

# Executive Summary

---

## ES.1.0 Introduction

A safe, interconnected cycling and walking system can be a major asset to both individual communities and to an urban area, particularly one as well suited to these activities as San Bernardino County. The climate and topography are highly conducive for these and other outdoor pursuits. Both natural and man-made corridors provide ideal opportunities for development of a comprehensive system of cycling facilities, pathways, and trails. Even though San Bernardino County is known for its recreational opportunities, such a system is not well developed in many areas of the County.

However, progress is being made. In 2001, the combined total of centerline miles of bicycle infrastructure for all jurisdictions was 53 miles. As of 2011, the combined total of centerline miles of bicycle infrastructure for all jurisdictions is 468 miles. This represents an eight-fold growth in the County's bicycle infrastructure.

The challenge ahead involves developing a cohesive, integrated plan and identifying sources of funds to implement that plan. This is the goal of the San Bernardino County Non-Motorized Transportation Plan (NMTP). The NMTP of 2001 and the 2006 update have taken us part way there. This 2011 Plan hopes to take the development of such systems to another level. It identifies a comprehensive network, with a focus on the bicycle system. It is also a response, in part, to the initiatives to reduce vehicle travel and greenhouse gas emissions embedded in California Senate Bill 375 (SB 375). The Plan satisfies the State of California requirements of a Bicycle Transportation Plan (BTP) for purposes of Caltrans Bicycle Transportation Account (BTA) funding.

Implementation of the Plan will be a win-win on multiple fronts, and a strong partnership among local governments, transportation agencies, and the citizens of San Bernardino County can make it happen. The 2011 San Bernardino County NMTP will serve as a vehicle for communicating the non-motorized vision for the County, which is represented by the collective visions of each jurisdiction. Although the jurisdictions will be responsible for implementation of the Plan, it is important to have a Plan that cuts across subareas and jurisdictions so that coordination can occur on a physical facility level as well as in scheduling and funding.

## ES.1.1 Overview of NMTP Development Process

The development of the 2011 NMTP was a collaborative effort between SANBAG and local jurisdictions in San Bernardino County, with policy oversight by the SANBAG Board of Directors. The existing 2006 update of the NMTP and the associated local jurisdiction plans provided the starting point, but the 2011 Plan represents a wholesale upgrade of the entire document, focusing principally on the bicycle system, but on the walking environment as well.

SANBAG staff conducted an initial inventory of all existing Class I, II and III bicycle facilities in the County and rode most of the facilities personally. This was supplemented by local jurisdiction inventory data. Existing facilities were then mapped, and proposed facilities from the

prior plan were superimposed. This served as the starting point for network development, representing an interactive process between SANBAG and local jurisdiction staff.

Basic criteria were applied to gauge the need and feasibility for additional bicycle facilities, including:

- Connections to major destination points and trip generators
- Connectivity within and across jurisdictional boundaries
- Potential for usage of exclusive rights-of-way (i.e. for Class I facilities)
- Physical characteristics of roadways and suitability for accommodation of bicycle facilities (i.e. for Class II and III facilities)
- Closing gaps between existing facilities
- Constructability and cost issues

Accident data were tabulated from the Statewide Integrated Traffic Records System (SWITRS), both by jurisdiction and for the County as a whole. A comprehensive countywide map of existing and proposed facilities was then prepared, and a draft subarea map was prepared for each jurisdiction. Each map was accompanied by tables of existing and proposed facilities, and a narrative was prepared describing both existing conditions and the bikeway plan for each. Construction costs were estimated for each improvement type and segment based on current unit cost factors (in 2010 dollars). The relevant sections were provided to each jurisdiction for review.

Typically two to three review cycles were undertaken before the city-level maps, tables, and text were finalized. These represented the “core” of the bicycle portion of the plan and were incorporated into Chapter 4. The Transportation Technical Advisory Committee (TTAC) served as a focal point for discussion of technical issues related to the NMTP. Periodic reviews of NMTP status were provided to the TTAC beginning in 2009.

The body of the report was completed and provided for local jurisdiction review in mid-February 2011. The report was reviewed by the TTAC and by individual jurisdictions, and comments were reflected in the text, as appropriate.

The SANBAG Plans and Programs Committee served as the committee with policy oversight throughout the process. The committee approved the proposed NMTP policies in October 2009 and received reports on the Plan in February and March, 2011. Following approval of the NMTP by the Committee on March 16 (action yet to come), the SANBAG Board approved the Plan on April 6 (action yet to come). Individual jurisdictions were responsible for approval of the Plan with their own city councils and the Board of Supervisors.

Public involvement opportunities have been available through the open meetings of the Plans and Programs Committee. Agendas have been posted and are available to all through the SANBAG website. However, direct outreach to the public and advocacy groups was limited during the course of the development of this Plan, due to the compressed timeline in which the Plan had to be prepared once the dates were set by the State for local jurisdiction applications for Bicycle Transportation Account funds. Nevertheless, one of the implementation actions listed in Chapter 7 is to take this significantly upgraded NMTP to both bicycle and pedestrian advocates and the general public. Comments and suggestions from these groups will be incorporated into the Plan, with another update of the NMTP anticipated by the end of 2012.

## ES.1.2 NMTP Structure

The Non-motorized Transportation Plan is organized into the following chapters:

### Executive Summary

1. Introduction
2. Regional System Overview and Goals, Objectives, and Policies
3. Bicycle Planning
4. Pedestrian Planning
5. Local Jurisdiction Bicycle Plans
6. Design Guidelines
7. Plan Implementation

Chapter 5 is the key chapter showing the NMTP for bikeways at the jurisdiction level. It includes an inventory of existing and proposed facilities, mileage statistics, accident data, and a narrative that ties each plan together. SANBAG acknowledges several Non-Motorized Transportation Plans prepared for other California jurisdictions from which information, graphics, and examples were drawn for inclusion in the San Bernardino County NMTP, specifically, bicycle plans for Stanislaus County, San Francisco Bay Area, and City of Portland. Additional information was extracted from the *Caltrans Design Manual, Chapter 1000 – Bikeway Planning and Design*, American Association of State Highway and Transportation Officials (AASHTO) *Guidelines for the Development of Bicycle Facilities*, and the Federal Highway Administration's *Manual on Uniform Traffic Control Devices (MUTCD)*.

