mar Avenue/ Hill Drive/San Gabriel</u>	<u>Graves Avenue</u>	<u>0.2 miles east of Lincoln Avenue</u>	<u>South San Gabriel, Whittier Narrows and Cities of Montebello and Rosemead<sup>A</sup></u>	<u>2</u>	<u>2.6</u>	<u>1</u>	<u>85</u>

<u>Boulevard<sup>C</sup></u>								
<u>35</u>	<u>Figueroa Drive</u>	<u>Windsor Avenue</u>	<u>Fair Oaks Avenue</u>	<u>Altadena</u>	<u>3</u>	<u>0.8</u>	<u>5</u>	<u>80</u>
<u>36</u>	<u>Las Flores Drive</u>	<u>Glenrose Avenue</u>	<u>Lake Avenue</u>	<u>Altadena</u>	<u>3</u>	<u>1.0</u>	<u>5</u>	<u>80</u>
<u>37</u>	<u>Marengo Avenue</u>	<u>Loma Alta Drive</u>	<u>Altadena Drive</u>	<u>Altadena and City of Pasadena<sup>A</sup></u>	<u>3</u>	<u>0.9</u>	<u>5</u>	<u>80</u>
<u>38</u>	<u>S 10th Avenue</u>	<u>Arcadia City Limits</u>	<u>E. Live Oak Avenue</u>	<u>South Monrovia Islands</u>	<u>3</u>	<u>0.6</u>	<u>5</u>	<u>75</u>
<u>39</u> <u>36</u>	Casitas Avenue	Ventura Street	West Altadena Drive	Altadena	3	0.5	5	75
<u>40</u> <u>37</u>	Vista Street	Huntington Drive	Longden Avenue	East Pasadena-East San Gabriel	3	1.1	5	70
<u>41</u> <u>38</u>	San Pasqual Street	Greenwood Avenue	San Gabriel Boulevard	East Pasadena	3	0.9	5	70
<u>42</u> <u>39</u>	Mayflower Avenue	Longden Avenue	Lynd Avenue	South Monrovia Islands	2	0.3	5	70
<u>43</u> <u>40</u>	South Golden West Avenue	West Naomi Avenue	East Lemon Avenue	East Pasadena-East San Gabriel and City of San Arcadia <sup>A</sup>	3	0.4	5	70
<u>44</u> <u>41</u>	Camino Real Shrode Avenue	Mayflower Avenue California Avenue	California Avenue Mountain Avenue	South Monrovia Islands	2 3	0.67 0.4	5	70
<u>45</u> <u>42</u>	Washington Boulevard	Belford Drive	Altadena Drive	Altadena	2	0.7	5	70
<u>46</u> <u>43</u>	Willard Avenue	Longden Avenue	Las Tunas Drive	East Pasadena-East San Gabriel and City of San Gabriel <sup>A</sup>	3	0.7	5	60
<u>47</u> <u>44</u>	California Boulevard	0.1 miles east of Brightside Lane	Michillinda Avenue	East Pasadena-East San Gabriel	2	1.0	5	60
<u>48</u> <u>45</u>	Longden Avenue	San Gabriel Boulevard	Rosemead Boulevard	East Pasadena-East San Gabriel and Cities of San Gabriel and Temple City <sup>A</sup>	3	1.0	5	55

**Table 3-36: West San Gabriel Valley Proposed Bicycle Facilities (continued)**

<u>Project ID</u>	<u>Segment</u>	<u>From</u>	<u>To</u>	<u>Community</u>	<u>Class</u>	<u>Mileage</u>	<u>Supervisorial District</u>	<u>Priority Score</u>
<u>49</u> <u>46</u>	Temple City Boulevard	Duarte Road	Lemon Avenue	East Pasadena-East San Gabriel and City of Temple	2	0.5	5	55

Chapter 3: Existing Conditions and Proposed Network

				City <sup>A</sup>				
<u>50</u>	Rosemead	Colorado	Callita Street	East Pasadena-East San	2	<u>4.92</u>	5	60
<u>47</u>	Boulevard <sup>C</sup>	Boulevard		Gabriel		<u>0</u>		
<b>Total Mileage</b>						<b><u>61.96</u></b>		
						<u>5.7</u>		

<sup>A</sup> Part of project traverses through or along boundary of incorporated city

<sup>B</sup> Proposed project requires on-street alignment between Maple Street and Titley Avenue and between Kinneloa Avenue and Del Mar Boulevard

<sup>C</sup> Proposed segment overlaps with Early Action bicycle project identified by County of Los Angeles

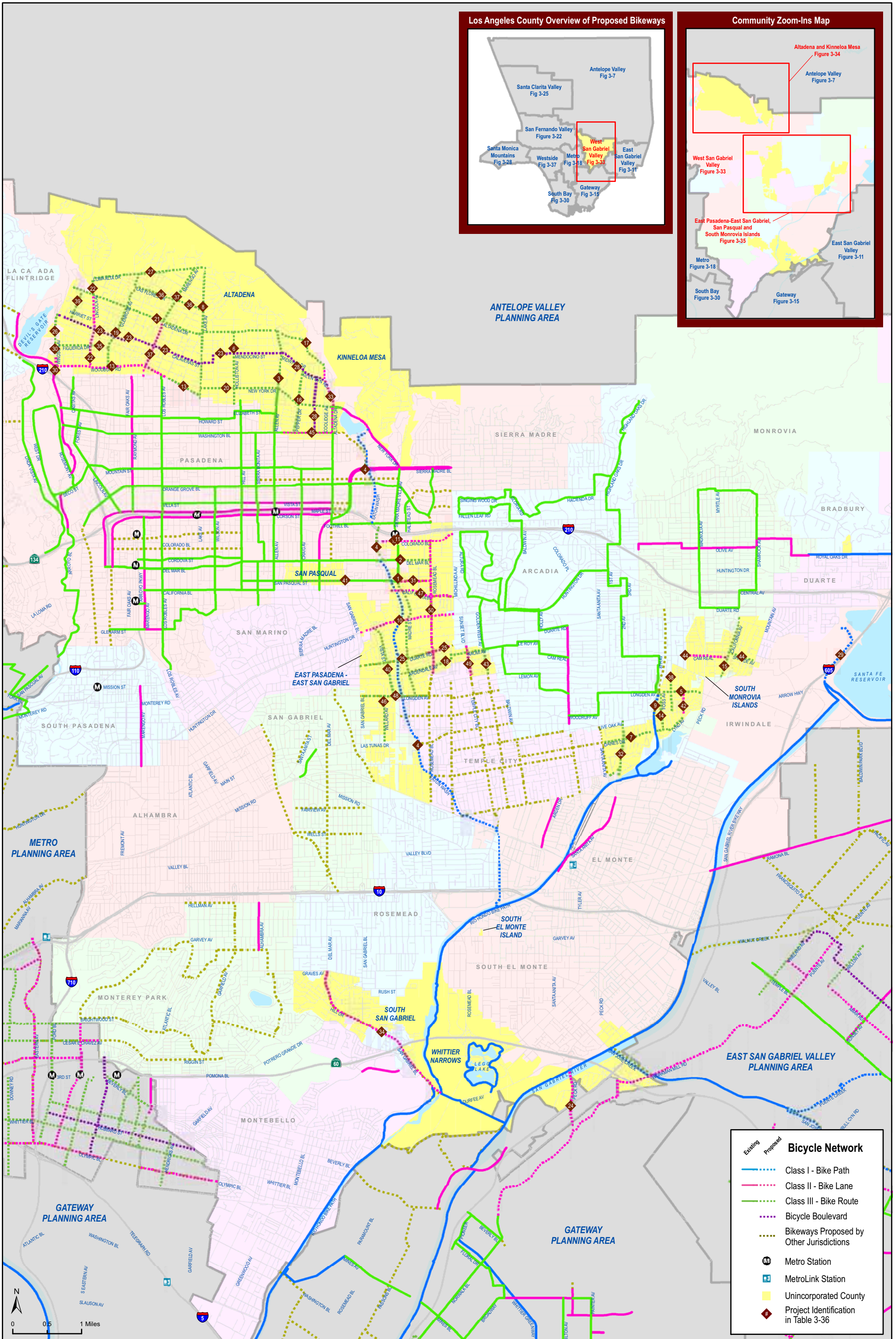
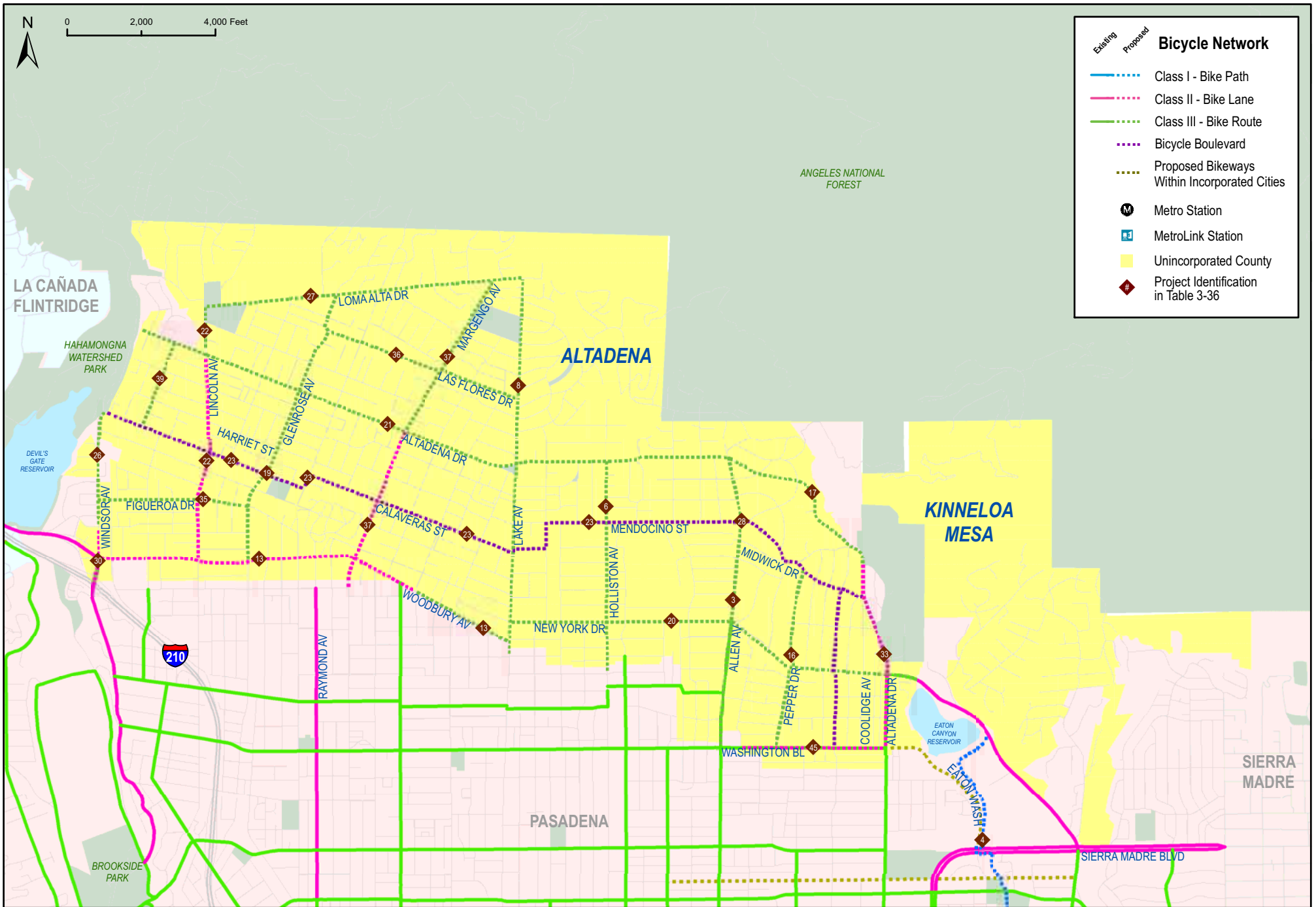


Figure 3-33: West San Gabriel Valley Planning Area Proposed Bicycle Facilities

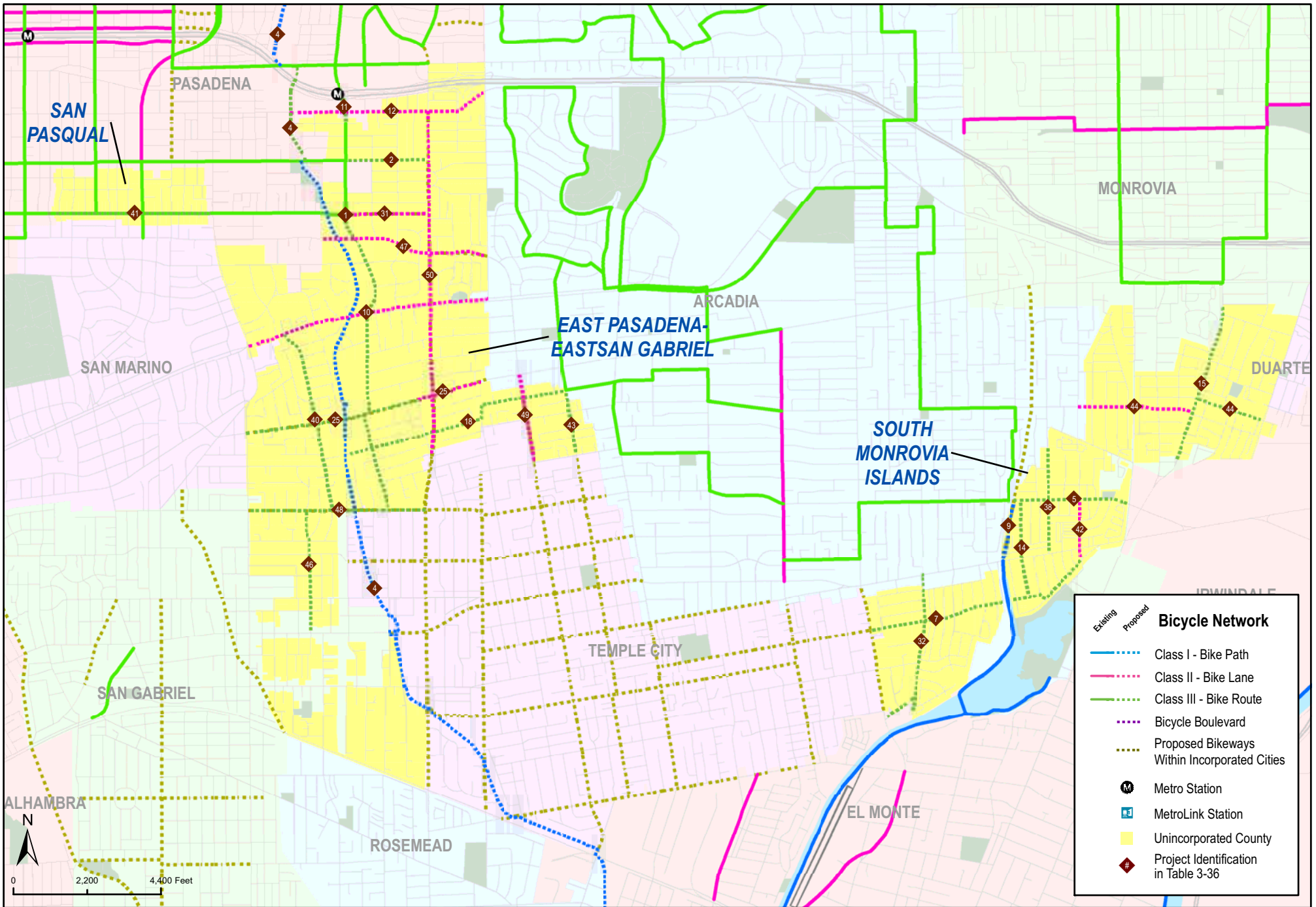
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**Figure 3-34: Altadena and Kinneloa Mesa Proposed Bicycle Facilities**

