5 Monterey Park

This chapter presents Monterey Park's portion of the San Gabriel Valley Regional Bicycle Master Plan. The chapter is organized into the following sections:

- Existing Conditions
- Needs Analysis
- Recommended Bicycle Facilities & Programs
- Project Costs
- Project Implementation
- Active Transportation Program (ATP) Compliance

East L.A. College Transit Center

5.1 Existing Conditions

The City of Monterey Park is located in the southwestern part of the San Gabriel Valley. There are approximately 60,600 residents with 7,870 people per square mile and a total area of 7.7 square miles. Monterey Park is bordered by unincorporated East Los Angeles to the west, Alhambra and the I-10 freeway to the north, Rosemead to the east, and Montebello to the south. Bicycle riders and others are particularly drawn to East Los Angeles College for educational and cultural activities and to shopping, dining, and entertainment destinations in northern and southern Monterey Park.

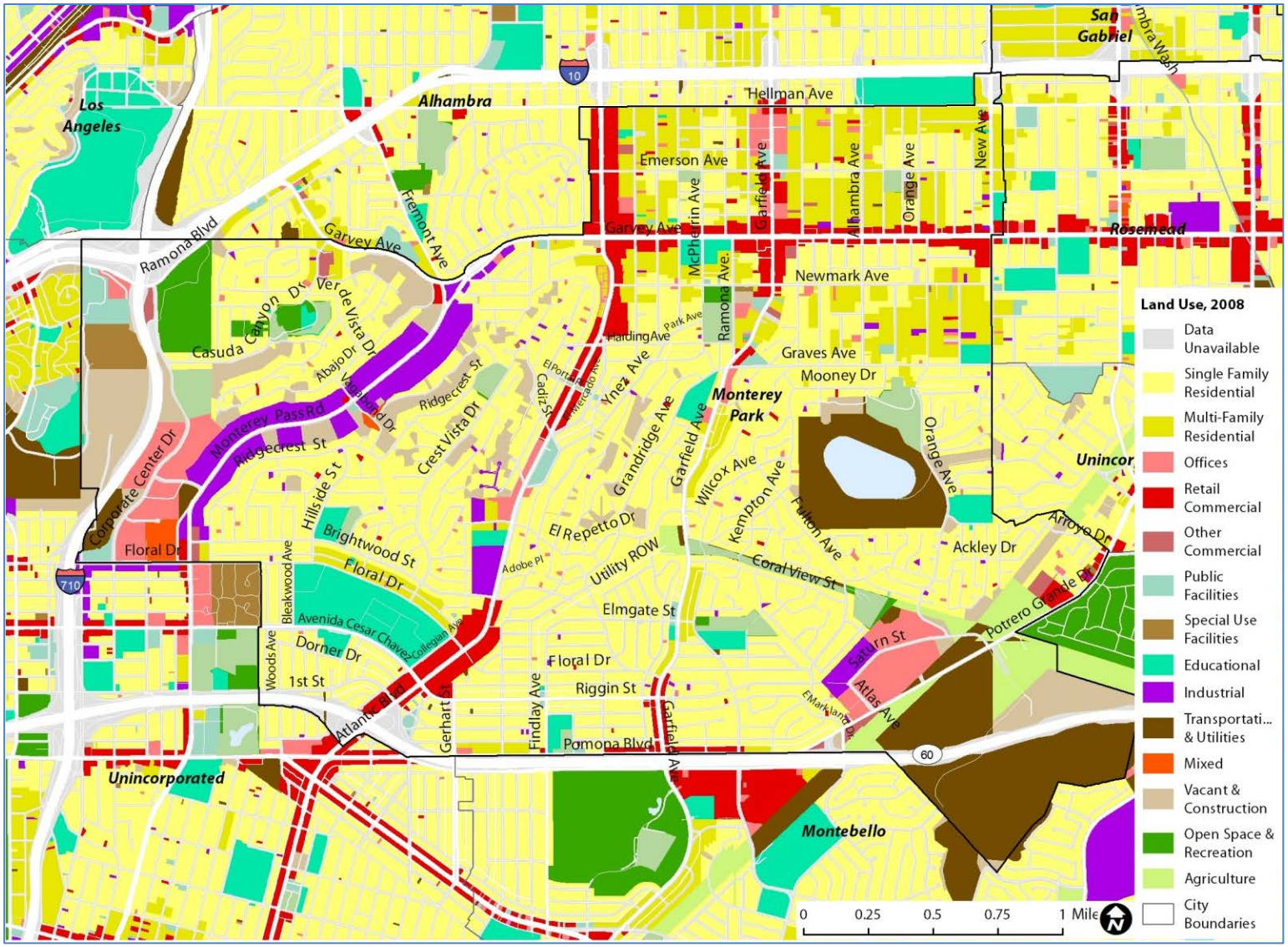
The purpose of this chapter is to explore existing bicycling conditions in Monterey Park. With a bicycling mode share of 0.4 percent (for commute trips), Monterey Park has somewhat lower bicycle use than most neighboring communities, as well as the State of California (1.0 percent). An estimated 1,887 bicycle trips are made daily in Monterey Park.

5.1.1 Land Use

Monterey Park Residential Street

Figure 5-1 presents Monterey Park's land use map. Single family residential homes account for approximately forty-seven percent (47%) of the City's land area while ten percent (10%) is occupied by multi-family residential buildings. Parks, open space, and recreational facilities account for three percent (3%) of land. Commercial, mixed-use, and office designations account for a total of approximately ten percent (10%) of the City's land, while industrial uses make up four percent (4%). Commercial uses are focused along Atlantic Boulevard, Garvey Avenue, and Garfield Avenue. The remaining 26% of land in the City is zoned for a variety of uses, including Agriculture (2%), Educational (4%), Public Facilities (1.2%), Special Use Facilities (0.7%), and Transportation & Utilities (10%). Ten percent (10%) of the land is vacant or in some phase of construction.