## ES.2.0 Local Jurisdiction Plans

For purposes of the Non-Motorized Transportation Plan, the study uses the following study areas:

- East Valley
- West Valley
- Victor Valley
- Mountains
- Barstow Area
- Morongo Basin
- Needles Area

The subareas are generally consistent with the San Bernardino County Measure I subareas, with the exception of the San Bernardino Valley. The Valley Measure I Subarea was further disaggregated into the East Valley and West Valley to provide additional granularity when mapping the NMTP facilities. Each of these subareas has unique aspects and demographics relevant to establishing an effective NMTP. Chapter 2 further identifies and comments on the unique geographic and demographic elements for each subarea.

## **ES.2.1 Goals**

The infrastructure improvements and programs recommended in San Bernardino County for the NMTP will be shaped by the Plan's goals and policies. Goals provide the context for the specific policies discussed in the NMTP. The goals provide the long-term vision and serve as the foundation of the Plan. Goals are broad statements of purpose, while policies identify specific initiatives and provide implementation direction on elements of the Plan.

The following represent the goals of the NMTP:

1. Increased bicycle and pedestrian access - Expand bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites.
2. Increased travel by cycling and walking - Make the bicycle and walking an integral part of daily life in San Bernardino County, particularly (for bicycle) for trips of less than five miles, by implementing and maintaining a bikeway network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer and more convenient.
3. Routine accommodation in transportation and land use planning - Routinely consider bicyclists and pedestrians in the planning and design of land development, roadway, transit, and other transportation facilities, as appropriate to the context of each facility and its surroundings.
4. Improved bicycle and pedestrian safety - Encourage local and statewide policies and practices that improve bicycle and pedestrian safety.

## **ES.2.2 Policies**

A set of policy recommendations was approved the SANBAG Plans and Programs Committee in October 2009 and reconfirmed in February 2011. The policies are as follows:

1. Local jurisdictions are the agencies responsible for the identification of non-motorized transportation projects within their jurisdiction for inclusion into the Plan. SANBAG shall only serve in an advisory capacity with respect to the identification of projects on the regional network. SANBAG shall provide advice on the inclusion of projects that may serve to better establish connectivity between jurisdictions, intermodal facilities and regional activity centers. However, local jurisdictions have sole authority over all projects included in the Plan
2. Local jurisdictions are also responsible for implementation of the projects included in the NMTP. SANBAG may provide advisory support to jurisdictions in the project development process on request. Should SANBAG be requested to provide assistance delivering a project in the Plan, such instances should be limited to development of regional non-motorized transportation facilities that provide connectivity to more than one jurisdiction or complete gaps within the regional non-motorized transportation network or serve to provide better access to transit facilities.

3. SANBAG shall, when feasible, support local education and safety efforts currently being implemented through local law enforcement, highway patrol, Caltrans and schools to better educate children and adults on the safe use of bicycles and to promote the non-motorized transportation system.
4. SANBAG shall prepare and update the comprehensive map identifying the County's non-motorized transportation system using its in-house GIS capabilities. Maintenance of the maps is also an important element of SANBAG's proposed 511 Traveler Information System.
5. SANBAG shall work with its member agencies to develop a regional way-finding system to assist travelers to identify the non-motorized transportation system. Any such system developed shall be developed in collaboration with local jurisdictions, will afford an opportunity for member agency customization, and promote connectivity to transit facilities, park and ride lots, and other regional activity centers.
6. SANBAG shall work with and encourage member agencies to incorporate non-motorized transportation facilities into general and specific plans as well as provide assistance in identifying design standards that provide for pedestrian- and bicycle-friendly access to transit facilities.
7. SANBAG shall use the NMTP as one component of the overall strategy to reduce greenhouse gas emissions pursuant to SB 375.
8. SANBAG shall work with and encourage transit operators to provide end-of-trip pedestrian and bicycle-serving facilities, such as bike lockers, racks, and capacity on transit vehicles to carry bicycles and better facilitate the integration and use of non-motorized transportation within the regional transportation system.
9. SANBAG shall use this plan as the basis to allocate state, federal, and local funds for delivery of non-motorized transportation improvements. Fund types may include, but are not limited to, federal Transportation Enhancement (TE), Congestion Mitigation and Air Quality (CMAQ), state Bicycle Transportation Account (BTA), and Transportation Development Act (TDA) Article 3 funds.
10. SANBAG shall work with member agencies to coordinate delivery of the NMTP and projects contained in the Nexus Study.
11. SANBAG shall work with member agencies to identify state/federal bicycle and pedestrian infrastructure or planning grant opportunities. When funding opportunities arise, SANBAG shall work to support local jurisdiction grant applications or collaborate with local jurisdictions to directly submit grant applications for projects in the Plan.
12. SANBAG and member agencies shall conduct regular bicycle and pedestrian counts to monitor the effects of implementation of the NMTP. SANBAG shall work to identify funding for the monitoring of Class I, separated shared-use facilities, so that no financial impact is borne by the local jurisdictions for collection of count information. Counts conducted on Class II and Class III, on-street bicycle facilities, shall correspond with counting for intersections that are both on the non-motorized network and require CMP Monitoring as outlined in the Congestion Management Program. When counts for non-

CMP intersections are desired, SANBAG shall be responsible for identifying funding for such counts.

These policies constitute a modest expansion of SANBAG's role in implementing the NMTP. Most of the policy recommendations are incorporated into SANBAG's current activities, although they may not be explicitly stated. All of the proposed policies are consistent with the agency's role as a County Transportation Commission and a Council of Governments. Moreover, SANBAG programs significant state, federal and local funding sources to implement the components of the NMTP, and needs to play an active role in providing for regional non-motorized transportation from that perspective as well.

### **ES.3.0 Bicycle Planning**

Chapter 3 provides an overview of bicycle planning as it relates to the San Bernardino County Non-Motorized Transportation Plan. The chapter begins by outlining the classes of bicycle facilities. For the purposes of the NMTP, there are three classes of bicycle facilities and are as follows:

- Class I (Share Use or Bike Path): A bikeway physically separated from any street or highway. Shared Use Paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users.
- Class II (Bike Lane): A portion of roadway that has been designated by striping, signaling, and pavement markings for the preferential or exclusive use of bicyclists.
- Class III (Bike Route): A generic term for any road, street, path, or way that in some manner is specifically designated for bicycle travel regardless of whether such facilities are designated for the exclusive use of bicycles, or are to be shared with other transportation modes.