Los Angeles County Bicycle Master Plan

Source: Los Angeles Metro (2010); Alta Planning + Design (2010)  
Date: 10/13/10



**Figure 3-35: East Pasadena-East San Gabriel, San Pasqual and South Morovia Islands Proposed Bicycle Facilities**

### 3.11 Westside Planning Area

The Westside Planning Area is located in the densely urban western part of Los Angeles County. There are four unincorporated areas comprised of the following six communities: Franklin Canyon, West Los Angeles (Sawtelle Veterans Affairs), Marina del Rey, Ballona Wetlands, West Fox Hills, and Ladera Heights/Viewpark-Windsor Hills. The unincorporated area is surrounded by incorporated jurisdictions, primarily the City of Los Angeles.

Approximately 32,000 people reside in this geographically small collection of communities<sup>34</sup>, excluding West Los Angeles (Sawtelle Veterans Affairs), which has no permanent residents. Land uses in West Los Angeles are exclusively open space/park and public use, hosting the Veterans Affairs Administration and Hospital, Barrington Recreation Center, and Los Angeles National Cemetery. The remaining communities consist of predominately residential, commercial, open space, and park land uses. Figure D-10 in Appendix D displays existing land uses within the planning area.

#### 3.11.1 Existing Bicycle Conditions

Within the Westside Planning Area, there are approximately 12.2 miles of bikeways maintained by the County. Table 3-37 summarizes the location, classification, extents, and mileage of the facilities maintained by the County.

**Table 3-37: Westside Planning Area Existing Bikeways**

Community	Segment	From	To	Classes	Mileage
Cities of Los Angeles and Santa Monica	Marvin Braude Bicycle Path	Mabery Road	Washington Boulevard	1	4.8
City of Los Angeles	Marvin Braude Bicycle Path	Pacific Avenue	Grand Avenue	1	3.8
City of Los Angeles and Marina del Rey	Ballona Creek Bicycle Path	Pacific Avenue	Lincoln Boulevard	1	1.5
Marina del Rey	Fiji Way	Western terminus of Fiji Way	Admiralty Way	3	0.7
Marina del Rey	Marvin Braude Bicycle Path	Fiji Way	Ballona Creek Bicycle Path	1	0.1
Marina del Rey	Marvin Braude Bicycle Path	Washington Boulevard	Fiji Way	1	1.3
				<b>Total</b>	<b>12.2</b>

*\*County-maintained bikeways only*

Opportunities to expand the existing bicycle network include improving access to key attractors in Ladera Heights/Viewpark-Windsor Hills such as West Los Angeles College, the Goldleaf Circle Commercial Plaza,

<sup>34</sup> 2008 SCAG Regional Transportation Plan, Table 2.5: Los Angeles County Population Projections

the Fox Hills Mall, and the commercial area surrounding Leimert Park Plaza, and to existing networks in Culver City and Los Angeles. In Marina del Rey, opportunities include enhancing beach access and connections to Culver City and Los Angeles networks, including linkages to Marvin Braude Bicycle Path.

The LACMTA identified two key gaps in the 2006 Metro Bicycle Transportation Strategic Plan, as shown in Table 3-38.

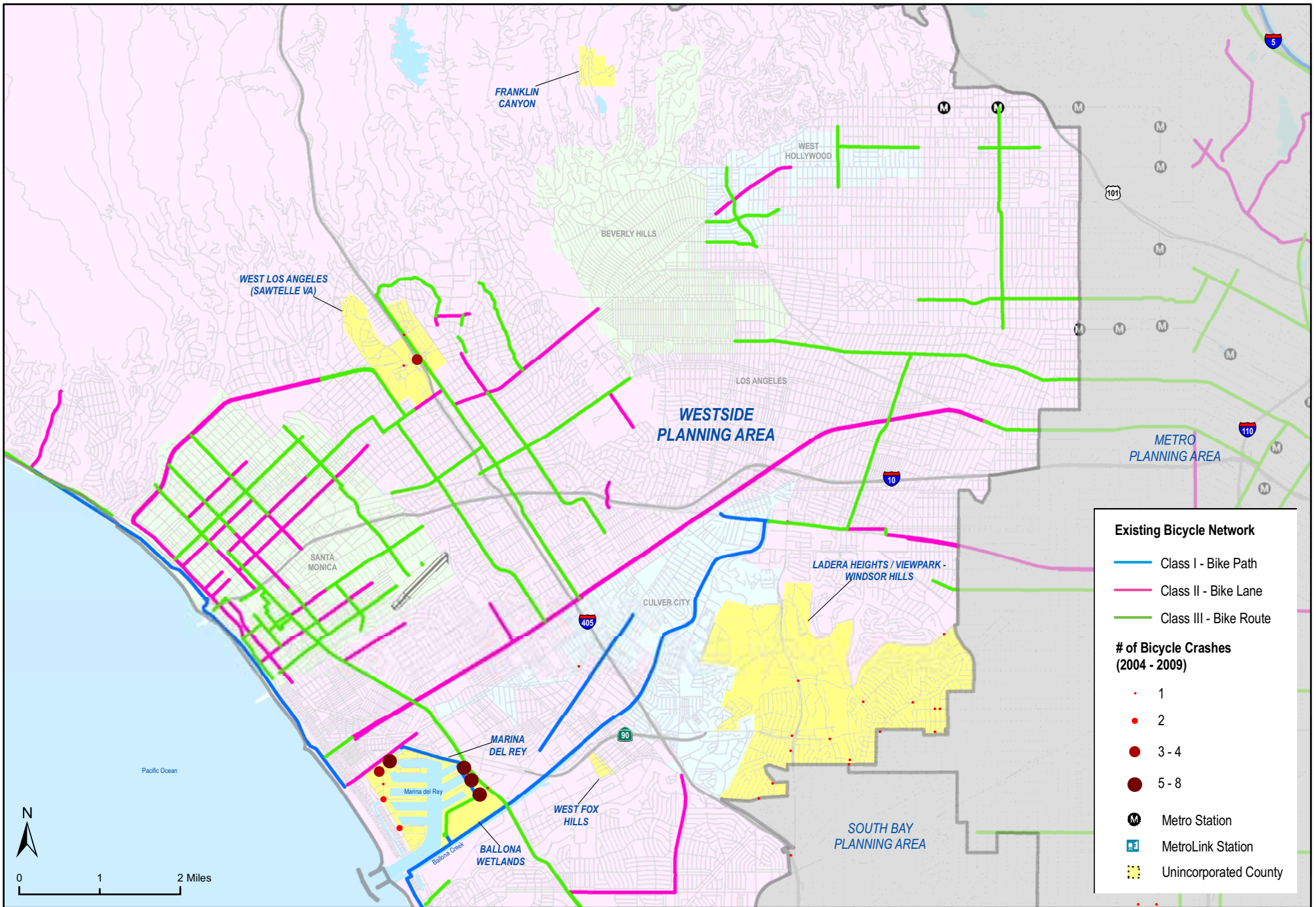
**Table 3-38: MTA Identified Gaps in the Westside Inter-Jurisdictional Bikeway Network**

MTA #	Corridor	Jurisdiction	Description	Constraints
35	Beach	LA County / LA City	South Bay Beach Bicycle Path through the Marina in Marina del Rey	Existing Class II on Washington
36	Beach	LA County / LA City	Connection between Fisherman’s Village and Ballona Creek Bicycle Path	Existing Class III on Fiji Way

Source: Los Angeles County Metropolitan Transportation Authority: 2006 Metro Bicycle Transportation Strategic Plan, p. 103-104

Figure 3-36 displays existing bicycle facilities, public transit stations, and bicycle collision locations within the planning area<sup>35</sup>. According to the California Highway Patrol SWITRS data, 56 bicycle collisions were reported in the Westside Planning Area between 2004 and 2009. Of these 56 instances, 37 occurred in Marina del Rey. Four intersections in Marina del Rey experienced more than five collisions during that time period: Mindanao Way/ Admiralty Way (eight crashes), Bali Way/Admiralty Way (seven crashes), Palawan Way/Admiralty Way (seven crashes), and Fiji Way/Admiralty Way (six crashes). The high incidence of bicycle collisions in this concentrated area is partly a function of the high bicycling rates.

<sup>35</sup> Bicycle collision locations displayed for unincorporated communities only.



**Figure 3-36: Westside Planning Area Existing Bicycle Network, Major Transit and Bicycle Crashes (2004-2009)**

### 3.11.2 Proposed Network

Table 3-39 summarizes the proposed bicycle network mileage by classification type within the Westside Planning Area. Projects were prioritized based on bicycling demand, facility deficiencies, barriers to implementation, public comment, and a host of other criteria. As shown, the proposed network would provide approximately 16 miles of facility across the planning area. There are currently only 12.2 miles of existing bicycle facilities within the unincorporated parts of Westside Planning Area. Table 3-40 presents the Supervisorial District, specific location, alignment, classification, priority score, and mileage for each of the proposed bikeways within the planning area.

Figure 3-37 displays the proposed bicycle network as well as existing bicycle facilities and major transit stops in the Westside planning area. Figure 3-38 provides a more detailed view of the proposed bicycle network within the Marina del Rey and Ballona Wetlands communities.

**Table 3-39: Westside Planning Area Bicycle Network Facility Type and Mileage Summary**

Mileage of Proposed Projects by Facility Type	Miles	% of Total
Class I – Bicycle Path	3.2	20.4%
Class II – Bicycle Lane	7.16.9	44.3.49%
Class III – Bicycle Route	5.75.6	35.67%
<b>Total</b>	<b>16.015.7</b>	<b>100%</b>

**Table 3-40: Westside Planning Area Proposed Bicycle Facilities**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisorial District	Priority Score
1	Fiji Way <sup>A</sup>	0.7 miles west of Admiralty Way	Admiralty Way	Marina del Rey	2	0.7	4	115
	Fiji Way	Admiralty Way	Lincoln Boulevard		3	0.1		
2	Palawan Way	Washington Boulevard	0.1 miles south of Admiralty Way	Marina del Rey	3	0.2	3.4	100
3	Bali Way	0.1 miles west of Marvin Braude Bicycle Path (Admiralty Way)	Marvin Braude Bicycle Path (Admiralty Way)	Marina del Rey	2	0.1	4	100
4	Mindanao Way	0.2 miles west of Marvin Braude Bicycle Path (Admiralty Way)	Marvin Braude Bicycle Path (Admiralty Way)	Marina del Rey	2	0.2	4	100