Figure 5-1: Monterey Park Land Use Map



5.1.2 Relevant Plans and Policies

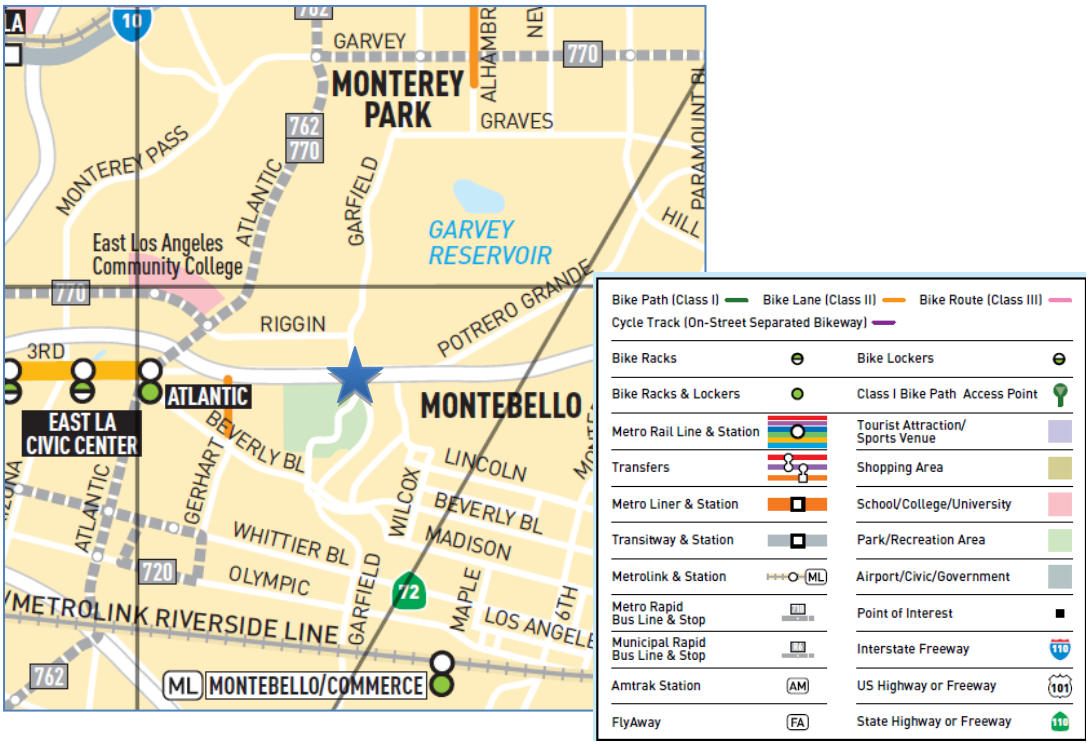
This section discusses various City of Monterey Park plans and policies and their relevance to this Plan.

South Garfield Transit Village Specific Plan (*In Progress*)

In anticipation of the proposed Metro Gold Line Eastside Transit Corridor Phase 2 station at Garfield Avenue and Via Campo, the City of Monterey Park is currently engaging in an update to the South Garfield Specific Plan in order to encourage and facilitate transit-oriented development along the South Garfield corridor as well as the perpendicular commercial corridor along Pomona Boulevard. The current Specific Plan permits a combination of uses that primarily encourage automobile use with minimal consideration of active transportation modes.

The Transit Village Specific Plan will also study pedestrian and bicycle use of Garfield Avenue, Pomona Boulevard, and surrounding streets in an effort similar to the *Downtown Mixed-Use and Pedestrian Linkages Plan* (see below in this section). This study will outline existing conditions and current street use, and recommend improvements needed in order to engage pedestrians and encourage public and active transportation use. The study will also identify linkages to important destinations throughout the City, including East Los Angeles College. **Figure 5-2** below shows the current lack of bicycle facilities in the area surrounding the South Garfield Commercial District (indicated by the blue star in the center).

Figure 5-2: Bicycle Facilities in the Vicinity of the South Garfield Commercial District



Healthy Community Element of the General Plan (2013)

The City's Healthy Community Element aims to create conditions that make it easier for people to make healthier choices. This element addresses some respiratory health issues that relate to poor air quality and transportation. The City of Monterey Park strives to provide safe bicycling and walking access to parks. The City also plans to provide convenient transit access to health care services on North Garfield Avenue and along Atlantic Boulevard.

For more information: *http://www.montereypark.ca.gov/DocumentCenter/View/590*

Sustainable Community Element of the General Plan (2013)

The Sustainable Community Element focuses on the environmental aspects of sustainability relating to land use and transportation. It identifies Monterey Park as having limited facilities for bicycling and, in some areas, deficient sidewalks for pedestrians. The City supports development of mixed-use areas along transit corridors to encourage people to walk, bike, or use public transit. The following policies are provided specific to bicycle travel within the City:

- Policy 5.6 Multipurpose Trails: Seek opportunities to provide off-street multipurpose trails for biking and walking that increase connectivity throughout the City while providing an attractive environment for walking and bicycling separated from the roadway.
- Policy 6.1 Public Bicycle Parking: Ensure adequate bicycle parking is available at City facilities and bus stops.
- Policy 6.2 Bicycle Parking in Development Projects: Require the provision of bicycle parking for new buildings and expansion projects as specified in the California Green Building Standards Code (CALGreen).
- Policy 6.3 End-of-Trip Facilities at Businesses: Encourage businesses to provide bike parking and other end-of-trip facilities that promote bicycling.
- Policy 7.2 Safe Driver Behavior: Promote safe driver behavior around bicycle riders and pedestrians, including knowing when to yield, looking for other people in the roadway, driving at appropriate speeds, and passing at a safe distance.
- Policy 7.3 Bicyclist and Pedestrian Education: Encourage and promote the education of community members, including children, as safe and alert bicycle riders and pedestrians.

For more information: *http://www.montereypark.ca.gov/DocumentCenter/View/589*

Climate Action Plan (2012)

The City of Monterey Park recently prepared and adopted a Climate Action Plan to reduce greenhouse gas emissions citywide. The Plan recommends a variety of strategies including the creation and adoption of a Master Bike Plan. The City also looks to expand their pedestrian network and increase bicycle parking and other end-of-trip facilities. Taken together, these actions have the potential to reduce

Vehicle Miles Traveled (VMT) in the City by 2.5% by the year 2020. The City will prioritize locations for Americans with Disabilities Act (ADA) improvements, including installing curb ramps, closing sidewalks gaps, and removing sidewalk obstructions.