### **ES.3.1 Types of Riders**

Despite the advances various cities have made in facilitating bicycling, many individuals still have concerns about the safety of bicycle transportation. Other bikeway plans have used a typology to categorize riders based on their approach to bicycling. A more thorough description of the four classes of bike riders identified by Alta Planning in collaboration with the City of Portland include:

- Strong and Fearless
- Enthused and Confident
- Interested but Concerned
- Not Interested

Of course there are limitations to any model that categorizes individuals; however, there is still some utility to considering these four generalizations, namely that it forces SANBAG to better think about who the plan is intended to serve. A major premise of this plan is that the residents who are described as 'interested but concerned' will not be attracted to bicycle for transportation by the provision of more bike lanes, but may be more willing to ride if a network of low-stress bikeways is provided.

## **ES.3.2 Existing Bicycle Network**

### **ES.3.2.1 Overview**

San Bernardino County has some excellent non-motorized facilities already in place for both recreation and commuting. The following describes these assets in detail and their relationship to the NMTP.

The growth of the non-motorized system has been substantial during the past decade. In 2001, the combined total of centerline miles of bicycle infrastructure for all jurisdictions was 53 miles. As of 2011, the combined total of centerline miles of bicycle infrastructure for all jurisdictions is 468 miles. This represents an increase of 415 centerline miles and a 780% growth in the County's bicycle infrastructure.

Subarea maps of existing and proposed bicycle facilities are provided in Figures ES.1 through ES.7. The full set of maps may be referenced at the end of the Executive Summary. Additional information and tabular summaries of existing and proposed route mileage are provided for each individual jurisdiction in Chapter 5.

### **ES.3.2.2 Existing Regional Non-Motorized Assets**

San Bernardino County has some excellent non-motorized facilities already in place for both recreation and commuting. Chapter 3 more thoroughly describes the assets, but the NMTP recognizes the following as assets within the context of the Plan.

- Pacific Electric Trail
- Santa Ana River Trail
- Flood Control Channels
- Power Line Corridors
- Cajon Pass Connector – Route 66 Heritage Trail
- Orange Blossom Trail

## **ES.3.3 Future Bicycle Network**

In addition to the above-mentioned existing regional assets that span across cities, many jurisdictions have developed their own Class I, Class II, and/or Class III bikeways. Collectively, these represent the bikeways portion of the NMTP. Figures ES.1 through ES.7 showcase these future facilities at the subarea level. Table ES.1 summarizes the total centerline mileage of existing and planned bicycle network by class. These mileage totals represent a summation of those in the individual jurisdiction plans. Because some of the planned facilities represent conversions from one class to another, the total existing plus planned is a slight over-counting of the actual mileage expected when the plan is complete.

**Table ES.1. Summary of Existing and Planned Bicycle Network Centerline Mileage**

(Note: Total existing plus planned represents a slight over-representation of the future network totals – see text.)

	Class I	Class II	Class III	Total
Existing	78.1	270.1	116.3	464.5
Planned	277.9	756.6	247.6	1282.1
Total	356.0	1026.7	363.9	1746.6

The local jurisdiction plans in Chapter 5 are drawn from the subarea maps and provide a more detailed discussion on specific bikeway facilities, end-of-trip facilities, and project priorities, where appropriate. Chapter 6 addresses design considerations when implementing bicycle facilities. Chapter 7 presents an overall implementation strategy and priorities.

### ES.3.4 Recommendations for the Regional Bikeway System

Specific project lists, recommendations, and priorities are contained in the individual jurisdiction bicycle plans in Chapter 5. This section provides recommendations that are regional in nature, with emphasis on the physical infrastructure in San Bernardino County. Chapter 7 presents an implementation strategy that takes these a step further, and provides regional priorities.

1. Deliver the Class I, II and III identified in the subarea maps referenced in Chapter 3. Although the Class I facilities can be considered a backbone bicycle system, there is much more to the network than just Class I facilities. Other types of facilities can also be delivered more quickly and less expensively, improving regional connectivity.
2. Develop better bicycle connectivity between cities and subareas of the County by coordinating the location and staging of network improvements. This must include improved collaboration with Caltrans, given the number of State highways connecting the subareas. Connectivity on Class II and Class III bicycle facilities can be increased by prioritizing the “low-hanging fruit” – parts of the regional system that are low-cost, close gaps in the system, and provide connections to key destinations.
3. Develop a better “sense of a system” through improved signage, markings, and way-finding for both cyclists and pedestrians.
4. Develop an improved inventory of end-of-trip facilities, particularly at transit stations, schools, other public buildings, and major employment centers.
5. Proactively coordinate integration of cycling and walking accommodations with the State’s Complete Streets requirements, once guidelines are finalized by the State.
6. Proactively coordinate integration of cycling and walking access accommodations to and from transit stations.
7. Continue safety education and promotion of cycling through schools, newsletters, and public websites.

## ES.4.0 Pedestrian Planning

It is often perceived that pedestrian transportation is essentially a local concern, given the length of most pedestrian trips and the manner in which these trips are usually contained within a given area, whether that area is a schoolyard, a shopping center, a college campus or a downtown business district. At the same time, federal legislation and funding programs remind us that regional, state and federal levels of government all have a stake in designing the multi-modal transportation system to serve the needs of all travelers. It is often said that pedestrian planning is a part of “alternative transportation planning,” yet there is no more basic mode of transportation than getting around on foot. Indeed, no trip involving a car, bus, train, airplane or other mode can even begin without a pedestrian journey taking place. Regional transportation facilities such as airports and transit stations must be designed around the needs of the pedestrian if they are to fulfill their mission.

For purposes of this plan, the following activities are considered regional priorities for pedestrian planning and project development:

1. Improving pedestrian access to transit;
2. Removing existing barriers to pedestrian travel;
3. Development of regional trails and pathways which provide improved pedestrian access to destinations;
4. Improvement of the pedestrian environment on major regional arterials and at regional activity centers.