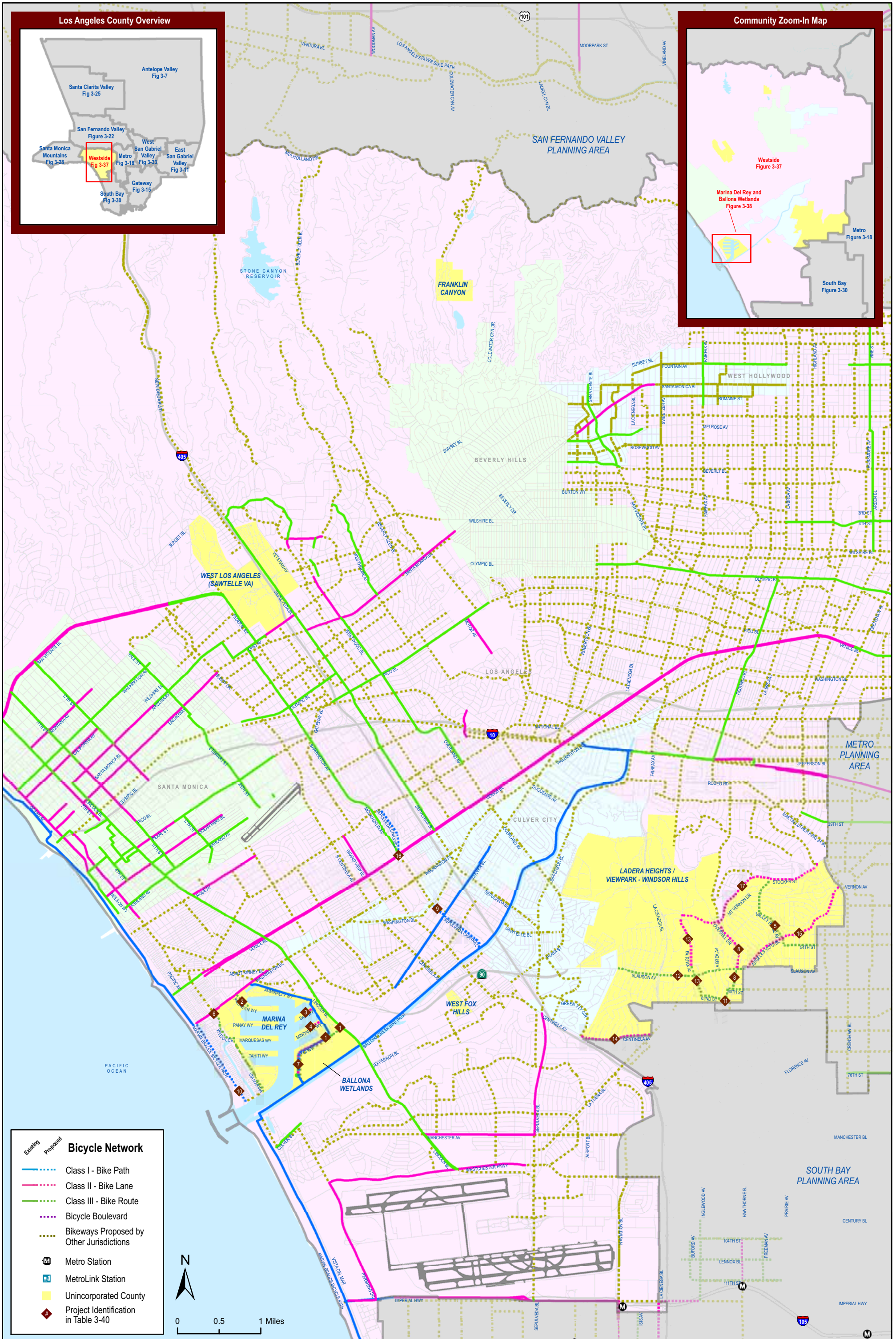
**Table 3-40: Westside Planning Area Proposed Bicycle Facilities (continued)**

Project ID	Segment	From	To	Community	Class	Mileage	Supervisory District	Priority Score
5	Valley Ridge Avenue/ 54th Street	Stocker Street	Hillcrest Drive	Ladera Heights/ Viewpark-Windsor Hills	3	1.4	2	90
6	Via Dolce	Washington Boulevard	Via Marina	Marina del Rey and City of Los Angeles <sup>B</sup>	3	0.4	3, 4	85
	Via Marina	Via Dolce/ Marquesas Way	Channel Walk		3	0.9 8		
7	Fiji Way Proposed Bicycle Path	Fiji Way	Admiralty Way	Marina del Rey	1	0.7	4	85
8	Overhill Drive	Stocker Street	Slauson Avenue	Ladera Heights/	2	0.7	2	80
	Overhill Drive	Slauson Avenue	60 <sup>th</sup> Street	Viewpark-Windsor Hills	3	0.2		
9	Sepulveda Channel Proposed Bicycle Path	Washington Boulevard	Ballona Creek Bicycle Path	City of Los Angeles	1	0.8	2	80
10	Marvin Braude Proposed Bicycle Path	Washington Boulevard	0.1 miles south of Yawl Street	City of Los Angeles	1	1.1	3	75
11	62 <sup>nd</sup> Street/ Citrus Avenue/ 60 <sup>th</sup> Street	Fairfax Avenue	0.1 miles east of Overhill Drive	Ladera Heights/ Viewpark-Windsor Hills and City of Los Angeles <sup>B</sup>	3	0.7	2	70
12	Slauson Avenue	0.1 miles east of Buckingham Parkway	Angeles Vista Road	Ladera Heights/ Viewpark-Windsor Hills and City of Los Angeles <sup>B</sup>	3	1.6	2	70
13	Fairfax Avenue	Stocker Street	57 <sup>th</sup> Street	Ladera Heights/	2	0.6	2	65
	Fairfax Avenue	57 <sup>th</sup> Street	62 <sup>nd</sup> Street	Viewpark-Windsor Hills	3	0.4		
14	Centinela Avenue	Green Valley Circle	La Tijera Boulevard	Ladera Heights/ Viewpark-Windsor Hills and City of Los Angeles <sup>B</sup>	2	0.9	2	65
15	Angeles Vista Road	Slauson Avenue	Vernon Avenue	Ladera Heights/ Viewpark-Windsor Hills and City of Los Angeles <sup>B</sup>	2	1.7 6	2	65
16	Sepulveda Channel Proposed Bicycle Path	Palms Boulevard	Venice Boulevard	City of Los Angeles	1	0.6	2	65
17	Stocker Street	Fairfax Avenue	Santa Rosalia Drive	Ladera Heights/ Viewpark-Windsor Hills and City of Los Angeles <sup>B</sup>	2	2.0	2	50
<b>Total Mileage</b>						<b>16.015.7</b>		

<sup>A</sup> *Proposed segment overlaps with Early Action bicycle project identified by County of Los Angeles*

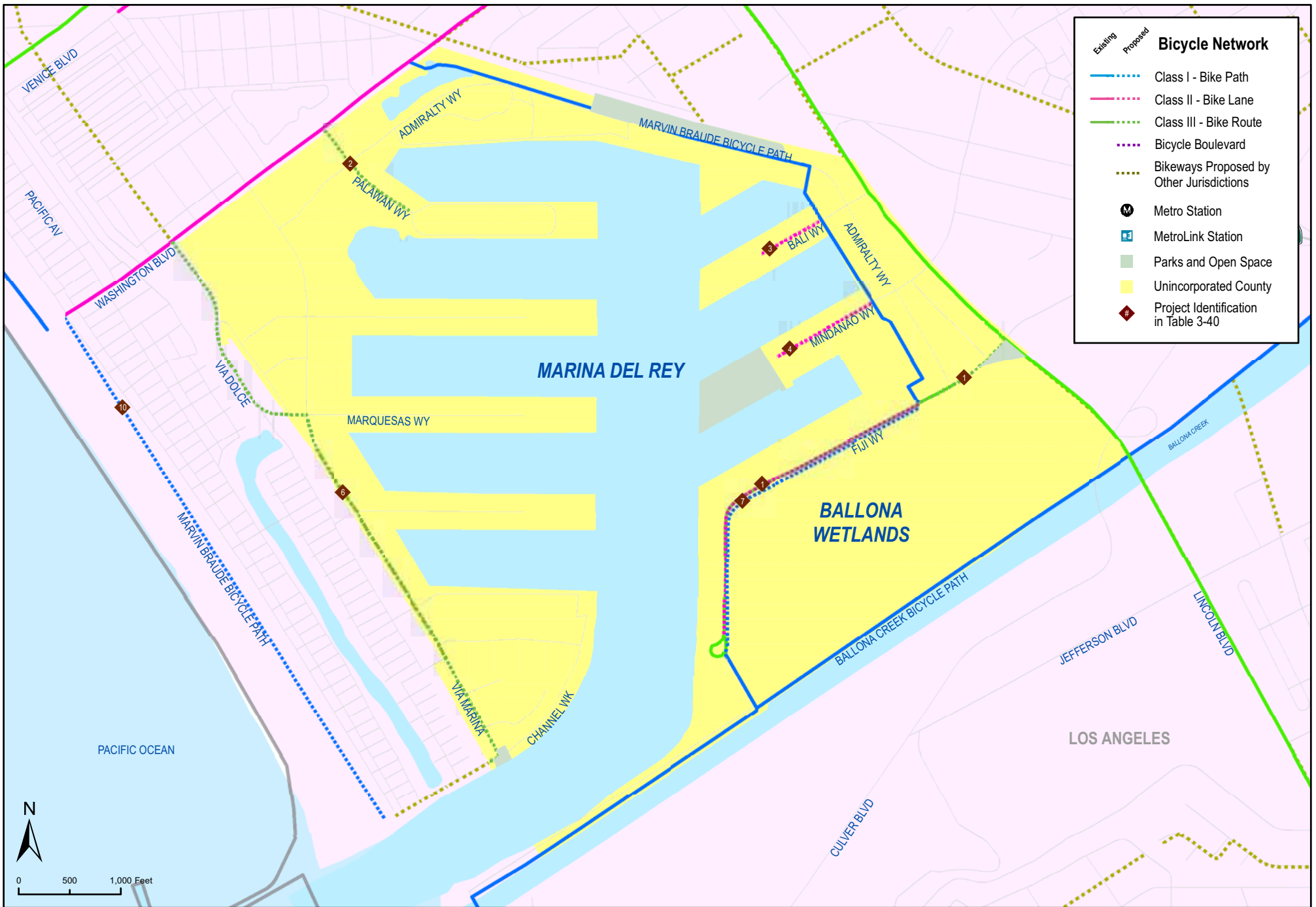
<sup>B</sup> *Part of project traverses through or along boundary of incorporated city*

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**Figure 3-37: Westside Planning Area Proposed Bicycle Facilities**

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**Figure 3-38: Ballona Wetlands and Marina Del Rey Proposed Bicycle Facilities**

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## **4. Education, Enforcement, Encouragement and Evaluation Programs**



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The bikeway projects and facility improvements recommended in the Plan will incorporate programs designed to educate people about bicyclists’ rights and responsibilities and safe bicycle operation; connect current and future bicyclists to existing resources; and encourage residents to bicycle more frequently.

This chapter outlines several potential programs that the County will pursue, as well as programs that the County currently provides and will continue. Recommendations presented in this chapter are divided into the following four categories: education, enforcement, encouragement and evaluation programs. Implementation of the programs will require coordination between various County departments. The County will pursue funding for these programs along with the proposed bikeway projects as implementation of the Plan moves forward. Table 5-6 in the next chapter provides the implementation strategies for the proposed programs outlined in this chapter.

## 4.1 Education Programs

Education programs enable bicyclists, pedestrians, and motorists to understand how to travel safely in the roadway environment and be aware of the laws that govern these modes of transportation. Education programs are available in an array of mediums, from long-term courses with detailed instruction to single sessions focusing on a specific topic. Curriculums should be tailored to the target audience and to the format of instruction. The education programs described in the remainder of this section are recommended for implementation in the unincorporated County of Los Angeles:

- Community Bicycle Education Courses
- Youth Bicycle Safety Education
- Bicycle Rodeos
- Share the Path Campaign
- Public Awareness Campaigns

The County shall coordinate with LACMTA and local jurisdictions to evaluate the efficacy of different education programs and partner with these stakeholders where appropriate to reach a wider audience throughout the County.

### 4.1.1 Community Bicycle Education Courses

Target audience	General Public, County employees
Primary agency	DPW & DPH
Potential partners	Bicycling groups such as Los Angeles County Bicycle Coalition (LACBC), Cyclists Inciting Change thru LIVE Exchange ( C.I.C.L.E) and Sustainable Streets; local Jurisdictions; bicycle shops
Purpose	Educate users of all age groups and skill levels on safe bicycling skills pursuant to Policy 3.1
Resources	<a href="http://www.bikeleague.org/programs/education/courses.php">www.bikeleague.org/programs/education/courses.php</a>

Most bicyclists do not receive comprehensive instruction on safe and effective bicycling techniques, laws, or bicycle maintenance. Bicycle skills courses can address this deficiency by providing on-bike maneuvering, traffic negotiation, and crash avoidance techniques, as well as instruction on bicycle safety checks, fixing flat tires, and adhering to bicycle traffic laws. The League of American Bicyclists (LAB) developed a comprehensive bicycle skills curriculum which is considered the national standard for adults seeking to improve their on-bike skills. The classes available include bicycle safety checks and basic maintenance, basic and advanced on-road skills, commuting, and driver education.

Many community groups such as the Los Angeles County Bicycle Coalition (LACBC), Cyclists Inciting Change thru LIVE Exchange (C.I.C.L.E) and Sustainable Streets offer adult LAB courses taught by League Certified Instructors on an ongoing basis. The County can partner with these groups to conduct targeted safety education for County residents, or incorporate them into other County programs that encourage healthy lifestyles, such as the Department of Parks and Recreations “Healthy Parks” program. Common LAB adult courses are Traffic Skills 101, Traffic Skills 102, and Commuting.

The community bicycle skill courses can also include distribution of bike repair kits or other free material, and offer free bicycle repair to encourage public participation. The skill courses can be made available to individual members of the public and also to existing groups such as employees of local business, County employees and university college students.

### 4.1.2 Youth Bicycle Safety Education

Target audience	School-age Children
Primary agency	DPW, DPH & LACOE
Potential partners	School Districts and parent groups, local volunteers, League of American Bicyclists instructors, bicycle groups
Purpose	In-school and/or after-school on-bike skills and safety training
Resources	National Center for Safe Routes to School guide: <a href="http://www.saferoutesinfo.org/guide/education/key_messages_for_children.cfm">http://www.saferoutesinfo.org/guide/education/key_messages_for_children.cfm</a> LAB’s Kids I and II curriculum: <a href="http://www.Bikeleague.org/programs/education/courses.php#kids1">http://www. Bikeleague.org/programs/education/courses.php#kids1</a> BTA’s Bike Safety Education Program: <a href="http://www.bta4bikes.org/resources/educational.php">http://www.bta4bikes.org/resources/educational.php</a>

Youth bicycle safety programs educate students about the rules of the road, proper use of bicycle equipment, biking skills, street crossing skills, and the benefits of bicycling. Such education programs are frequently initiated as part of Suggested Routes to School programs.

Bicycle safety education can be integrated into classroom time, physical education periods, or taught after school. Classroom activities teach children about bicycling and traffic safety through lessons given by a volunteer, trained professional, law enforcement officer, or teacher. Individual lessons should focus on one or two key issues and include activities that are specifically designed to entertain and engage the targeted age group. Pedestrian safety topics are generally most effective for children in kindergarten through third grade,

whereas bicycle safety lessons are more appropriate for fourth through eighth grade students.<sup>36</sup> The National Center for Safe Routes to School (SR2S) online guide summarizes key messages to include in pedestrian and bicycle safety curriculums.