For more information: *http://www.montereypark.ca.gov/documentcenter/view/581*

Downtown Mixed-Use and Pedestrian Linkages Plan (2004)

The Downtown Monterey Park Mixed-Use and Pedestrian Linkages Plan provides guidance for the growth of the Downtown area, as shown in

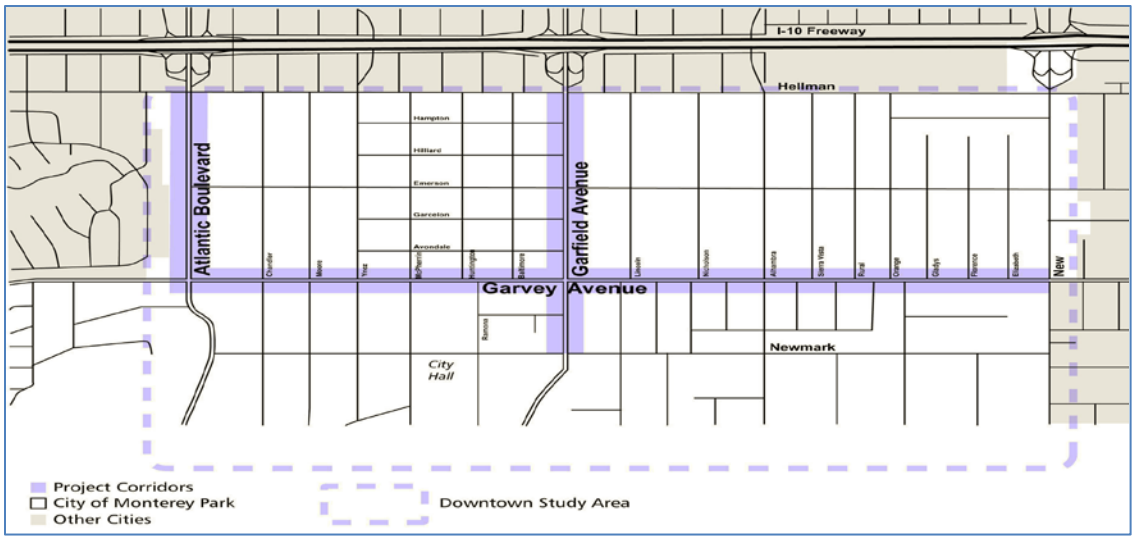
Figure 5-3. The Plan focuses on three primary Downtown streets: Garvey Avenue (Atlantic Boulevard to New Avenue), Atlantic Boulevard (Hellman Avenue to Garvey Avenue), and Garfield Avenue (Hellman Avenue to Newmark Avenue).

This Plan discusses how transportation infrastructure and the developing community can be interconnected. Recommendations are provided for both public and private realm. The Plan noted that bicycle travel within the downtown study area is generally minimal, except near Garfield Hospital and at the McPherrin Avenue/Garvey Avenue intersection. The Plan included the following recommendations:

- Bicycle parking along major streets to provide bicycle riders with improved access to destinations along downtown's corridors.
- Traffic calming on Class III bicycle routes.
- Installation of Class II bicycle lanes along McPherrin Avenue.

For more information: *http://www.montereypark.ca.gov/524/Pedestrian-Linkages-Plan*

Figure 5-3: Map of Downtown Monterey Park with Project Area highlighted in Blue



5.1.3 Engineering

Existing Bicycle Facilities

This report refers to standard bikeway definitions identified by Caltrans in Chapter 1000 of the Highway Design Manual (Caltrans HDM). Additional concepts for bikeways have been promoted and implemented throughout the United States; however, they have not been adopted for use in the Caltrans HDM. Bicycle facility types are discussed in **Section 1.3**.

Table 5-1 summarizes the classification and mileage of the existing network.

Table 5-1: Existing Bicycle Network

Facility Type	Mileage
Class I (Bike Path)	0.0
Class II (Bike Lanes)	0.7
Class III (Bike Route)	0.0
Total Mileage	**0.7**

As shown in **Table 5-1**, a total of 0.7 miles of bikeways are currently provided in the City of Monterey Park, consisting of the following facilities:

- On-street Class II bike lanes on Alhambra Avenue (between Hellman Avenue and Newmark Avenue)

Signage

The California Manual on Uniform Traffic Control Devices (CA MUTCD) and the CA HDM outline the requirements for bikeway signage. The Bike Lane Sign (R81) is required at the beginning of each designated bike lane and at each major decision point. The Bike Route Sign (D11-1) is required on Class III facilities. Shared-use paths require additional standardized signs to help manage different user groups. The City has installed CA MUTCD standard signs along the appropriate bikeways.

Caltrans Bikeway Signs

Bicycle Parking

Bicycle storage can range from a simple and convenient bicycle rack to storage in a bicycle locker or cage that protects against weather, vandalism and theft. The City currently has an inventory of existing short-term bicycle parking locations at several locations along Garvey Avenue and Garfield Avenue. Short-term bicycle racks can be found at some major destinations, including City Hall and parks throughout the city. Many bicycle riders resort to securing their bike to street fixtures such as trees, lights, telephone poles, and parking meters when sufficient parking facilities are not provided.

End-of-Trip Facilities

The presence and quality of trip-end facilities (e.g. showers, lockers, and changing facilities) can greatly influence a person's decision to complete a trip via bicycle. These facilities enable bicycle riders to change into work attire (especially after riding in wet or hot conditions). The City currently does not have an inventory of existing end-of-trip facilities.