Chapter 4 describes potential elements of a regionally based pedestrian transportation effort. The core focus of pedestrian planning, as it relate to this plan, include the following:

- Improving transit access
- Preventing and eliminating barriers to pedestrian travel
- Developing regional trails and pathways
- Better providing for pedestrian travel on major regional arterials and at activity centers

## ES.5.0 Overview of Local Jurisdiction Plans

Chapter 5 represents the heart of the Non-Motorized Plan for bicycle facilities. The chapter contains individualized plans for each of the 25 jurisdictions in San Bernardino County, with emphasis on the bicycle system. The plans all contain the same structure, including the following elements:

- The population of the jurisdiction
- An overview of the jurisdiction, including uniquely tailored commentary about its geography or historical elements.
- A summary of the jurisdiction’s existing and proposed land use.
- A map of the jurisdiction’s General Plan land use coverage, including information on schools, parks, residential, commercial and industrial land uses.

- A map of the jurisdiction’s existing and proposed bicycle facility networks.
- A textual description of the existing non-motorized condition.
- A textual description of the jurisdiction’s past investment in non-motorized infrastructure
- A textual description of the jurisdiction’s non-motorized priorities, if any.
- Tables that document existing, future and priority bicycle facility projects with class, mileage, and estimated costs.
- A summary table of multi-modal connections.
- Documentation of municipal code pertaining to the provision of non-motorized serving infrastructure, if available.
- A summary of non-motorized serving infrastructure, including bike racks, bike lockers and shower facilities where identified.
- A table with collision information and an analysis as to how the number of collisions relates to the state average.
- Information on jurisdiction safety and education programs related to non-motorized transportation.

## **ES.6.0 Design Guidelines**

Chapter 6 provides details on the recommended design and operating standards for the San Bernardino County Bikeway System.

The Caltrans Design Manual, Chapter 1000 – Bikeway Planning and Design establishes the standards for bicycle facility design within the state of California. These standards are, for the most part, consistent with the American Association of State Highway and Transportation Officials (AASHTO) Guidelines for the Development of Bicycle Facilities. The Caltrans standards provide the primary basis for the design recommendations that follow.

## **ES.7.0 Implementation**

Chapter 7 provides an implementation strategy for the NMTP and a description of funding opportunities for the proposed bicycle and pedestrian improvements. The implementation strategy consists of the following elements:

- Identification of implementation priorities (both infrastructure and institutional)
- Coordination of responsibilities for project delivery
- Identification and pursuit of funding opportunities

Each of these elements is described below.

### **ES.7.1 Implementation Priorities**

The setting of priorities for the NMTP involves more than just the identification of priority projects, although it does include that. Priorities must also consider institutional initiatives that pave the way for the delivery of priority projects. Thus, the priorities for the NMTP include a

restatement of some of the recommendations for system improvement identified in Chapter 3, plus several institutional initiatives to foster program and project delivery. The following represent NMTP priorities (not in order of importance):

1. Deliver the Class I backbone bicycle system. Although the Class I facilities can be considered a backbone bicycle system, there is much more to the network than just Class I facilities. Other types of facilities can also be delivered more quickly and less expensively, improving regional connectivity.
2. Develop better bicycle connectivity between cities and subareas of the County. This must include improved collaboration with Caltrans, given the number of State highways connecting the subareas.
3. Increase connectivity on Class II and Class III bicycle facilities by prioritizing the “low-hanging fruit” – parts of the regional system that are low-cost, close gaps in the system, and provide connections to key destinations.
4. Develop a better “sense of a system” through improved signage, markings, and way-finding for both cyclists and pedestrians
5. Proactively coordinate integration of cycling and walking accommodations with the State’s Complete Streets requirements
6. Proactively coordinate integration of cycling and walking access accommodations to and from transit stations
7. Aggressively pursue grant funding and devote additional programmatic funding to non-motorized facilities
8. Identify individuals within SANBAG, local jurisdictions, Caltrans, and transit agencies to be points of contact on non-motorized facility implementation and ensure communication on non-motorized topics among the agencies.

The full identification of Class I bicycle facilities is contained in the subarea maps in Chapter 3 and in the individual jurisdiction plans in Chapter 5. Several key Class I projects listed in the 2001 NMTP and the 2006 update that would be considered as part of the Class I backbone system include:

- Santa Ana River Trail
- Pacific Electric Trail
- Orange Blossom Trail
- San Timoteo Canyon Trail
- Riverwalk Trail
- Cajon Pass Connector – Route 66 Heritage Trail

## **ES.7.2      Coordination of Responsibilities for Project Delivery**

The policies listed in Chapter 2 provide guidance as to how implementation is to occur. Local jurisdictions are responsible for the identification, prioritization, and implementation of non-motorized transportation projects within their jurisdiction, with SANBAG serving in an advisory capacity and coordinating activity where necessary. SANBAG is also to work with local jurisdictions to develop a regional way-finding system.

The policies also identify a role for SANBAG to pursue grant opportunities for State/federal bicycle and pedestrian infrastructure or planning. SANBAG will support local jurisdiction grant applications or collaborate with local jurisdictions to directly submit grant applications for

projects in the Plan. The pursuit of grant application opportunities is one of the areas identified in the Plan where substantial improvement is possible, as San Bernardino County has been under-represented in the share of non-motorized grant funds that have been awarded in the past.

This Plan recognizes that regional cooperation among local agencies is critical in the selection and promotion of priority projects and the allocation of local funding to ensure an orderly implementation of an effective bicycle system.

The schedule for implementation on a year-to-year basis can be better coordinated and should be determined by:

- Relationship to the regional system
- Readiness of each project in terms of local support;
- CEQA approvals;
- Right-of-way requirements;
- Timing with other related improvements; and/or
- Success in obtaining competitive funding.

SANBAG staff should monitor the short- and mid-term projects identified in this Plan and subsequent updates, and maintain a comprehensive list of projects and funding allocations. A rolling five-year schedule of short-term projects should be identified so that resources can be focused and coordinated to ensure attention to priority projects over time. This is not to the exclusion of other local projects, but regional connectivity to support commuting and other longer-distance trips is an emphasis of this Plan. Each year the TTAC and SANBAG staff will review the list of projects slated for priority that year, review the readiness of each project to be proposed for funding, and consider the sequencing of the projects. This process does not preclude cities and local agencies from continuing to submit other local projects for funding consideration.