In addition to classroom-based activities, periodic “safety assemblies” can also be used to provide bicycle safety education. Safety assemblies are events that convey a safety message through the use of engaging and visually stimulating presentations, videos, skits, guest speakers, or artistic displays. Assemblies should be relatively brief and focus on one or two topics. Classes receiving on-going instruction on related topics can participate by presenting what they are learning to the rest of the school. Safety assembly lessons can be reinforced throughout the school year by reiterating the message in school announcements, school newsletters, posters, or other means. In addition to providing safety instruction, safety assemblies generate enthusiasm about biking.

On-bike safety education presented by professionally trained teachers, bicycling organizations, or other volunteers should include:

- Identifying the parts of a bicycle
- How a bicycle works
- Flat fixing
- Rules of the road
- Right of way
- Road positioning
- On-bike skills lessons (braking, turning, steering)
- Riding with traffic

### 4.1.3 Bicycle Rodeos

Target audience	School-age Children
Primary agency	DPW & DPH
Potential partners	School Districts and parent groups, CHP, Sheriff’s Department and local law enforcement, bicycle groups
Purpose	Teach children basic bicycle skills through a fun activity
Resources	Safe Routes to School online guide: <a href="http://www.bicyclinglife.com/SafetySkills/BicycleRodeo.htm">http://www.bicyclinglife.com/SafetySkills/BicycleRodeo.htm</a> <a href="http://www.saferoutestoschools.org/pdfs/lessonplans/RodeoManualJune2006.pdf">http://www.saferoutestoschools.org/pdfs/lessonplans/RodeoManualJune2006.pdf</a>

<sup>36</sup> Safe Routes to School National Partnership, <http://www.saferoutespartnership.org/state/bestpractices/personalsafety>

Bicycle Rodeos are individual events that help students develop basic bicycling techniques and safety skills through the use of a bicycle safety course. Rodeos use playgrounds or parking lots set up with stop signs, traffic cones, and other props to simulate the roadway environment. Typically, students are taught basic maneuvering tips and are taught to stop at stop signs and look for on-coming traffic before proceeding through intersections.

Bicycle Rodeos also provide an opportunity for instructors to ensure children's helmets and bicycles are appropriately sized, and can include free or low-cost helmet distribution and/or bike safety checks. Trained adult volunteers can administer rodeos, or they may be offered through the local police or fire department. Bicycle Rodeos can be conducted as part of school events or in conjunction with other community-wide events to engage parents and obtain their support for bicycling as a valid transportation choice.

### 4.1.4 Share the Path Campaign

Target audience	Users of multi-use paths and Class I bike paths
Primary agency	DPW & Los Angeles County Department of Parks & Recreation (DPR)
Potential partners	CHP, Sheriff's Department and local law enforcement, bicycle groups, local bicycle retail and rental shops
Purpose	Educate path users, including bicyclists, pedestrians, joggers, and dog walkers on being safe and respectful to others on multi-use paths
Resources	City of Portland, OR: <a href="http://www.portlandonline.com/shared/cfm/image.cfm?id=163129">http://www.portlandonline.com/shared/cfm/image.cfm?id=163129</a>

Conflicts between bike path users can be a major issue on popular, well-used path systems. "Share the Path" campaigns promote safe and courteous behavior. These campaigns typically involve distribution at bicycle rides and other public events of bicycle bells and other bicycle paraphernalia, and brochures with safety tips and maps.

Effective Share the Path campaigns generally require the following actions:

- Developing a simple, clear "Share the Path" brochure for distribution through local bike shops and wherever bike maps are distributed.
- Public service announcements promoting courtesy and respect to encourage all path users to share the path safely.
- Hosting a bicycle bell giveaway promotion at a community event, such as a popular bicycle ride on a shared-use path. Bell giveaways provide positive stories about bicycling and good visual opportunities for marketing. A table is typically set up near the start line with maps and brochures, and event organizers are present to answer questions and mount the bells on handlebars at the event (bells that require no tools for installation such as BBB EasyFit bells are recommended). The event organizers and corporate sponsors can also assist with media outreach to publicize the event.
- Volunteers and County staff can partner to distribute "Share the Path" brochures to other path users (e.g., pedestrians with strollers or pets).

### 4.1.5 Public Awareness Campaigns

Target audience	Motorists, Bicyclists and Pedestrians
Primary agency	DPW
Potential partners	Bicycle groups, health organizations, local transit agencies (for advertising)
Purpose	Increase awareness of bicycling; promote safety
Resources	Sonoma County (CA) Transit: <a href="http://www.sctransit.com/bikesafe/bikes.htm">http://www.sctransit.com/bikesafe/bikes.htm</a>

A high-profile outreach campaign that highlights bicyclist safety is an important part of helping all roadway users – motorists, pedestrians and bicyclists alike – understand their roles and responsibilities on the roadway. This type of campaign is an effective way to raise the profile of bicycling and improve safety for all roadway users.

A public awareness campaign should combine compelling graphics and messages with an easy-to-use website targeted to motorists, pedestrians and bicyclists. The safety and awareness messages can be displayed near high-traffic corridors (e.g., on billboards), printed in local publications and broadcast as public service announcements. A well-produced public awareness campaign will be memorable and effective and include clean, clear graphics in a variety of media, the distribution of free promotional items, and email or in-person outreach. This type of campaign is particularly effective when kicked off in conjunction with other bicycling events.

The public awareness campaign should address many of the following safety issues:

- How to share the road (for both motorists and bicyclists)
- Proper roadway positioning and etiquette
- Bicycling rights
- Safe bicycling skills
- Yielding to pedestrians
- Where bicycling is permitted and where bicyclists should walk their bikes
- Light and helmet use

## 4.2 Enforcement

Enforcement programs target unsafe bicyclist and motorist behaviors and enforce laws that reduce bicycle/motor vehicle collisions and conflicts. Enforcement fosters mutual respect between roadway users and improves safety. These programs generally require coordination between law enforcement, transportation agencies, and bicycling organizations.

Enforcement activities are undertaken by different agencies throughout the County of Los Angeles. The California Highway Patrol is responsible for enforcement on unincorporated County roadways. The local police departments in the incorporated cities are responsible for enforcement of the County-operated Class I bike paths in their jurisdiction. Some cities may have elected to contract with the Los Angeles County

Sheriff's Department for law enforcement in their jurisdiction. For those cities, the County Sheriff's Department is responsible for enforcement along the Class I bike paths.

### 4.2.1 Bicycle Patrol Unit

Target audience	Cyclists and motorists
Primary agency	CHP, Sheriff's Department and local law enforcement agencies
Potential partners	DPW
Purpose	Increase safety by promoting awareness of bicycle/motorist issues and conflicts
Resources	<a href="http://www.bta4bikes.org/btablog/2008/01/30/alice-award-nominee-chief-jon-zeliff/">http://www.bta4bikes.org/btablog/2008/01/30/alice-award-nominee-chief-jon-zeliff/</a>

On-bike officers are an excellent tool for community and neighborhood policing because they are more accessible to the public and able to mobilize in areas that patrol cars cannot reach (e.g., overcrossings and paths). Bike officers undergo special training in bicycle safety and bicycle-related traffic laws and are therefore especially equipped to enforce laws pertaining to bicycling. Bike officers help educate cyclists and motorists through enforcement and also serve as excellent outreach personnel to the public at parades, street fairs, and other gatherings.

Vehicle statutes related to bicycle operations are typically enforced on bikeways as part of the responsible traffic enforcement agencies' normal operations. Such agencies may also consider using bicycle patrol units to proactively enforce bicycle-related violations. Spot enforcements are highly visible and publicly advertised. They may take the form of intersection stings, handing out informational sheets to motorists, bicyclists and pedestrians, or enforcing speed limits and right-of-way at shared use path/roadway intersections. Targeted enforcement can be undertaken as a component of a Share the Road campaign. Plain clothes officers on bicycles can stop motorists and cyclists not following the rules of the road and provide educational material, as well as cite the transgressors. An officer on a bicycle could observe the offense and radio to an officer in a chase car who will make the stop. Bicycle patrol units can also effectively enforce a bike light requirement which is discussed in the next section.

### 4.2.2 Bicycle Light Enforcement

Target audience	Cyclists
Primary agency	CHP, Sheriff's Department and local law enforcement agencies
Potential partners	Bicycle groups
Purpose	Increase safety by providing bicycle lights to bicyclists
Resources	Community Cycling Center (Portland, OR): <a href="http://www.communitycyclingcenter.org/index.php/programs-for-adults/get-lit/">http://www.communitycyclingcenter.org/index.php/programs-for-adults/get-lit/</a> San Francisco Bicycle Coalition: <a href="http://www.sfbike.org/?lights">http://www.sfbike.org/?lights</a>

A bicycle light enforcement program can issue “fix it” tickets or warnings to bicyclists without lights and distribute safety brochures. The actual installation of free bike lights on the spot is a common alternative.

Many bicyclists ride without lights or with dysfunctional lights and are unaware that during darkness, lights are required by California law. Bicycling without lights reduces bicyclists’ visibility and visibility to motor vehicles and therefore increases bicyclists’ risks of being involved in bicycle/car crashes. For these reasons, increasing bicycle light usage is a top priority for the County.

Bicycle light enforcement can effectively impact behavior, particularly if bicyclists are able to avoid penalty by obtaining a bike light. One option is for officers to give offenders warnings, explain the law, and install a free bike light at the time of citation. Alternatively, officers can write “fix it” tickets and waive the fine if bicyclists can prove that they have purchased a bike light within a specified timeframe. When citing bicyclists, officers can also provide coupons for free or discounted lights at local bike shops, if available.

Bicycle light enforcement can be implemented in tandem with outreach efforts. Bike light outreach campaigns can include the following components:

- Well-designed public service announcements reminding bicyclists about the importance of bike lights can be placed on transit benches, transit vehicles, and local newspapers.
- Partnership with local cycling groups to get the word out to their members and partners. Groups should be supplied with key campaign messages to distribute to their constituents, along with coupons for free or discounted bike lights.
- Distribution of media releases with statistics about the importance of using bike lights and relevant legal statutes.
- In-school presentations about bike lights, including reflective material giveaways.
- A community bike light parade with prizes.
- Discounts on bike lights and reflective gear at local bike shops.

### **4.3 Encouragement Programs**

Encouragement programs are generally characterized by their focus on encouraging people to bicycle more frequently, particularly for transportation. Encouragement programs increase the propensity for bicycle trips by providing incentives, recognition, or services that make bicycling a more convenient transportation mode. The following encouragement programs are recommended for implementation in the unincorporated County and described in more detail in the remainder of the section:

- Suggested Routes to School
- Family biking programs
- Bicycling maps
- Valet bike parking at events
- Local partnerships for more bicycle parking
- Bike to Work Week/Month

- New bikeway parties
- Bike and Hike to Parks Programs

### 4.3.1 Suggested Routes to School

Target audience	Students and their parents; school administrators, faculty, and staff
Primary agency	DPW & LACOE
Potential partners	Schools, school districts and parent groups, CHP, Sheriff's Department and local law enforcement agencies, bicycle groups
Purpose	Provide parents and children with recommendations for safer and direct routes to walk/bike to school
Resources	County of Los Angeles Suggested Routes to School Program <a href="http://ladpw.org/tnl/schoolroute/">http://ladpw.org/tnl/schoolroute/</a>

Suggested biking and walking route maps direct students to walk and bicycle along the safest routes to school. These maps include arrows to indicate the routes and show stop signs, signals, crosswalks, sidewalks, trails, overcrossings, and crossing guard locations surrounding the school. Maps can be distributed by school officials to parents to encourage their children to walk and bike to school. Having County staff, such as a traffic engineer, review and approve the maps can ensure that they reflect up-to-date traffic information.

Factors to consider in the process of creating routes include:

- Presence of sidewalks or paths
- Presence of bikeways
- Traffic volumes and speeds
- Roadway widths
- Convenience, directness
- Number of crossings
- Types of controls at intersections, e.g., stop signs or signals
- Crossing guards
- Surrounding land uses

The maps should be focused on the attendance boundary of a particular school. Suggested walking and biking maps may tie directly to a community's existing or proposed sidewalk, traffic control, and park networks. Routes should take advantage of low volume residential streets, and off-street facilities such as bike paths, sidewalks, and pedestrian bridges. Identifying where crossing guards, traffic signals, or stop signs provide the safest crossing locations is a major component of developing a suggested route.

### 4.3.2 Family Biking Programs

Target audience	Parents and Families
Primary agency	DPW
Potential partners	Regional bicycling groups, local volunteers, local bicycle shops
Purpose	Educate and encourage parents on how to ride bicycles with children
Resources	Kidical Mass: <a href="http://www.kidicalmass.org/locations/">http://www.kidicalmass.org/locations/</a> Geared 4 Kids: <a href="http://www.geared4kids.org/">http://www.geared4kids.org/</a>

Family bicycling programs equip families with information and tools so that parents can safely transport children by bicycle and help children learn bicycling skills. Family biking programs provide a level of security and certainty to parents that the family is receiving appropriate training on safety issues and safe practices. Activities include trainings or safety courses, group rides, bicycle safety checks, basic bike maintenance workshops, the distribution of maps and information on bicycling with children, and more.

### 4.3.3 Bicycling Maps

Target audience	General Public
Primary agency	DPW
Potential partners	LACMTA, Southern California Association of Governments (SCAG)
Purpose	Assist bicyclists in wayfinding by offering a map with clear symbols and graphics, destinations and services attractive for bicyclists, and good selection of routes
Resources	City of Long Beach, CA: <a href="http://www.longbeach.gov/civica/filebank/blobdload.asp?Blobid=27418">http://www.longbeach.gov/civica/filebank/blobdload.asp?Blobid=27418</a> City of Los Angeles, CA: <a href="http://www.bicyclela.org/pdf/BikeMapWestsideCC.pdf">http://www.bicyclela.org/pdf/BikeMapWestsideCC.pdf</a> San Diego Region Bicycle Map: <a href="http://www.icommutesd.com/Bike/BikeMap.aspx">http://www.icommutesd.com/Bike/BikeMap.aspx</a>

One of the most effective ways of encouraging people to bicycle is by distributing maps and guides to show that the infrastructure exists, demonstrate how easy it is to access different parts of the community by bike, and highlight unique areas, shopping districts, or recreational areas. Maps can also support bicycle tourism. Maps can be County-wide, community-specific, or neighborhood maps, and can be available on paper and/or online.