Bicycle Signal Detection

Bicycle detection at actuated traffic signals permits bicycle riders to trigger a green light, even when no motor vehicle is present. California Assembly Bill 1581 requires all new and replacement actuated traffic signals[1] to detect bicycle riders and to provide sufficient time for a bicycle rider to clear an intersection from a standing start. Caltrans Policy Directive 09-06 clarifies the requirements and permits any type of detection technology. The most common technologies are in-pavement loop detectors and video detection. More recently, microwave detection has been used to detect and differentiate between bicycle riders and motor vehicles.

The City complies with the Caltrans Policy Directive by installing detector loops designed to detect bicycles during pavement rehabilitation and traffic signal upgrade projects. Traffic signal timing is reviewed and updated as necessary through traffic signal corridor timing projects.

Multi-Modal Connections

Transit is often best for longer trips, while bicycling is better for shorter trips. Combining transit use and bicycling can offer a high level of mobility that is comparable to travel by automobile. **Figure 5-4** shows the existing Metro and Metrolink transit lines that serve the City of Monterey Park.[2] The nearest Metrolink station is the Cal State L.A. station immediately to the northwest of Monterey Park in the City of Los Angeles, and the nearest light rail station is at the Atlantic Boulevard/Pomona Boulevard intersection a block south of the City's southern border.

The Los Angeles County Metropolitan Transportation Authority (Metro) operates the following bus lines in the City of Monterey Park (All Metro buses can carry two bicycles):

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[1] *Actuated traffic signals stay red until the signal detects a car or bicycle rider that is waiting for the light to turn green.*

[2] *GIS mapping data were only available for Metro and Metrolink facilities.*

- 68 – Along Avenida Cesar Chavez and Riggin Street between Downtown Los Angeles and the Shops at Montebello
- 70 – Along Garvey Avenue, between Downtown Los Angeles and El Monte Bus Station
- 258 – Along Monterey Pass Road between Alhambra and Paramount
- 260 – Along Atlantic Boulevard between Pasadena and the Artesia Blue Line Station
- 762 – Rapid service along Atlantic Boulevard between Pasadena and the Artesia Blue Line Station
- 770 – Rapid service along Avenida Cesar Chavez, Atlantic Boulevard, and Garvey Avenue between Downtown Los Angeles and El Monte Bus Station

In the City of Monterey Park, Montebello Bus Lines operates Line 10 along Atlantic Boulevard between East Los Angeles College and Whittier and Line 30 along Garfield Avenue between Alhambra and South Gate. Montebello Bus Lines' buses are equipped with racks that can carry two bicycles.

The City of Monterey Park also provides a local-circulator bus system – Spirit Bus – which complements regional bus service and accommodates local trips to all of the City's key destinations as well as the Cal State Los Angeles Metrolink station. Most routes operate Monday through Saturday. Spirit buses purchased after 2012 are equipped with bicycle racks.

In November 2013, the City of Monterey Park opened a new transit center at East Los Angeles College. The new center provides students with improved access to buses, making travel to campus easier and safer since bus boardings no longer need to occur in mixed traffic. In addition, transit information kiosks will display schedules and other information for the various bus lines that serve the immediate area – including Metro, Montebello Bus Lines and the City of Monterey Park Spirit – as well as the Metro Gold Line a few blocks away at the Pomona Boulevard/Atlantic Boulevard intersection in East Los Angeles.

Maintenance

Street maintenance programs aid in the quality and longevity of bicycle facilities. The City of Monterey Park currently has a Street Maintenance program that provides staff with guidelines to inspect, schedule, and repair City streets, alleys, and bike trails. The program provides maintenance of signs, pavement markings, curb markings, street name signs, and roadway striping. In addition to as-needed repairs, the program annually repaints school pavement legends and inspects school regulatory and warning signs. Street sweeping occurs on residential streets (once per week), city boulevards (four times per week) and parking lots (one to two times per week).

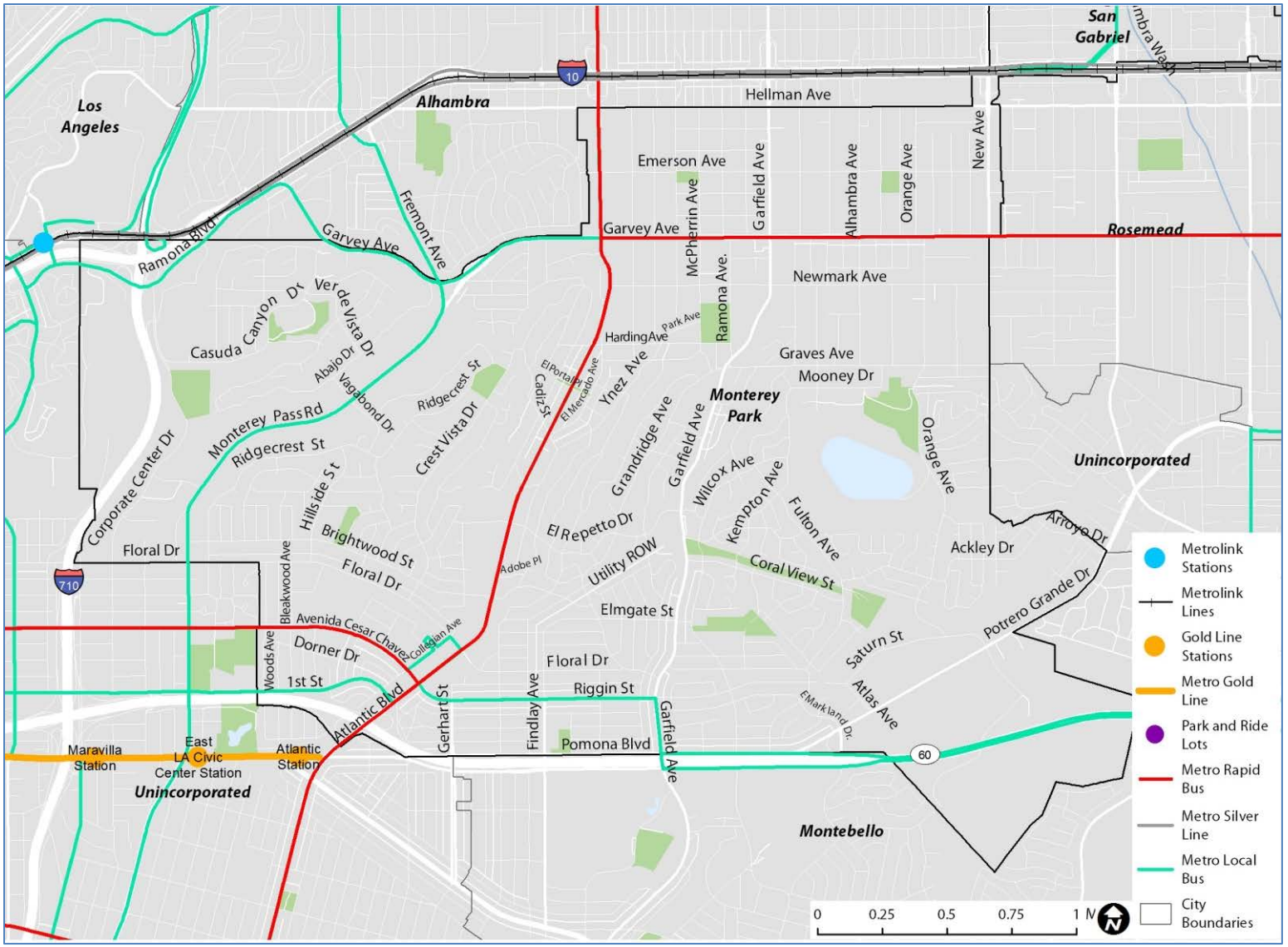
The Capital Improvement Program (CIP) serves to develop and construct major public improvements and address significant maintenance items. The CIP prioritizes and allocates funding for large scale projects including roadway resurfacing, repair projects, and improvements within the city.