### **ES.7.3 Funding Opportunities**

There are a variety of potential funding sources - including local, state, regional, and federal programs - that can be used to construct the proposed bicycle and pedestrian improvements. Most of the federal, state, and regional programs are competitive, and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits. In addition, the majority of the programs require a local match, usually 10-15% of the total project cost.

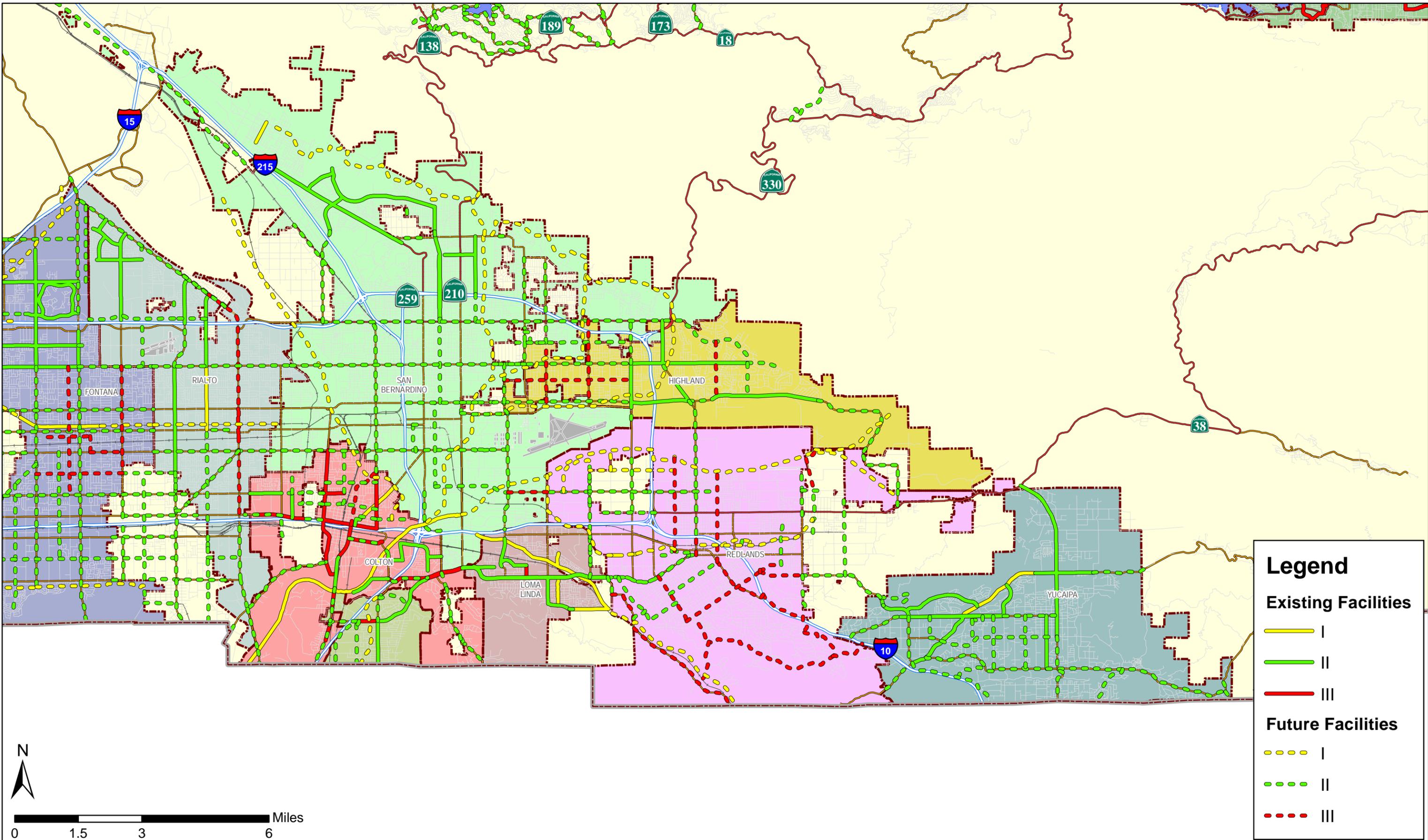
The recipients of grant funds for many of these programs are then required to monitor the projects for compliance with the program guidelines. Although the pursuit and administration of grant moneys can require a significant amount of staff time, grant funding allows for the construction of more miles of facilities.

The key to receiving funds will be to tailor grant requests to meet specific requirements and criteria, leverage grants with matching funds, and demonstrate a commitment by the jurisdiction to implement and maintain the system. Serious intent would include adoption of the NMTP, development of an additional local plan, inclusion of bikeway improvements into the Capital