### 4.3.4 Valet Bike Parking at Events

Target audience	General Public, event attendees
Primary agency	Los Angeles County DPW
Potential partners	Bicycle groups, local volunteers
Purpose	Encourage bicycle travel; offer appealing alternative to driving for event attendees
Resources	LACBC: <a href="http://la-bike.org/projects/bike-valet">http://la-bike.org/projects/bike-valet</a> San Francisco Bicycle Coalition: <a href="http://www.sfbike.org/?valet">http://www.sfbike.org/?valet</a>

Convenient, secure bike parking at large events can make bicycling to an event a more attractive option. Valet bike parking provides secure, staffed temporary facilities for the storage of bicycles during large events. Sometimes these are outdoor, temporary structures; however, indoor bicycle storage locations can be designed into future venues that host sporting events, festivals, and other events where large numbers of people gather.

Valet parking systems generally work like a coat check: the cyclist gives their bicycle to the attendant, who tags the bicycle with a number and gives the cyclist a claim stub. The valet bike parking can also accept non-motorized devices such as rollerblades, baby strollers, and push scooters. When the cyclist returns to get the bicycle, they present the claim stub and the attendant retrieves the bicycle for them. Locks are not needed. The valet is generally open for a couple of hours before the event and a shorter time after the event.

Local bicycling groups such as LACBC offer secure, professional, and attended bike valet services. The County should work with these groups and volunteers to provide this service at their events.

### 4.3.5 Local Partnerships For More Bicycle Parking

Target audience	General Public
Primary agency	DPW
Potential partners	LACMTA, local shops, bicycle groups
Purpose	Make bicycle parking easily available for residents in unincorporated County areas
Resources	City of Long Beach, CA: <a href="http://www.bikelongbeach.org/">http://www.bikelongbeach.org/</a> City of Portland, OR: <a href="http://www.portlandonline.com/transportation/index.cfm?c=34813">http://www.portlandonline.com/transportation/index.cfm?c=34813</a>

Bicycle parking is a major factor in whether individuals choose to use a bike for commuting to work or for running errands. The County shall evaluate the feasibility of seeking grant funding and partnering with local stakeholders to make bicycle parking available at no or low-cost at all key destinations in unincorporated County areas. Long Beach, CA has innovative programs where bicycle racks are provided and installed free of charge at key destinations to improve bicycle mobility in the community.

### 4.3.6 Bike to Work Week/Month

Target audience	Commuters
Primary agency	DPW
Potential partners	LACMTA, bicycle groups, local bicycle shops, large employers
Purpose	Encourage bicycling to work through fun, social activities and incentives
Resources	LAB: <a href="http://www.bikeleague.org/programs/bikemonth/">http://www.bikeleague.org/programs/bikemonth/</a> LACMTA: <a href="http://www.metro.net/around/bikes/bike-to-work/">http://www.metro.net/around/bikes/bike-to-work/</a>

Bike to Work Month, Week, and Day are high-profile encouragement programs intended to introduce people to bicycle commuting and impact the general public’s perceptions and attitudes toward bicycle commuting. Cities, towns, and counties across the country participate in Bike to Work Week, Month, or Day. They generally rely on special events, materials, and media outreach to promote bicycle commuting.

Common elements of Bike to Work events include: Commute 101 workshops, guided commutes or group rides to increase comfort and familiarity with bicycling routes, “Energizer Stations” to reward bicycle commuters with treats and incentives, workplace/team bicycling challenges, celebrity events (e.g., County administration bikes to work with news team, bike/bus/car race), post-work celebrations, and bike-to-school events.

### 4.3.7 Launch Party for New Bikeways

Target audience	Residents living or working near recently completed bicycle facilities
Primary agency	DPW
Potential partners	LACMTA and other stakeholders, bicycle groups, local bicycle shops
Purpose	Inform residents about new bicycle facilities to encourage use and promote awareness
Sample Program	When a new bikeway is built, the City of Vancouver throws a neighborhood party to celebrate. Cake, t-shirts, media and festivities are provided and all neighbors are invited as well as City workers (engineers, construction staff, and planners) who worked on it.

When a new bicycle facility is built, some residents will become aware of it and use it, but others may not realize that they have improved bicycling options available to them. A launch party/campaign is an effective and fun way to inform residents about a new bikeway, and an opportunity to share other bicycling information (such as maps and brochures) and answer questions about bicycling.

### 4.3.8 Bike and Hike to Park Programs

Target audience	General Public
Primary agency	DPR
Potential partners	Bicycle groups, community and other stakeholders
Purpose	Promote healthy, active living by encouraging residents to bike/walk to recreational facilities

Encouraging bicycling and walking to parks is a great way to increase community health, decrease automobile congestion and parking issues, and maximize the use of public resources. DPR created the “Healthy Parks” program to work with local communities and develop health and wellness programs that reflect their diverse community needs and improve the quality of life for the community.

Elements of these type of programs typically include distributing route information, guiding rides and walks to and in parks, information kiosks, improved bicycle parking at trailheads and parks, and outreach to existing groups (e.g., boy scouts, senior groups, walking and bicycling clubs).

### 4.3.9 Bicycle Sharing Program

<u>Target audience</u>	<u>General Public</u>
<u>Primary agency</u>	<u>DPW</u>
<u>Potential partners</u>	<u>LACMTA, SCAG and local governmental agencies</u>
<u>Purpose</u>	<u>Develop a regionally consistent bicycle sharing program for Los Angeles County</u>
<u>Resources</u>	<u>City of Washington, DC: <a href="http://www.capitalbikeshare.com">http://www.capitalbikeshare.com</a></u> <u>City of Denver, CO: <a href="http://www.denverbikesharing.org">http://www.denverbikesharing.org</a></u>

LACMTA will develop a working group comprised of all interested local agencies and groups in the region who will work with private partners/entrepreneurs to develop a regionally consistent bicycle sharing program for Los Angeles County. The County will be a participating member in this working group.

## 4.4 Evaluation Programs

Monitoring and evaluating the County’s progress toward becoming bicycle-friendly is critical to ensuring that programs and facilities are achieving their desired results and to understanding changing needs. Maintaining consistent staff positions, count programs, reporting on progress, and convening community stakeholder groups are methods for monitoring efforts and for holding agencies accountable to the public.

### 4.4.1 Annual Progress Report

Target audience	County residents
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Primary agency	DPW
Potential partners	DRP
Purpose	Provide continuous updates on the progress of the Bikeway Plan implementation
Resources	City of Seattle, WA: <a href="http://www.seattle.gov/transportation/bikeprogram.htm">http://www.seattle.gov/transportation/bikeprogram.htm</a> San Francisco Annual Report Card: <a href="http://www.sfbike.org/download/reportcard_2006/SF_bike_report_card_2006.pdf">http://www.sfbike.org/download/reportcard_2006/SF_bike_report_card_2006.pdf</a>

The County will provide annual updates on the progress made toward implementing the goals, policies, and programs of the Bikeway Plan, as part of the General Plan Annual Progress Report [Update](#). DPW will also develop and maintain a website pursuant to Policy 5.2, to provide more frequent updates on the progress of the Plan implementation.

### 4.4.2 Community Stakeholder Group

Target audience	Citizen advocates
Primary agency	DPW
Potential partners	LACMTA, SCAG, Caltrans, bicycle groups, local advocates
Purpose	Advise the County on bicycle issues
Resources	City of LA Bicycle Advisory Committee: <a href="http://www.bicyclela.org/">http://www.bicyclela.org/</a>

Create a Community Stakeholder Group pursuant to IA 5.1.1 that will oversee the implementation of this plan and ~~will~~ provide input on bicycle issues in the County. [Input from the Community Stakeholder Group will play a pivotal role in decisions made related to implementation of the individual projects and programs within the Plan. Specifically, the Community Stakeholder Group will participate in decisions made related to which projects within Phase I and/or Programs within Tier I we will implement or submit grant applications for.](#) This group [shall include representatives of each planning area, and](#) should be composed of representatives from ~~each—the unincorporated—unincorporated County~~ communities, County officials, bicycling organizations, bicycling clubs, transportation agencies, universities, colleges, and community members-at-large in order to provide multiple perspectives from a broad cross-section of the bicycling community.

### 4.4.3 Bicycle Counts

Target audience	County staff, elected officials, general public
Primary agency	DPW
Potential partners	LACMTA, SCAG, bicycle groups, local advocates
Purpose	Gather important benchmarking information about bicycling and provide progress reports on the Plan
Resources	<a href="http://bikepeddocumentation.org/">http://bikepeddocumentation.org/</a>

Collect bicycle counts biennially, pursuant to IA 2.4.2 as a part of a regional effort to record bicycle activity levels. The bicycle count program will be administered biennially and capture all types of bicycle trips including trips for recreation, commuting to work and for other utilitarian purposes. Bicycle counts and assessments should also be conducted whenever a local land development project requires a traffic impact study. Funding opportunities will need to be identified to guarantee the longevity of the program.

## 5. Funding and Implementation



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This chapter is intended to support the implementation of the Plan's recommendations by providing the following information:

- Planning-level cost estimates for the entire proposed un-built network, presented in Table 5-2
- An overview of the implementation strategies for the proposed programs, [presented](#) in Table 5-6
- An overview of funding sources for those proposed projects, presented in Table 5-7

### 5.1 Program Monitoring

The Plan provides a long-term vision for the development of a region-wide bicycle network that can be used by all residents for all types of trips. Implementation of the Plan will take place incrementally over many years, and the Plan is intended to guide bicycling in the County for the next 20 years. The County shall review and update the Plan every five years pursuant to Policy 1.5 of the Plan. The following actions and measures of effectiveness are provided to guide the County of Los Angeles toward the vision identified in the Plan.

#### 5.1.1 Update the Plan

While the Plan is intended to guide bicycle planning in the County of Los Angeles for the next 20 years, it shall be reviewed and updated every five years pursuant to Policy 1.5, to reflect the current needs of the community and enable the County to remain eligible for Bicycle Transportation Account (BTA) funding.

#### 5.1.2 Regularly Revisit Project Prioritization

The proposed bikeways were prioritized and grouped into three implementation phases based on bicycling demand, facility deficiencies, barriers to implementation, public input, and other criteria described in detail in Appendix I. County staff shall review the projects in each phase on a regular basis, and consult with the community stakeholder group and other interested parties for prioritizing project implementation [within](#) each phase. Community input should also be sought after adoption of the Plan via the web or through community meetings, for new infrastructure or programs to improve bicycle mobility in the County, which will be reflected in future updates to the Plan.

#### 5.1.3 Establish Measures of Effectiveness

Measures of effectiveness are used as a quantitative way to measure the County's progress toward implementing the Plan. Well-crafted measures of effectiveness will allow the County to determine the degree of progress toward meeting the Plan's goals, and include time-sensitive targets for the County to meet.

Table 5-1 describes several recommended program measures for the County. These measures were developed based on known baseline conditions. When given, goal targets are developed based on reasonable expectations within the time frame. As new baseline information is made available, and the County implements more of the Plan, the measures of effectiveness should be re-evaluated, revised, and updated. The County of Los Angeles should regularly review the progress made toward these goals.

**Table 5-1: Program Measures of Effectiveness**

Measure	Existing Benchmark (if available)	Target																					
Bicycle mode share	Existing County bicycle mode share estimated to be 1.86%.	Increase bicycle mode share in the County to 2.5% within 5 years.																					
Public attitudes about biking in the County of Los Angeles	A survey geared specifically toward attitudes of bikers and non-bikers should be developed.	Increase bikeway-related public service announcements and initiate education and evaluation programs for County staff and the general public within 5 years. All educational material should be accompanied with surveys to gauge shifts in opinion and general knowledge regarding bicycling in the region.																					
Number of miles of bike paths, lanes and routes maintained by the County of Los Angeles	Mileage of existing bicycle network: Class I Bike Paths – 100.3 miles Class II Bike Lanes – 20.2 miles Class III Bike Routes – 23.5 miles	Mileage of full build-out of proposed bicycle network: Class I Bike Paths – 170.9 miles Class II Bike Lanes – 286.1 miles Class III Bike Routes – 482.1 miles Bicycle Boulevards – 18.9 miles																					
Proportion of arterial streets with bike lanes	8.9 miles out of an estimated 690 miles of County-maintained arterial streets have bike lanes (1.3%).	Within 5 years, increase the proportion of arterial streets with bicycle facilities. Suggested target of 5% to spur greater bicycle commuting (an additional 25 miles of bike lanes on County-maintained arterial roads).																					
Independent recognition of non-motorized transportation planning efforts	No bicycle awards to date.	Independent recognition of efforts to promote biking within 3 years. League of American Bicyclists' Bronze Award within 8 years and Silver or Gold Award within 18 years.																					
Number of collisions involving bicyclists and motor vehicles in unincorporated areas	<table border="1"> <thead> <tr> <th>Year</th> <th>Crashes</th> <th>Killed</th> </tr> </thead> <tbody> <tr> <td>2004</td> <td>272</td> <td>5</td> </tr> <tr> <td>2005</td> <td>245</td> <td>2</td> </tr> <tr> <td>2006</td> <td>209</td> <td>6</td> </tr> <tr> <td>2007</td> <td>220</td> <td>5</td> </tr> <tr> <td>2008</td> <td>220</td> <td>5</td> </tr> <tr> <td>2009</td> <td>203</td> <td>2</td> </tr> </tbody> </table>	Year	Crashes	Killed	2004	272	5	2005	245	2	2006	209	6	2007	220	5	2008	220	5	2009	203	2	Zero deaths or severe injuries resulting from collisions involving bicyclists and motor vehicles while increasing bicycle ridership.
Year	Crashes	Killed																					
2004	272	5																					
2005	245	2																					
2006	209	6																					
2007	220	5																					
2008	220	5																					
2009	203	2																					

Sources: NHTS (2010); US Census (2000); LACMTA (2010); SWITRS (2010)

## 5.2 Cost Estimates

Table 5-2 summarizes cost estimates for the proposed bikeway network recommended in the Plan. Unit cost estimates for the Plan were developed by KOA Corporation. The cost of completing the proposed bicycle network is estimated to be about \$76 million for bike path projects, \$251 million for bike lane and bike route projects, and \$0.57 million for bicycle boulevard projects, for a combined total system build-out cost of approximately \$327.6 million. Cost estimates include costs for survey and design, construction, administration, and contingencies. These costs do not include programmatic or project-level environmental review or detailed traffic studies for implementing neighborhood traffic management programs as part of on-road bikeways. Refer to Appendix H for detailed subcomponents of the unit costs.