5.1.4 Existing/Previous Education, Encouragement, and Enforcement Strategies

Bicycle education programs and enforcement of bicycle-related policies help to make riding safer for all bicycle riders. The City does not currently have education campaigns related to bicycling within the City.

Monterey Park police officers enforce all bicycle-related rules in the California Vehicle Code and issue citations when they observe violations.

Figure 5-4: Existing Public Transportation Facilities in Monterey Park



5.1.5 Past and Future Bicycle-Related Expenditures

No new bicycle facilities have been implemented within the City within the past three years.

5.2 Needs Analysis

This section describes the needs of bicycle riders in Monterey Park. This section provides estimates and forecasts of bicycle travel to determine the estimated bicycling demand in the city. In addition, this section analyzes recent bicycle collision data to identify areas that would benefit from bicycle facility improvements. Public outreach efforts related to the preparation of this Plan is discussed in Chapter 1 of this Plan.

5.2.1 Bicycle Demand Estimates and Forecasts

The model uses the U.S. Census Bureau's *American Communities Survey* (ACS) journey-to-work data and applies a market segment approach to estimate the number of bicycling or walking trips. Elementary school and college students usually have a different bicycle/walking mode split than work commuters.

In addition, national transportation surveys, in particular the *National Household Travel Survey* (NHTS, 2009), have shown that commute trips are only a fraction of the total trips an individual takes on a given day. The model uses the NHTS findings to estimate the number of non-work, non-school trips taken by commuters to determine the number of walking or bicycling trips that occur in a day. This information can be projected out using standard trip lengths by mode and trip purpose to estimate the number of driving miles reduced by non-motorized modes.

Model Data

The foundation of this analysis is the ACS 2008-2012 five-year estimate for Monterey Park. Model variables from the ACS include: total population, employed population, school enrollment (grades K-12 and college students), and travel-to-work mode split.

The 2009 NHTS provides a substantial national dataset of travel characteristics, particularly for trip characteristics of bicycling and walking trips. Data used from this survey include:

- Student mode split, grades K-12
- Trip distance by mode by trip purpose
- Ratio of walking/bicycling work trips to utilitarian trips
- Ratio of work trips to social/recreational trips
- Average trip length by trip purpose and mode

Several of these variables provide a way to estimate the number of walking and bicycling trips made for other reasons than work trips, such as shopping and running errands. NHTS 2009 data indicates that for every bicycle work trip, there are slightly more than two utilitarian bicycle trips made. Although these trips cannot be directly attached to a certain group of people (not all of the utilitarian bicycling trips are

made by people who bicycle to work), these multipliers allow a high percentage of the community's walking and bicycling activity to be captured in an annual estimate.

The *Safe Routes to School Baseline Data Report* (2010) was used to determine the percent of students who walk or bicycle by the parents' estimate of distance as well as the frequency of carpooling for trip replacement.

As with any modeling projection, the accuracy of the result is dependent on the accuracy of the input data and other assumptions. Effort was made to collect the best data possible for input to the model, but in many cases national data was used where local data points were unavailable. Examples of information that could improve the accuracy of this exercise include the detailed results of local Safe Routes to Schools parent and student surveys, a regional household travel survey, and a student travel survey of college students.

Existing Walking and Bicycling Trips

Table 5-2 below presents commute to work data estimates for Monterey Park, as well as nearby cities and comparison geographies, as reported in the 2008-2012 American Community Survey 5-year estimates. This information for Monterey Park is one of several inputs of the demand model.

Table 5-2: Existing Mode Split Comparison with Neighboring Cities

Jurisdiction	Walk	Bike	Transit	Carpool	Drive Alone
Monterey Park	**1.9%**	**0.4%**	**3.8%**	**11.6%**	**75.8%**
Rosemead	1.3%	0.8%	4.3%	12.2%	76.2%
South Pasadena	1.2%	0.8%	5.1%	9.2%	78.4%
Temple City	0.8%	0.4%	3.4%	12.8%	77.5%
City of Los Angeles	3.7%	1.0%	11.1%	10.3%	67.0%
County of Los Angeles	2.9%	0.8%	7.1%	10.9%	72.2%
California	2.8%	1.0%	5.1%	11.5%	73.0%
United States	2.8%	0.6%	5.0%	10.0%	76.1%
Source: 2008-2012 American Community Survey 5-year Estimates					

Table 5-3 shows the estimated current number of daily bicycling and walking trips. Based on the model assumptions, the majority of trips are non-work utilitarian trips, which include medical/dental services, shopping/errands, family personal business, obligations, transport someone, meals, and other trips.