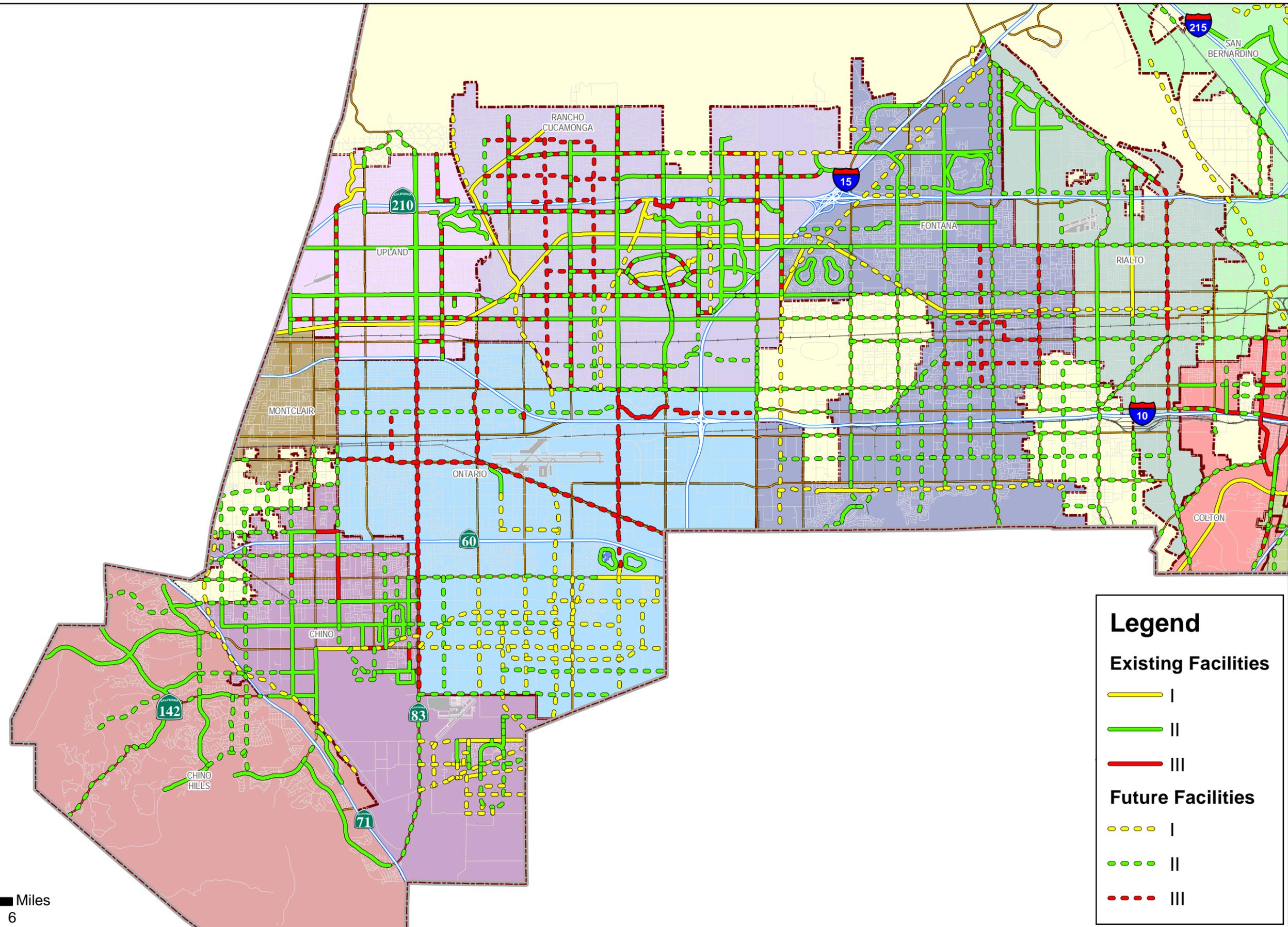
Improvements Plan, adoption of recognized design and operating standards, and public/political support.

A detailed breakdown of available funding programs is provided in Chapter 7. Tracking program specifics can be difficult as program guidelines are modified regularly. Thus it is important to verify program dates and deadlines with the program administrator since specific amounts and deadlines can change from year to year. In general, however, the known broad groups of funding sources are broken into three broad categories—federal, state and local—with further documentation of the known fund sources pertinent to each of the broad groups called out as bullet points. For more detailed information on any of the funding sources, see the more detailed discussion in Chapter 7.