**Table 5-2: Proposed Bicycle Network Cost Estimates**

Facility Type	Unit Cost (per mile)	Miles of Un-Built Proposed	Cost Estimate
Class I – Bike Path	Varies	<u>70.676.7*</u>	<u>\$75,94776,397,000</u>
Class II – Bike Lane	\$40,000	<u>76.378.4</u>	<u>\$3,052,0003,136,000</u>
Class II – Bike Lane (curb reconstruction/ raised median)	\$1,700,000	41.38	\$70,283996,000
Class II – Bike Lane (widening/ paved shoulder)	\$400,000	<u>140.185.1</u>	<u>\$5634,024040,000</u>
Class II – Bike Lane (road diet)	\$165,000	68.86	\$11,355318,000
Class III – Bike Route	\$15,000	<u>8988.94</u>	<u>\$1,350327,000</u>
Class III – Bike Route (sharrows)	\$25,000	<u>37.840.0</u>	<u>\$9461,000,000</u>
Class III – Bike Route (widening/ paved shoulder)	\$400,000	<u>270.3330.3</u>	<u>\$108132,402114,000</u>
Bicycle Boulevard	\$30,000 <sup>37</sup>	<u>21.122.8</u>	<u>\$634685,000</u>
<b>Totals</b>		<b><u>846.2832.1</u></b>	<b><u>\$327331,690013,000</u></b>

Source: KOA Corporation, August 2010

*\* This total includes 4.9 miles of on-street Class III connections for some proposed Bike Paths.*

<sup>37</sup> This unit is a base cost and does not include the potential need for intersection treatments.

## 5.3 Implementation Plan

The following sections describe the implementation plan for the proposed bikeway network, as well as the programs recommended in the Plan.

### 5.3.1 Bikeway Network Phasing and Implementation Plan

#### Prioritization Process

The bicycle network was prioritized based on key indicators of demand, deficiencies, and implementation factors in order to guide network implementation phasing. The project prioritization was completed in a two-phase process, the first of which focused on factors related to people’s propensity to use the proposed network (utility factors) and a second phase that addressed key implementation factors. The utility prioritization factors include connections to existing and proposed bikeway network; connections to key destinations such as schools, libraries, parks, recreation centers, and transit hubs; lack of existing bikeways; bicycle crashes; and community support of the proposed facilities obtained through the public outreach process.

Table 5-3 summarizes the utility prioritization factors and point values assigned to each proposed bikeway throughout the County of Los Angeles, which were developed to measure the overall usefulness and utility of the proposed bikeway projects. These prioritization factors were finalized after extensive review and input from members of the Bicycle Advisory Committee and the Technical Advisory Committee. For a more detailed description of the prioritization approach, refer to Appendix I.

**Table 5-3: Bicycle Network Prioritization Utility Factors and Points**

Utility Prioritization Factor	Point Range
Connects to Existing Bikeway Facility: Class I Bike Path = 20 points Class II/III On-Street Bikeway = 15 points	0 to 20
Connects to Proposed Bikeway Facility	0 or 10
Alternative Route Availability	0 or 10
Connects to University	0 or 20
Connects to Transit Station	0 or 20
Connects to K-12 School	0 to 20
High Employment Density	0 or 10
Connects to Park, Library or Recreational Facility	0 to 20
High Rate of Collisions	0 or 5
High Rate of Zero Vehicle Households	0 or 10
Public Input	0 to 10
<b>Maximum Total Points</b>	<b>155</b>

Source: Alta Planning + Design, 2011

The second phase of the prioritization process focused on implementation-oriented factors, such as project cost, project coordination, travel lane and parking removal, and other considerations. These prioritization factors are intended to measure issues, challenges, and the “degree of difficulty” of implementing the proposed bikeway projects. Table 5-4 summarizes these implementation-oriented prioritization factors and describes the scoring process that was utilized for each factor.

Finally, the project scores from the two prioritization phases described above were tabulated to generate an overall project score for each project. All projects were ranked numerically based upon their respective overall project scores.

**Table 5-4: Bicycle Network Prioritization Implementation Factors and Points**

Implementation Prioritization Factor	Point Range
<b>Project Cost</b> was ranked as follows:	
Less than \$100,000 = 20 points	
\$100,000 to \$500,000 = 15 points	
\$500,000 to \$1,500,000 = 10 points	0 to 20
\$1,500,000 to \$3,000,000 = 5 points	
Greater than \$3,000,000 = 0 points	
Project Coordination	0 or 10
Requires Travel Lane Removal	0 or 5
Requires Reduction in Width of Landscaped Median	0 or 5
Requires Street Widening of Paved Surface	0 or 5
Requires Parking Removal	0 or 5
<b>Maximum Total Points</b>	<b>50</b>

*Source: Alta Planning + Design, 2011*

### 5.3.2 Bikeway Network Implementation Plan

The proposed bikeway projects were grouped into three phases primarily based on the overall prioritization score for each project and the anticipated available funding. Projects for which funding has already been allocated, or which are expected to be implemented in conjunction with County road reconstruction and/or rehabilitation projects may be shown in an earlier phase, regardless of their prioritization score. The implementation timeline for the three phases is shown below:

- Phase I: Projects listed are anticipated to be implemented within the first five-year period following adoption of the Plan (2012-2017).
- Phase II: Projects listed are anticipated to be implemented within the ten-year period following Phase I (2017-2027).
- Phase III: Projects listed are anticipated to be implemented within the final five-year period of the term of the Plan (2027-2032).

Table 5-5 lists the projects in Phase I. Refer to Appendix I for more information on the phasing and a list of all projects in the three phases.

**Table 5-5: Phase I Projects**

Segment	From	To	Classes	Planning Area
N. Sunset Avenue	Amar Road	Temple Avenue	2	East San Gabriel Valley
Workman Mill Road	San Jose Creek Bicycle Path	Strong Avenue	2	Gateway
<del>Woods Avenue</del> Woods Avenue	1st Avenue	Olympic Boulevard	BB	Metro
Cesar Chavez	Mednik Avenue	Roscommon	2/3	Metro
Crocket Boulevard	76th Place	83rd Street	3	Metro
Hawthorne Boulevard	104th Street.	111 Street	2	South Bay
Redondo Bch Boulevard	Prairie Avenue	Crenshaw Boulevard	2	South Bay
Madre Street / Muscatel	San Pasqual	Longden Drive	3	West San Gabriel Valley
Del Mar Boulevard	Pasadena City Limit	Rosemead Avenue	3	West San Gabriel Valley
San Jose Creek	7th Avenue	Murchison Avenue	1	East San Gabriel Valley
Normandie Avenue	98th Street	El Segundo Boulevard	2	Metro
E. 68th Street	Central Avenue	Compton Avenue	3	Metro
Maie Avenue / Miramonte Boulevard	Slauson Avenue	92nd Street	BB	Metro
Redondo Beach Boulevard	S Figueroa Street	Avalon Boulevard	2	Metro
Florence Avenue	Central Avenue	Mountain View Avenue	2	Metro
Vermont Avenue	87th Street	El Segundo Boulevard	2	Metro
Rosemont Avenue	Rockdell Street	Honolulu Avenue	3	San Fernando Valley
Budlong Avenue	N County Border	El Segundo Boulevard	BB	Metro
El Segundo Boulevard	Figueroa	Central	2	Metro
Compton Avenue	Slauson Avenue	92nd Street	2	Metro
Broadway	E. 121st Street	E. Alondra Boulevard	2	Metro
Firestone Boulevard	Central Avenue	Alameda Street	2	Metro
Imperial Hwy	Van Ness Avenue	Vermont Street	2	Metro
La Crescenta Avenue	Orange Avenue	Foothill Boulevard	3	San Fernando Valley
111th Street	Buford Avenue	<del>Prairie</del> Prairie Avenue	3	South Bay
Allen Avenue	Pinecrest Drive.	New York Drive	3	West San Gabriel Valley
Pathfinder Road	Paso Real Avenue	Alexdale Lane	2	East San Gabriel Valley
Vineland Avenue	Nelson Avenue	Proposed bike path	3	East San Gabriel Valley
Killian Avenue	Paso Real Avenue	Otterbien	3	East San Gabriel Valley
Paso Real Avenue	Colima Road	Pathfinder Road	3	East San Gabriel Valley
Denker Avenue	Century Boulevard	Imperial Hwy	3	Metro
Holmes Avenue	Slauson Avenue	Gage Avenue	2	Metro
Rosecrans Avenue	Figueroa Street	Central Avenue	2	Metro
Manhattan Beach Boulevard	Prairie	Crenshaw	2	South Bay
Eaton Wash Channel	New York Drive	Rio Hondo Bikeway	1/3	West San Gabriel Valley

30th Street <del>E</del> -West	Avenue M	Avenue 0-12	2	Antelope Valley
Los Padres Drive/ Jellick Avenue	Greenbay Drive	Aguiro Street	3	East San Gabriel Valley

**Table 5-5: Phase I Projects (continued)**

Segment	From	To	Classes	Planning Area
Amar Road	Vineland Avenue	N. Puente Avenue	2	East San Gabriel Valley
W Gladstone Street	Blender Street	Big Dalton Wash	3	East San Gabriel Valley
Ford Boulevard	Floral Drive	Olympic Boulevard	3	Metro
Hazard Avenue	City Terrace Drive	Cesar Chavez Avenue	3	Metro
6th Street	Ford Boulevard	Harding Avenue	3	Metro
92nd Street E	Central Avenue	Alameda Street	3	Metro
Nadeau Street / Broadway	Central Avenue	E County Border	2	Metro
Altura Avenue	La Crescenta Avenue	Rosemount Avenue	3	San Fernando Valley
La Crescenta Avenue	Foothill Boulevard	Montrose Avenue	3	San Fernando Valley
104th Street	Buford Avenue	PrairiePrairie Avenue	3	South Bay
Marine Avenue	Gerkin Avenue	Crenshaw Boulevard	3	South Bay
Balan Rd / Annandel Avenue	Cul-de-sac s/o Pathfinder Rd	Brea Canyon Cut Off Rd	3	East San Gabriel Valley
Batson Avenue	Colima Rd	Dragonera Drive	3	East San Gabriel Valley
Nogales Street	La Puente Road	Hollingsworth Street	2	East San Gabriel Valley
Pathfinder Road	Fullerton Road	Paso Real Avenue	2	East San Gabriel Valley
Fullerton Road	Colima Road	Pathfinder Road	2	East San Gabriel Valley
Whiteside Street	Hebert Avenue	Eastern Avenue	3	Metro
Seville Avenue	E. Florence Avenue	Broadway	2	Metro
Pico Canyon Rd	The Old Road	Whispering Oaks	2	Santa Clarita Valley
Normandie Avenue	225th Street	Sepulveda Boulevard	2	South Bay
Longden Avenue	8th Avenue	Peck Road	3	West San Gabriel Valley
Holliston Avenue	S County Border	Altadena Drive	3	West San Gabriel Valley
Fiji Way	0.7 Miles South of Lincoln Boulevard	Lincoln Boulevard	3,2	Westside
Fiji Way	Lincoln Boulevard	Admiralty Way	3	Westside
Elizabeth Lake Rd	10th Street	Dianron Rd	2	Antelope Valley
170th Street E	Avenue M	Palmdale Boulevard	2	Antelope Valley
Nogales Street	Arenth Avenue	Pathfinder Rd	2	East San Gabriel Valley
Pathfinder Road	Alexdale Lane	Canyon Ridge Road	2	East San Gabriel Valley
Mills Avenue	Telegraph Rd	Lambert Rd	2	Gateway
Mednik Avenue	Floral Drive	Olympic Boulevard	2	Metro
124th Street E	Slater Avenue	Alameda Street	3	Metro
Whitter Boulevard	Indiana Street	Ford Boulevard	3	Metro
Success Avenue/Slater Avenue	Imperial Hwy	El Segundo Boulevard	3	Metro

Avalon Boulevard	121st Street	E Alondra Boulevard	2	Metro
Briggs Avenue	Shields Street	Foothill Boulevard	3	San Fernando Valley
Las Virgenes Rd / Malibu Canyon Rd	Mureau Rd	Pacific Coast Hwy	3	Santa Monica Mountains

**Table 5-5: Phase I Projects (continued)**

Segment	From	To	Classes	Planning Area
Lennox Boulevard.	Felton Avenue	Osage Avenue	3	South Bay
Daines Drive/ Lynd Avenue	Santa Anita Avenue	Mayflower Avenue	3	West San Gabriel Valley
Lake Avenue	Loma Alta Drive	S County Border	3	West San Gabriel Valley
Sierra Hwy	915' s/o Avenue	Pearlblossom Hwy	2	Antelope Valley
Mauna Loa Avenue	Citrus Avenue	E County Border	3	East San Gabriel Valley
Colima Rd	Mulberry Drive	Poulter Drive	3	Gateway
Whittier Boulevard	Ford Boulevard	Via Clemente Street	3	Metro
Imperial Hwy	Central Avenue	Wilmington	2	Metro
Alondra Boulevard	Figuroa Street	Avalon Boulevard	2	Metro
Mureau Rd	Las <a href="#">virgenes-Virgenes</a> Road	Calabasas Rd	2	Santa Monica Mountains
S Freeman Avenue	W 104th Street	W 111th Street	3	South Bay
S. Lemoli Avenue	Marine Avenue	Manhattan Beach Boulevard	3	South Bay
Doty Avenue	Marine Avenue	Manhattan Beach Boulevard	3	South Bay
Aviation Boulevard	Imperial Hwy	154th Street	2	South Bay
Huntington Drive	San Gabriel Boulevard	Michillinda Avenue	2	West San Gabriel Valley
Sierra Madre Villa Avenue	I-210	Green Street	3	West San Gabriel Valley
Avenue L-8	65th Street West	60th Street West	2	Antelope Valley
Willow Avenue	Amar Rd	Francisquito Avenue	3	East San Gabriel Valley
Las Lomas Drive / Newton Street	Vallecito Drive	Hacienda Boulevard	3	East San Gabriel Valley
Los Robles Avenue	7th Avenue	Kwis Avenue	3	East San Gabriel Valley
Fairway Drive / Brea Canyon Cut Off Rd	Walnut Rd	Bickford Drive	2	East San Gabriel Valley
Glendora Avenue	Arrow Hwy	Cienega Avenue	2	East San Gabriel Valley
Ceres Avenue	Broadway	Telegraph Rd	3	Gateway
Mulberry Drive	Greenbay Drive	Colima Road	2	Gateway
Atlantic Avenue	Rosecrans Avenue	Alondra Boulevard	3	Gateway
E. Victoria Street	S. Santa Fe Avenue	Susana Road	2	Gateway
Compton Boulevard	Harris Avenue	LA River Bikeway	2	Gateway
Leffingwell Rd	Imperial Hwy	Scott Avenue	2	Gateway
Rowan Avenue	Floral	Olympic Boulevard	BB	Metro
120th Street	Central Avenue	Wilmington	2	Metro