Table 5-3: Current Weekday Bicycling and Walking Trips

	Bicycling	Walking	Source
Bicycling/walking commute trips	205	976	Employed population from ACS multiplied by mode split from ACS, doubled for round-trips
Walk- or bike-to-transit trips	20	566	Number of transit commuters from ACS multiplied by transit mode split from TCRP Report 153, doubled for round-trips
K-12 bicycle/walking trips	153	2,040	School children population from ACS multiplied by mode split from SRTS Baseline Data Report (2010), doubled for round-trips
College bicycle/walking trips	202	823	Employed population from ACS multiplied by mode split from NHTS 2009, doubled for round-trips
Daily bicycle/walking utilitarian trips	330	4,220	Bicycle/walking commute trips (above) multiplied by mode-specific utilitarian trip multiplier from NHTS 2009
Daily social/recreational trips	977	3,818	Bicycle/walking commute trips (above) multiplied by mode-specific social/recreational trip multiplier from NHTS 2009
Current daily bicycling and walking trips	**1,887**	**12,443**	
Annual Extrapolation			
Annual commute trips	56,475	387,042	Bicycle/walking and walk- or bike-to-transit trips multiplied by annual work days
Annual K-12 trips	27,540	367,200	K-12 bicycle/walking trips multiplied by annual K-12 school days
Annual college trips	30,300	123,450	College bicycle/walking trips multiplied by annual college class days
Annual utilitarian trips	90,988	1,673,357	Annual commute trips multiplied by mode-specific utilitarian trip multiplier

As shown in **Table 5-3**, current commute, school, college and utilitarian trips via bicycle are estimated at approximately 1,890 trips daily, and approximately 91,000 bicycle trips are estimated to occur annually.

Trip Replacement

To estimate the total distance residents travel to work or school by walking and bicycling, the model isolates different walking and bicycling user groups and applies trip distance information for walking or bicycling trips by mode based on NHTS 2009.

Table 5-4 shows the trip replacement factors.

Yearly factors are calculated by assuming that work and school/college trips occur five days per week, while utilitarian trips occur seven days per week. However, work and utilitarian trips occur year-round, while school and college trips are only three-quarters of the year, due to summer vacation.

Table 5-4: Current Bicycling and Walking Trip Replacement (Annual)

	Bicycling	Walking	Source
Vehicle commute trips replaced	46,269	321,943	Redistribution of bikers/walkers using existing mode split if that mode were not available
K-12 vehicle trips replaced	11,731	178,724	SR2S Baseline Data Report, 2010
College vehicle trips replaced	24,694	106,167	NHTS 2009
Utilitarian vehicle trips replaced	74,544	1,391,906	Redistribution of bikers/walkers using existing mode split if that mode were not available
Vehicle Miles Traveled			
Commute VMT replaced	163,791	215,702	NHTS 2009 average bicycle trip distance for "Work" trips
K-12 VMT replaced	9,009	63,469	SRTS 2010, percent of students who walk or bicycle by parent's estimate of distance
College VMT replaced	36,547	59,453	NHTS 2009 average trip distance for "School/Daycare/Religious" trips
Utilitarian VMT replaced	141,137	927,937	Derived from NHTS 2009
Total VMT reduced	350,484	1,266,561	
Per capita VMT reduced	**6**	**21**	

Current Benefits

To the extent that bicycling and walking trips replace single-occupancy vehicle trips, they reduce emissions and have tangible economic impacts by reducing traffic congestion, crashes, and maintenance costs. In addition, the reduced need to own and operate a vehicle saves families money. These benefits are shown in Table 5-5.

Table 5-5: Annual Benefits of Current Bicycling and Walking Trips

Measure	Bicycling	Walking	Total
Yearly vehicle miles reduced	350,484	1,266,561	1,617,046
Air Quality Benefits[3]			
Reduced Hydrocarbons (pounds/year)	1,051	3,798	4,848
Reduced Particulate Matter (pounds/year)	8	28	36
Reduced Nitrous Oxides (pounds/year)	734	2,653	3,387
Reduced Carbon Monoxide (pounds/year)	9,581	34,624	44,206
Reduced Carbon Dioxide (pounds/year)	285,121	1,030,355	1,315,476

As shown in **Table 5-5**, current bicycle trip benefits include the reduction of over 350,000 vehicle miles annually and a reduction of carbon dioxide emissions by over 285,000 pounds annually.

Potential Future Walking and Bicycling Trips

Estimating future benefits requires additional assumptions regarding Monterey Park's future population and anticipated commuting patterns in 2035. Future population predictions as determined by the SCAG 2012 RTP Growth Forecast (for 2035) were used in this model. **Table 5-6** shows the projected future demographics used in the future analysis.

Table 5-6: Projected Future Demographics

Demographic	Value	Source
Population	77,700	SCAG 2012 RTP Growth Forecast (for 2035)
Employed population	33,031	Same percentage as current model estimate
School population, K-12	9,827	Same percentage as current model estimate
College student population	7,757	Same percentage as current model estimate

Forecast bicycling mode share was increased to address the higher use potentially generated by the addition of recommended bikeway facilities to the existing system.

[3] *From EPA report 420-F-05-022 "Emission Facts: Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks." 2005.*

The analysis predicts that the bicycle mode split will increase to 0.8% by 2035, due in part to bicycle network implementation and education/encouragement programs. The results of the future bicycling trips model, assuming an increase to 0.8% bicycle mode share, are shown in **Table 5-7**.