# Figure ES.1 Bicycle Facilities East Valley



# Figure ES.2 Bicycle Facilities West Valley



### Legend

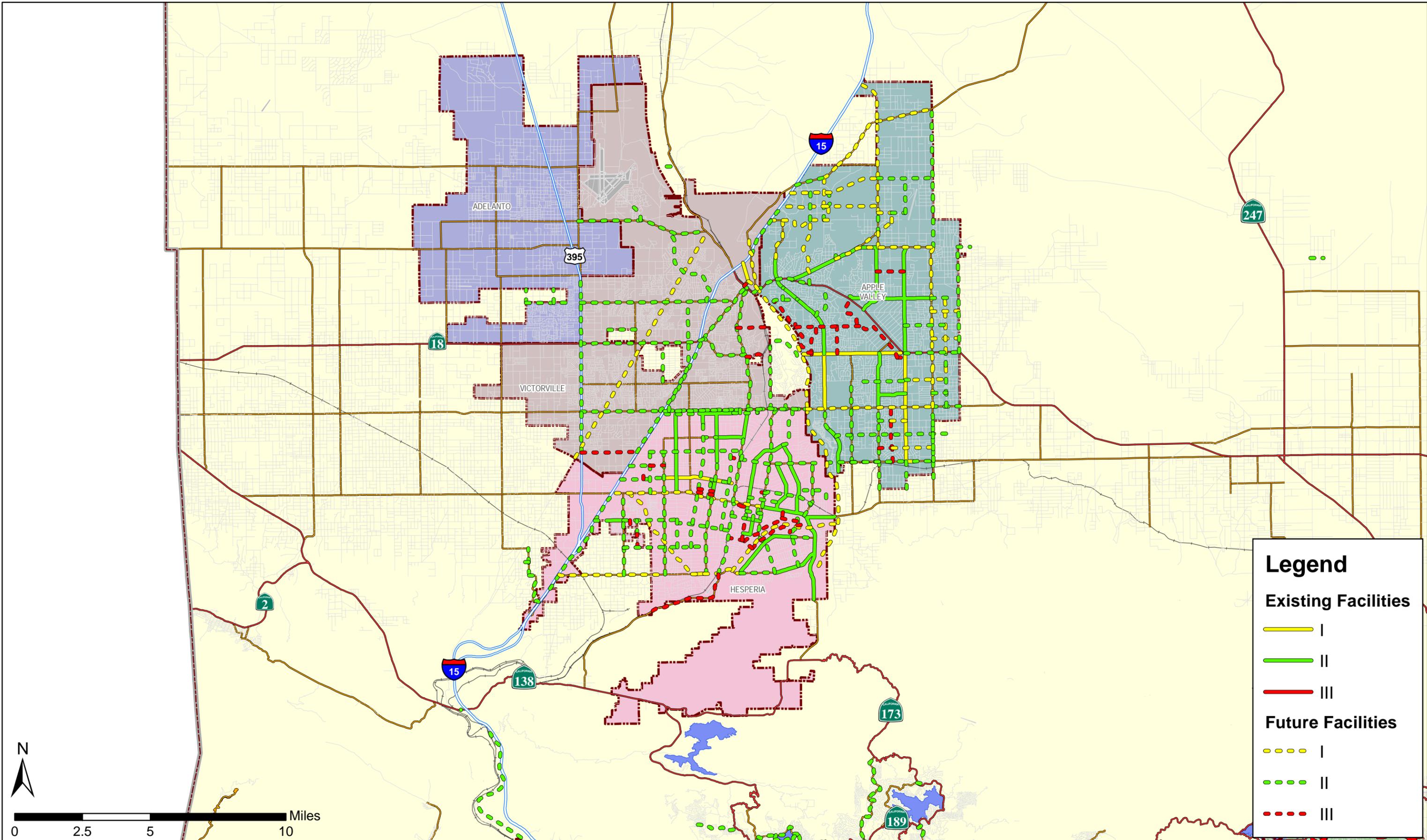
**Existing Facilities**

- Yellow line |
- Green line ||
- Red line |||

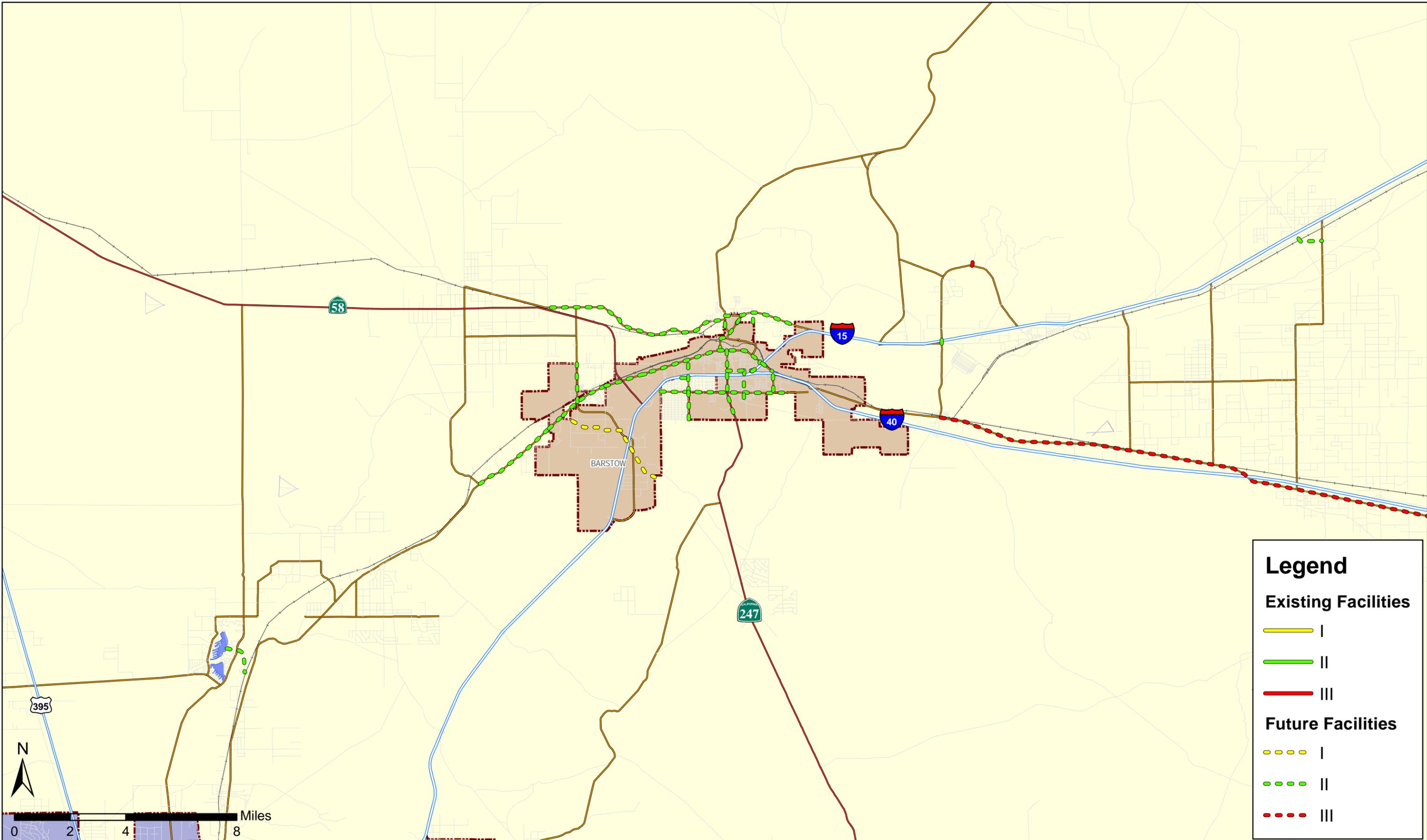
**Future Facilities**

- Yellow dashed line |
- Green dashed line ||
- Red dashed line |||