Willowbrook Avenue	Imperial Hwy	119th street	1	Metro
The Old Rd	Sloan Canyon Road	Weldon Canyon Rd	2	Santa Clarita Valley
Duarte Rd	San Gabriel Boulevard	Sultana Avenue	3	West San Gabriel Valley
San Gabriel Boulevard/ Hill Drive	Graves Avenue	Lincoln Avenue	2	West San Gabriel Valley

**Table 5-5: Phase I Projects (continued)**

Segment	From	To	Classes	Planning Area
<u><a href="#">Emerald Necklace Gateway</a></u>	<u><a href="#">San Gabriel River Path</a></u>	<u><a href="#">Park entrance (parking lot)</a></u>	1	<u><a href="#">West San Gabriel Valley</a></u>
San Jose Creek	Workman Mill Rd	San Gabriel River Bikeway	1	East San Gabriel Valley
Bouquet Canyon Road	Hob Ct	Elizabeth Lake Rd	3	Santa Clarita Valley
Rosemead Boulevard	Colorado	Callita Street	2	West San Gabriel Valley

### 5.3.3 Programs Phasing and Implementation Plan

The multitude of programs recommended in Chapter 4 are a relatively low-cost and highly effective method for promoting public awareness of bicycling and adding to the safety and enjoyment of bicyclists in the County. The programs have been grouped into two tiers; Tier I includes programs that can be implemented within a year of Plan adoption, and Tier II includes the remaining programs which are anticipated to be implemented within the five-year period following Tier I. Table 5-6 lists the programs in each tier, and provides additional information for the programs, such as the timeframe for implementation; the entity most appropriate for initiating and overseeing the program (noted as “Lead Agency”); the nexus between the recommended program with the goals, policies and implementation actions outlined in Chapter 2; and a list of potential funding sources for implementing the program.

While the majority of infrastructure projects fall within the exclusive jurisdiction of the County, many program recommendations can fall under the banner of outside agencies, local and regional nonprofit organizations and, in some cases, private sector partners. A collaborative approach to implementing and sustaining bicycling programs will contribute to the broader vision of improving bicycling conditions in the County and fostering a strong bicycle advocacy community and bicycle culture.

**Table 5-6: Program Implementation Recommendations**

Program	Nexus with Chapter 2	Timeframe	Lead Agency	Possible Funding Sources
<b>Tier I Programs</b>				

Community Bicycle Education Courses	<i>Goal 3 – Education</i> Offer bicycle skills, bicycle safety classes and bicycle repair workshops. (IA3.1.1)	Ongoing	DPW & DPH	Center for Disease Control (CDC) - Community Transformation Grants
Youth Bicycle Safety Education Classes	<i>Goal 3 – Education</i> Offer bicycle skills, bicycle safety classes and bicycle repair workshops. (IA3.1.1)	Annual	DPW, DPH & LACOE	Safe Routes to School – Federal and State
<del>Bicycle Rodeos</del>	<del><i>Goal 3 – Education</i> Offer bicycle skills, bicycle safety classes and bicycle repair workshops. (IA3.1.1)</del>	<del>Biannual. In conjunction with Bike Month events and Summer Out-of-School programs.</del>	<del>DPW &amp; DPH</del>	<del>CDC – Community Transformation Grants</del>

**Table 5-6: Programs Implementation Recommendations (continued)**

<b>Program</b>	<b>Nexus with Chapter 2</b>	<b>Timeframe</b>	<b>Lead Agency</b>	<b>Possible Funding Sources</b>
<u>Bicycle Rodeos</u>	<u><i>Goal 3 – Education</i> Offer bicycle skills, bicycle safety classes and bicycle repair workshops. (IA3.1.1)</u>	<u>Biannual. In conjunction with Bike Month events and Summer Out-of-School programs.</u>	<u>DPW &amp; DPH</u>	<u>CDC - Community Transformation Grants</u>
Suggested Routes to School	<i>Goal 3 – Education</i> Create Safety Education Campaigns aimed at bicyclists and motorists. (P 3.2)	Ongoing.	DPW	Safe Routes to School – Federal and State
Family Biking Programs	<i>Goal 4: Encouragement</i> Support organized rides or cycling events. (P 4.1)	Ongoing. In coordination with regular bicycle events.	DPW	CDC or other health grant programs
Bicycling Maps	<i>Goal 4: Encouragement</i> Develop maps and wayfinding signage and striping to assist navigating the regional bikeways. (P 4.3)	One time with regular updates.	DPW	CMAQ - Surface Transportation Program

Bike to Work Week/Month	<i>Goal 4: Encouragement</i> Promote Bike to Work Day/Month among County employees. (IA 4.2.1)	Annual.	DPW	General transportation fund; local donations
Launch Parties for New Bikeways	<i>Goal 5: Community Support</i> Maintain efforts to gauge community interest and needs on bicycle-related issues. (P 5.3)	As new bikeways are built.	DPW	General transportation fund; local donations
Bike and Hike to Park Programs	<i>Goal 4: Encouragement</i> Support organized rides or cycling events. (P 4.1)	Ongoing.	DPW & DPR	CDC - Community Transformation Grants
<del>Community Stakeholder Group</del>	<del><i>Goal 5: Community Support</i> Establish a community stakeholder group to assist with the implementation of the Bicycle Master Plan. (IA 5.1.1)</del>	<del>Ongoing.</del>	<del>DPW</del>	<del>N/A</del>
<del>Annual Progress Report</del>	<del><i>Goal 1: Bikeway System</i> Measure the effectiveness of the Bikeway Plan Implementation. (IA 1.5.1)</del>	<del>Annual.</del>	<del>DPW</del>	<del>N/A</del>

**Table 5-6: Programs Implementation Recommendations (continued)**

<b>Program</b>	<b>Nexus with Chapter 2</b>	<b>Timeframe</b>	<b>Lead Agency</b>	<b>Possible Funding Sources</b>
<u>Community Stakeholder Group</u>	<u><i>Goal 5: Community Support</i> Establish a community stakeholder group to assist with the implementation of the Bicycle Master Plan. (IA 5.1.1)</u>	<u>Ongoing.</u>	<u>DPW</u>	<u>N/A</u>

<u>Annual Progress Report</u>	<u>Goal 1: Bikeway System</u> <u>Measure the effectiveness of the Bikeway Plan Implementation. (IA 1.5.1)</u>	<u>Annual.</u>	<u>DPW</u>	<u>N/A</u>
Bicycle Counts	<u>Goal 2: Safety</u> Conduct biennial counts. (IA 2.4.2)	Biennial.	DPW	Federal transportation funding, such as Transportation Enhancements or mini grants
<b>Tier II Programs</b>				
Share the Path Campaign	<u>Goal 3- Education</u> Create safety education campaigns aimed at bicyclists and motorists. (P 3.2)	Ongoing. Host one event in the Summer.	DPW & DPR	General transportation fund; federal funding; can use volunteers for outreach
Public Awareness Campaigns	<u>Goal 3- Education</u> Develop communication materials aimed to improve safety for bicyclists and motorists. (IA 3.1.2)	Every 2 to 4 years.	DPW	General transportation fund; federal funding; donations from transit agencies and advertising/media
Bicycle Patrol Unit	<u>Goal 2- Safety</u> Support traffic enforcement activities that increase bicyclists' safety. (P 2.3)	Ongoing.	CHP, Sheriff's Dept. and local law enforcement	Law enforcement budgets
Bicycle Light Enforcement	<u>Goal 2- Safety</u> Encourage targeted enforcement activities in areas with high bicycle and pedestrian volumes. (IA 2.3.2)	Ongoing.	CHP, Sheriff's Dept. and local law enforcement	General transportation fund; law enforcement budgets; federal funding

**Table 5-6: Programs Implementation Recommendations (continued)**

<u>Program</u>	<u>Nexus with Chapter 2</u>	<u>Timeframe</u>	<u>Lead Agency</u>	<u>Possible Funding Sources</u>
Valet Bike Parking at Events	<u>Goal 4: Encouragement</u> Support organized rides or cycling events. (P 4.1)	Ongoing. In coordination with annual bicycle events.	DPW	Mostly volunteer effort

<a href="#"><u>Bicycle Sharing Program</u></a>	<a href="#"><u>Goal 4: Encouragement</u></a> <a href="#"><u>Develop a regionally consistent bicycle sharing program for Los Angeles County (IA 4.2.4)</u></a>	<a href="#"><u>Ongoing.</u></a>	<a href="#"><u>DPW</u></a>	<a href="#"><u>LACMTA</u></a>
Local Partnerships for More Bicycle Parking	<i>Goal 1: Bikeway System</i> Ensure the provision of convenient and secure end-of-trip facilities at key destinations. (IA 1.4.3)	Ongoing.	DPW	General transportation fund; donations from transit agencies and local businesses

## 5.4 Funding Sources

This section explores the available funding opportunities for implementing the proposed bikeway network from **Chapter 3**. It is important to note that the County will pursue funding for education, encouragement, enforcement, and monitoring and evaluation programs along with the proposed bikeway projects as implementation of the Plan moves forward. Potential funding sources for bicycle projects, programs, and plans can be found at all levels of government. This section covers federal, state, and regional sources of bicycle funding, as well as some non-traditional funding sources that may be used for bicycle projects. All the projects are recommended for implementation over the next five to 20 years, or as funding is available. The more expensive projects may take longer to implement. In addition, many funding sources are highly competitive. Therefore, it is not possible to determine exactly which projects will be funded by which funding sources. The information in **Table 5-7** below is intended as a general guide to funding sources. County staff should refer to current guidelines provided by the granting agency when pursuing any funding opportunity.

**Table 5-7: Bikeway Improvements Funding Source Summary**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
<b>Federally-Administered Funding</b>									
Transportation, Community and System Preservation Program**	Varies, generally January or February.	Federal Transit Administration	\$204 million nationally in 2009	20%	States, MPOs, local governments and tribal agencies	X	X	X	Because TCSP program is one of many programs authorized under SAFETEA-LU, current funding has only been extended through March 4 of 2011, and program officials are not currently accepting applications for 2011. In most years, Congress has identified projects to be selected for funding through the TCSP program. TAMC will need to work with AMBAG, Caltrans and Members of Congress to gain access to this funding.
Federal Lands Highway Programs**	Not available	Federal Highway Administration	\$1,019 million nationally in 2009	Not applicable	States	X	X		Grant funds are allocated for highways, roads, and parkways (which can include bicycle and pedestrian facilities) and transit facilities that provide access to or within public lands, national parks, and Indian reservations.
Rivers, Trails and Conservation Assistance Program	Aug 1 for the following fiscal year	National Parks Service	Program staff time is awarded.	Not applicable	Public agencies			X	RTCA staff provides technical assistance to communities to conserve rivers, preserve open space, and develop trails and greenways. The program provides only for planning assistance – there are no implementation monies available.

**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
Partnership for Sustainable Communities	Not applicable	Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (USDOT)	Varies	Not applicable	Varies by grant	X	X	X	Though not a formal agency, the Partnership for Sustainable Communities is a joint project of the EPA, the HUD, and the USDOT. One goal of the project is to expand transportation options that improve air quality and public health, which has already resulted in several new grant opportunities (including TIGER I and TIGER II grants). The County should track communications and be prepared to respond proactively to announcements of new grant programs.
Surface Transportation Program**	Not available	Federal Highway Administration	\$6,577 million nationally in 2009	Not applicable	States and local governments	X	X	X	Grants fund projects on any federal-aid highway. Bicycle and pedestrian improvements include on-street facilities, off-street paths, sidewalks, crosswalks, bicycle and pedestrian signals, parking, and other ancillary facilities. Non-construction projects, such as maps, bicycle/pedestrian coordinator positions, and encouragement programs are eligible. The modification of sidewalks to comply with the requirements of the Americans with Disabilities Act (ADA) is also an eligible activity.

**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
Congestion Mitigation and Air Quality (CMAQ)**	Not available	Federal Highway Administration and Federal Transit Administration	\$1,777 million nationally in 2009	Not applicable	States and Metropolitan Planning Organizations in air quality non-attainment and maintenance areas	X	X	X	Funds are allocated for transportation projects that aim to reduce transportation related emissions. Funds can be used for construction of bicycle transportation facilities and pedestrian walkways or for non-construction projects related to safe bicycling and walking (i.e. maps and brochures).
Transportation Enhancements*	Not available	Federal Highway Administration	10 percent of State Transportation Program funds	Not applicable	States	X	X	X	Funds are a set-aside of Surface Transportation Program (STP) monies designated for Transportation Enhancement (TE) activities, which include the pedestrians and bicycles facilities, safety and educational activities for pedestrians and bicyclists, and the preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian and bicycle trails).
Highway Safety Improvement Program**	October	Federal Highway Administration	\$1,296 million nationally in 2009	Varies between 0% and 10%	City, county or federal land manager	X	X	X	Funds projects on publicly-owned roadways or bicycle/pedestrian pathways or trails that address a safety issue and may include education and enforcement programs. This program includes the Railroad-Highway Crossings and High Risk Rural Roads programs.