Table 5-7: Estimated Future (2035) Weekday Bicycling and Walking Trips

Trip Type	Bicycling	Walking	Discussion
Bicycle/walking commute trips	528	1,255	Employed population multiplied by mode split, doubled for round-trip
Walk- or bike-to-transit trips	25	728	Number of transit commuters multiplied by transit mode split from TCRP Report 153, doubled for round-trip
K-12 bicycle/walking trips	197	2,624	School children population multiplied by mode split, doubled for round-trip
College bicycle/walking trips	260	1,058	Employed population multiplied by mode split, doubled for round-trip
Daily bicycle/walking utilitarian trips	851	5,426	Bicycle/walking commute trips multiplied by mode-specific utilitarian trip multiplier
Daily social/recreational trips	2,517	4,910	Bicycle/walking commute trips multiplied by mode-specific social/recreational trip multiplier
Total future daily bicycling and walking trips	**4,378**	**16,001**	

As shown in **Table 5-7**, assuming bicycle mode split increases to 0.8%, forecast year 2035 commute, school, college and utilitarian trips via bicycle are estimated to grow to approximately 4,400 trips daily.

Future Benefits

The trip replacement factors remain the same as in the model of current trips. **Table 5-8** shows the air quality benefits of the future projected walking and bicycling trips.

Table 5-8: Annual Benefits of Future Bicycling and Walking Trips

Measure	Bicycling	Walking	Total
Yearly vehicle miles reduced	808,000	1,629,000	2,437,000
Air Quality Benefits[4]			
Reduced Hydrocarbons (pounds/year)	2,423	4,884	7,306
Reduced Particulate Matter (pounds/year)	18	36	54
Reduced Nitrous Oxides (pounds/year)	1,692	3,411	5,104
Reduced Carbon Monoxide (pounds/year)	22,091	44,526	66,617
Reduced Carbon Dioxide (pounds/year)	657,383	1,325,021	1,982,403

As shown in **Table 5-8,** assuming bicycle mode split increases to 0.8%, forecast year 2035 benefits include the reduction of over 800,000 vehicle trips annually and the reduction of carbon dioxide emissions by over 657,000 pounds annually.

5.2.2 Bicycle Counts

A knowledge of current bicycling levels in the City of Monterey Park helps to identify areas of particular need while also serving as a baseline from which to evaluate the impact of bicycling infrastructure and program improvements called for in this Plan. To assess current bicycling levels at different sites throughout the City, the project team conducted bicycle counts using two separate methodologies: manual counts with volunteers and automated counts using electronic tube counters.

Methodology

The methodology for the manual bicycle counts derives from the National Bicycle and Pedestrian Documentation Project (NBPD), a collaborative effort of Alta Planning + Design and the Institute of Transportation Engineers. The NBPD methodology aims to capture existing levels of both utilitarian and recreational bicycling trips. The NBPD also provides guidance on how to select count locations.

[4] *From EPA report 420-F-05-022 "Emission Facts: Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks." 2005.*

Volunteers conducted bicycle counts at eight locations in Monterey Park on the following Saturdays from 11:00 a.m. to 1:00 p.m.: May 3, June 14, and June 21, 2014. Weekday morning bicycle counts took place from 7:00 a.m. to 9:00 a.m. at nine locations on various mid-week days between May 6 and June 17, 2014. Weekday evening counts took place from 4:00 p.m. to 6:00 p.m. at eight locations on several days between May 8 and June 17, 2014. These dates are meant to capture volumes of bicycle riders on a typical weekday and weekend day. The manual bike count locations were selected by staff members from the City of Monterey Park, Day One, and Alta Planning + Design. This snapshot of locations is intended to capture a diverse bicycling population using the roads and streets that span the spectrum of "bike-friendliness."

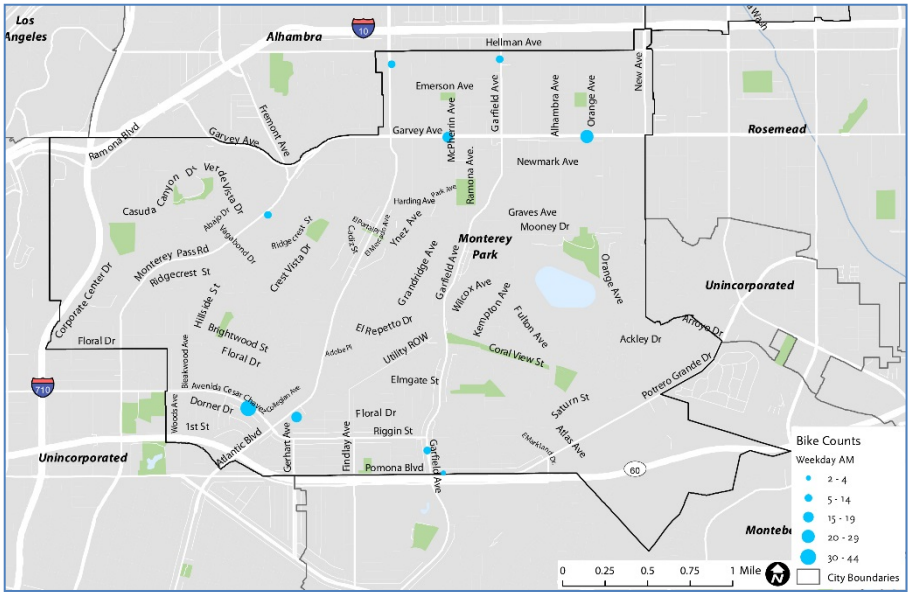


Figure 5-5: Weekday Morning Bike Count Results in Monterey Park

In addition to manual counts, automated 24-hour bicycle counts were conducted using Eco-Counters that were procured by the Los Angeles County Department of Public Health and distributed to each of the five Regional Bike Plan partner cities for various time periods. In Monterey Park, the automated bicycle counters were installed at eight locations between April 24 and May 13, 2014. The project team experienced several issues with the automated counters that negatively affected the accuracy of the bicycle count data, such as maintenance problems and data reporting flaws. Therefore, the project team recommends that the automated count data be dismissed in favor of the manual count results. However, the automated counting technology should be refined and considered for use in future bicycle data collection efforts.