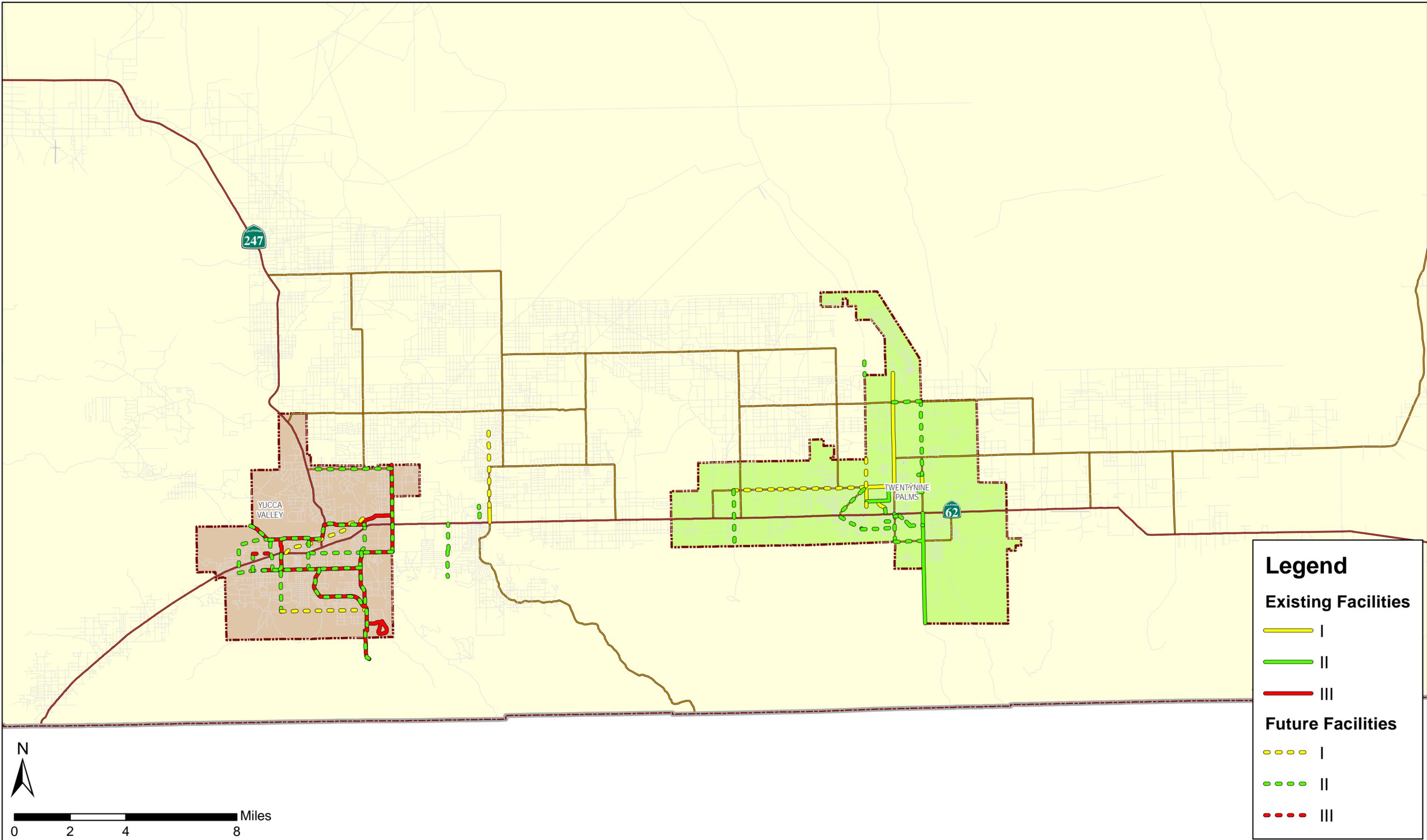
**Figure ES.3 Bicycle Facilities  
Victor Valley**



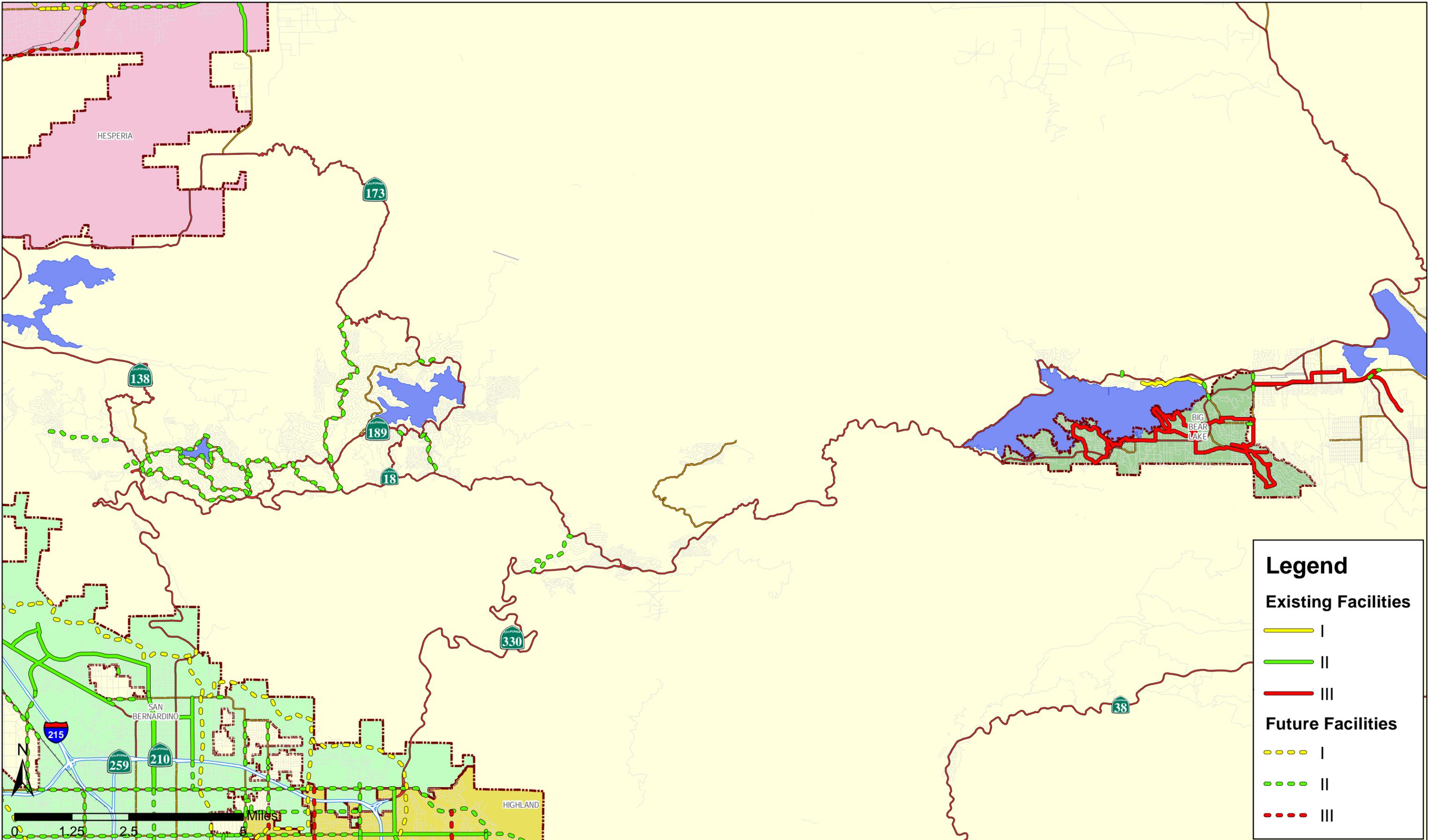
**Figure ES.4 Bicycle Facilities  
Barstow Area**



**Figure ES.5 Bicycle Facilities  
Morongo Basin**



**Figure ES.6 Bicycle Facilities  
Mountain Areas**



# Figure ES.7 Bicycle Facilities Needles Area