**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
Community Development Block Grants	Varies between grants	U.S. Dept. of Housing and Urban Development (HUD)	\$42.8 m	Varies between grants	City, county	X	X	X	Funds local community development activities such as affordable housing, anti-poverty programs, and infrastructure development. Can be used to build sidewalks and recreational facilities.
Recreational Trails Program**	October	CA Dept. of Parks and Recreation	\$1.3 m in 2010	12%	Agencies and organizations that manage public lands	X	X	X	Provides funds to states for acquisition of easements for trails from willing sellers, maintenance and restoration of existing trails, construction of new paved or unpaved trails, and operation of educational programs to promote safety and environmental protection related to trails.

Federal Safe Routes to School**	Mid-July	Federal Highway Administration	Max. funding cap for infrastructure project: \$1 million. Max funding cap for non-infrastructure project: 500,000	Not applicable	State, city, county, MPOs, RTPAs and other organizations that partner with one of the above.	X	X	X	Grant funds for infrastructure and non-infrastructure projects. Infrastructure projects are engineering projects or capital improvements that will substantially improve safety and the ability of students to walk and bicycle to school. Non-infrastructure projects are education/encouragement/enforcement activities that are intended to change community behavior, attitudes, and social norms to make it safer for children in grades K-8 to walk and bicycle to school.
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**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
Community Transformation Grant	July	Centers for Disease Control and Prevention	\$50,000-10,000,000 per applicant	Not applicable	State and local governmental agencies, tribes and territories, and national and community-based organizations	X		X	Funding is available to support evidence and practice-based community and clinical prevention and wellness strategies that will lead to specific, measurable health outcomes to reduce chronic disease rates. Bicycle and pedestrian improvements are applicable as they encourage physical activity, which has been proven to reduce the risks of diseases associated with inactivity.

**State-Administered Funding**

Bicycle Transportation Account	March	Caltrans	\$7.2 million	Minimum 10% local match on construction	Public agencies	X	X	X	Funds bicycle projects that improve safety and convenience of bicycle commuters. In addition to construction and planning, funds may be used for right of way acquisition.
California Safe Routes to School	Varies	Caltrans	\$24.5 million	10%	Cities and counties		X	X	SR2S is primarily a construction program to enhance safety of pedestrian and bicycle facilities near schools.
State Transportation Improvement Program (STIP)	December	Caltrans	Varies	Not applicable	Cities	X	X	X	The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources.
State Coastal Conservancy	Rolling	State Coastal Conservancy	Varies	Not applicable	Public agencies, non-profit organizations	X	X	X	Projects must be in accordance with Division 21 and meet the goals and objectives of the Conservancy's strategic plan. More information can be found at <a href="http://scc.ca.gov/applying-for-grants-and-assistance/forms">http://scc.ca.gov/applying-for-grants-and-assistance/forms</a> .

**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
Community Based Transportation Planning	March	Caltrans	\$3 million	20%	MPO, city, county		X		Eligible projects that exemplify livable community concepts including enhancing bicycle and pedestrian access.

County of Los Angeles | Bicycle Master Plan

Land and Water Conservation Fund	March	NPS, CA Dept. of Parks and Recreation	\$2.3 million in CA in 2009	50% + 2-6% administration surcharge	Cities, counties and districts authorized to operate, acquire, develop and maintain park and recreation facilities	X	X	Fund provides matching grants to state and local governments for the acquisition and development of land for outdoor recreation areas. Lands acquired through program must be retained in perpetuity for public recreational use. Individual project awards are not available. The Department of Parks and Recreation levies a surcharge for administering the funds. The LCWF could fund the development of river-adjacent bicycle facilities.
Environmental Enhancement and Mitigation Program	October	California Natural Resources Agency	\$10 million	Not applicable	Federal, State, local agencies and MPO	X	X	Support projects that offset environmental impacts of modified or new public transportation facilities. These projects can include highway landscaping and urban forestry projects, roadside recreation projects, and projects to acquire or enhance resource lands. EEMP funds projects in California, at an annual project average of \$250,000. Funds may be used for land acquisition.

**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
State Highway Operations and Protection Program (SHOPP)	Not Available	Caltrans	\$1.69 million statewide annually through FY 2013/14	Not Available	Local and regional agencies	X	X	X	Capital improvements and maintenance projects that relate to maintenance, safety and rehabilitation of state highways and bridges.

Office of Traffic Safety (OTS) Grants	January	Caltrans	Varies annually - \$82 million statewide in FY 2009/2010	Not applicable	Government agencies, state colleges, state universities, city, county, school district, fire department, public emergency service provider	X			Funds are used to establish new traffic safety programs, expand ongoing programs, or address deficiencies in current programs. Bicycle safety is included in the list of traffic safety priority areas. Grant funding cannot replace existing program expenditures, nor can traffic safety funds be used for program maintenance, research, rehabilitation, or construction. Evaluation criteria to assess needs include potential traffic safety impact, collision statistics and rankings, seriousness of problems, and performance on previous OTS grants.
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**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
<b>Regional- and Local-Administered Funding</b>									
Transportation Development Act (TDA) Article 3 (SB 821)	January	LACMTA	Varies	Not applicable	Cities and counties	X	X	X	Funds are a percentage of the state sales tax given annually to local jurisdictions for bicycle and pedestrian projects. Funds may be used for engineering expenses leading to construction, right-of-way acquisition, construction and reconstruction, retrofitting existing facilities, route improvements, and bicycle support facilities.

Metro Call for Projects (CFP)***	January	LA Metro	Varies annually	Not applicable	Public agencies that provide transportation facilities or services within Los Angeles County	X	X	X	Co-funds new regionally significant capital projects that improve all modes of surface transportation. Relevant categories include Bikeway Improvements; Regional Surface Transportation Improvements; Transportation Enhancement Activities; Transportation Demand Management; and Pedestrian Improvements.
Proposition A	N/A	LA County	Varies	Not applicable	Cities and unincorporated communities in LA County				A half-cent sales tax dedicated to transportation funding. One-fourth of the funds go to Local Return Programs. The monies help these entities develop and improve local public transit, paratransit, and related transportation infrastructure

**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
Proposition C	N/A	LACMTA	Varies	Not applicable	Cities and unincorporated communities in LA County				Revenues are allocated into categories including Rail & Bus Security; Commuter Rail, Transit Centers and Park and Ride Lots; Local Return; and, Transit Related Improvements to Streets and Highways. Supports projects and programs developed with Prop A funds.
Measure R	N/A	LACMTA	Varies	Not applicable	Cities and unincorporated communities in LA County	X	X	X	A half-cent sales tax to finance new transportation projects and programs, and accelerate many of those already in process.

Adopt-A-Trail Programs	Not applicable	Local trail commission or non-profit	Varies	Not applicable	Local governments	X	X	These programs used to fund new construction, renovation, trail brochures, informational kiosks and other amenities. These programs can also be extended to include sponsorship of trail segments for maintenance needs.
<b>Other Funding Sources</b>								
Vehicle Impact Fees	Not applicable	LA County	Not Available	Not Available	Local communities affected by development projects	X		These fees are typically tied to trip generation rates and traffic impacts produced by a proposed project. A developer may reduce or mitigate the number of trips by paying for on- and off-site bikeway improvements that encourage residents to bicycle rather than drive. Establishing a clear connection between the impact fee and the project's impacts is critical.

**Table 5-7: Bikeway Improvements Funding Source Summary (continued)**

Funding Source	Due Date*	Administering Agency	Annual Total	Matching Requirement	Eligible Applicants	Planning	Infrastructure	Other	Comments
Bikes Belong Grant	Multiple dates throughout year.	Bikes Belong	Not Available	50% minimum	Organizations and agencies	X	X	X	Bikes Belong provides grants for up to \$10,000 with a 50% match that recipients may use towards paths, bridges and parks.

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Robert Wood Johnson Foundation (RWJF)	Multiple dates throughout year.	RWJF	\$2,000 to \$14 M	Not Available	Organizations and agencies	X	The RWJF funds aim to improve health and health care in the United States. RWJF funds approximately 12 percent of unsolicited projects. Bicycle and pedestrian projects applying for RWJF funds qualify under the program’s goal to “promote healthy communities and lifestyles.”
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\* Due dates are subject to change due to pending authorization of a new federal transportation bill.

\*\* Program is one of many programs authorized under SAFETEA-LU and current funding has only been extended through March 31, 2012.

\*\*\* Refer to Table 5-8 for more information on eligible project types

## Regional Funding Sources

LACMTA is responsible for allocating discretionary federal, state, and local transportation funds to improve all modes of surface transportation. LACMTA also prepares the Los Angeles County Transportation Improvement Program (TIP). A key component of TIP is the Call for Projects program, a competitive process that distributes discretionary capital transportation funds to regionally-significant projects.

Every other year (pending funding availability), LACMTA accepts Call applications in several modal categories. Funding levels for each of the modes is established by mode share as determined by the LACMTA Long Range Transportation Plan (LRTP). As of the writing of this Plan, the Call is currently on an odd-year funding cycle with applications typically due early in the odd years. Local jurisdictions, transit operators, and other eligible public agencies may submit applications proposing projects for funding. LACMTA staff ranks eligible projects and presents preliminary scores for approval to LACMTA's Technical Advisory Committee (TAC), which is made up of members of public agencies and the LACMTA's Board of Directors. Upon approval, the TIP is updated and formally transmitted to the Southern California Association of Governments (SCAG) and the California Transportation Commission (CTC) planning agencies. The TIP then becomes part of the five-year program of projects scheduled for implementation in the County of Los Angeles.

The modal categories relevant to the implementation of bicycle projects and programs are Bikeway Improvements, Regional Surface Transportation Improvements (RSTI), Transportation Enhancements Activation (TEA), and Transportation Demand Management (TDM). Typically, funding provided for bicycle improvements under the Call comes from different sources including SAFETEA-LU, Regional Surface Transportation Program (RSTP), Transportation Enhancement (TE), and CMAQ. Wherever possible, projects from this Plan should be included as part of larger arterial improvement projects and submitted under the RSTI category. Other regional funding sources include the Policies for Livable, Active Communities and Environments (PLACE) grant, and the Regional Parks and Open Space District (RPOSD) grants. The Los Angeles County Department of Public Health's PLACE Program in 2008 awarded approximately \$100,000 per year over a three-year period to five agencies to initiate policy changes and physical projects to enhance the built environment and increase physical activity among community residents. The funded projects include bicycle plans, a Safe and Healthy Streets Plan, and several bicycle corridor improvements. The RPOSD grants program allocated \$859 million to date for acquisition, development and rehabilitation of open space, and improvement of recreation facilities to several regional agencies within the County. Grant funds from RPOSD are administered through the Specified Project, Per Parcel Discretionary, and Excess Funds Grant Programs.<sup>38</sup>

Table 5-8 provides information on each of the relevant modal categories within the LACMTA Call for Projects as of 2011.

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<sup>38</sup> For more information about RPOSD grants refer to: *Grant Program Procedural Guide*, June 2009. Available at [http://openspacedistrict.lacounty.info/cms1\\_139608.pdf](http://openspacedistrict.lacounty.info/cms1_139608.pdf)

**Table 5-8: LACMTA Call For Projects (Bicycle Related)**

Modal Category	Share of Funding*	Eligible Projects**
Bikeway Improvements	8%	Regionally-significant projects that provide access and mobility through bike-to-transit improvements, gap closures in the inter-jurisdictional bikeway network, bicycle parking, and first-time implementation of bicycle racks on buses.
Regional Surface Transportation Improvements (RSTI)	40%	On-street bicycle lanes may be eligible if included as part of a larger capacity-enhancing arterial improvement project. Bikeway grade-separation projects may be eligible as part of larger arterial grade-separation projects.
Transportation Enhancement Activities (TEA)	2%	Bicycle-related safety and education programs. Bikeway projects implemented as part of a scenic or historic highway, and landscaping or scenic beautification along existing bikeways may also be eligible.
Transportation Demand Management (TDM)	7%	Technology and/or innovation-based bicycle transportation projects such as Bicycle Commuter Centers and modern bicycle sharing infrastructure. Larger TDM strategies with bicycle transportation components would also be eligible.

*\*Funding estimate is biennial (every other year) based on the approved funding from the 2009 Call.*

*\*\*The discussion of eligible projects is based on 2009 CFP requirements and assumes all eligibility requirements are met and the questions in the Call application are adequately addressed. These requirements are subject to change in future cycles. County staff should refer to the latest Call Application Package for detailed eligibility requirements.*

*See [http://www.metro.net/projects\\_studies/call\\_projects/images/2011-Call-for-Projects-Application.pdf](http://www.metro.net/projects_studies/call_projects/images/2011-Call-for-Projects-Application.pdf)*

Under the 2011 Draft Guidelines, the following projects are eligible for Bikeways Improvement funding:

- Bicycle parking (racks or lockers); membership-based attended or unattended high-capacity bicycle-parking facility (20 spaces and above) at major destinations or transit stations (examples are: store fronts, bike rooms, or sheltered rack parking with bicycle-information kiosk).
- On-street improvements to increase bicycle access to transit hubs (see 2006 BTSP Section 3 for bike-transit hubs).
- Wayfinding and directional signage to major destinations and transit stations, as part of a larger bikeway project.
- Bike sharing programs.

- Road diet (lane reduction to add bike lanes, center left-turn lanes, and intersection improvements for bikes – be aware that this cannot be on a street that received RSTI funds to widen for car lanes in the last seven years).
- Class II bike lanes or Class I bike path projects that improve continuity to other bicycle facilities (i.e., gap closures).
- Enhanced Class III bike routes or bicycle priority streets (i.e., bicycle boulevards) that modify a roadway to prioritize bicycle throughput and divert cut-through motor traffic (treatments such as signage, pavement legends, roundabouts, diverters, curb extensions, highly visible crossings, stop signs or cross streets, etc.).
- Sharrows on identified bike routes (see Caltrans Traffic Operations Policy Directive 05-10).

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