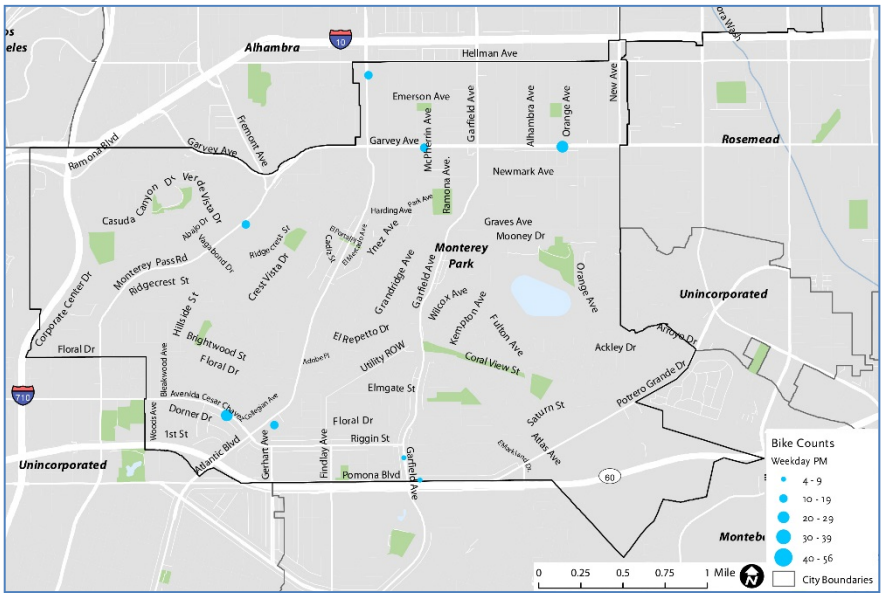


Figure 5-6: Weekday Afternoon Bike Count Results in Monterey Park

Results

Manual bicycle count locations and results for the City of Monterey Park are displayed in **Figure 5-5**, **Figure 5-6**, and **Figure 5-7**, as well as in **Appendix F**. During the weekday morning manual counts, the Monterey Park location that experienced the highest volume of bicycle riders was Avenida Cesar Chavez between Schoolside Avenue and Collegian Avenue, with 31 total bicycle riders passing during the two hour count period. For the weekday afternoon count periods, the count location of East Garvey Avenue between Rural Drive and Sefton Avenue saw the highest volume of bicycle riders – 27 bicycle riders from 4:00 p.m. to 6:00 p.m. On weekends, the most bicycle riders were again counted along East Garvey Avenue between Rural Drive and Sefton Avenue, with 20 riders passing by during the count period.

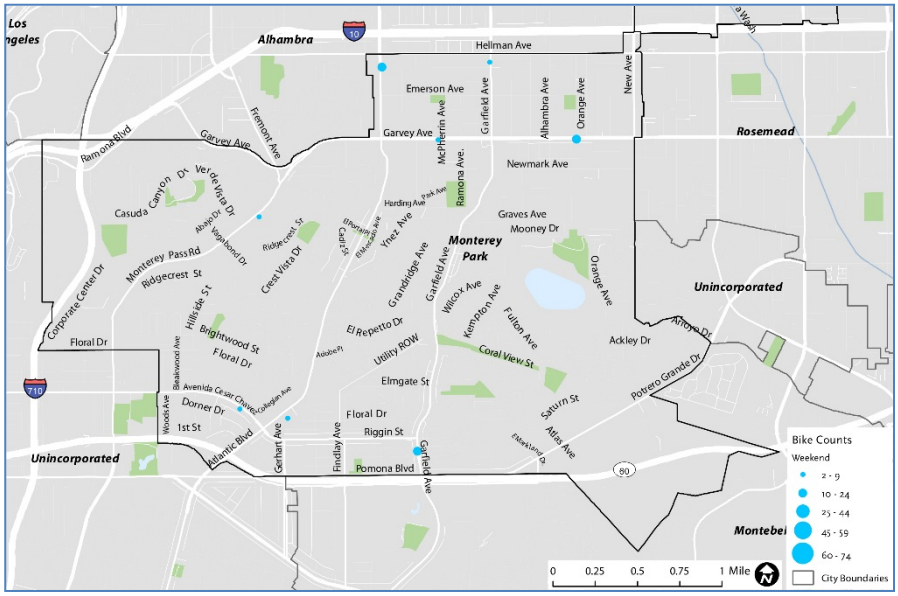


Figure 5-7: Weekend Bike Count Results in Monterey Park

In the City as a whole, approximately 87 percent of bicycle riders counted were male. Approximately 77 percent of those observed were not wearing bicycle helmets, and 53 percent were riding on the sidewalks. Riding on the sidewalk can be an indicator of a lack of safe bicycling facilities and/or proper education, as bicycle riders that are uncomfortable riding with traffic may choose to instead travel along the sidewalk.

5.2.3 Bicycle Collision Analysis

Safety is a major concern for current and potential bicycle riders, and can influence the decision whether or not to bicycle. Potential bicycle riders that do not have experience riding, especially in traffic, typically will not ride if they perceive the roadway as dangerous. People who do not ride often express frustration when drivers do not see them or do not understand that bicycle riders are afforded the same rights as vehicles. Similarly, many bicycle riders do not know or follow the "rules of the road." Uninformed or unlawful roadway users can contribute to collisions.

This section reviews bicycle collisions from January 2007 to December 2011, as reported by the Statewide Integrated Traffic Records System (SWITRS). **Table 5-9** presents the number of bicycle collisions in Monterey Park from 2007-2011. **Figure 5-8** maps bike collisions over the study period with larger dots representing locations with multiple collisions.

Table 5-9: Bicycle-Related Collisions by Year

Year	Number of Collisions

2007	5
2008	7
2009	10
2010	18
2011	24
Total	**64**

Table 5-10 displays the top eight roadways with the most bicycle-related collisions based on data from 2007-2011. The eight roadways shown here accounted for nearly sixty percent (58%) of all bicycle-related collisions during the period 2007-2011. The top roadway –Garvey Avenue – was host to one-fifth (20%) of all bicycle-related collisions in the City during this period.

Table 5-10: Highest Bicycle-Related Collision Roadways

Roadway	Number of Bike Collisions
Garvey Avenue	13
Emerson Avenue	5
Atlantic Boulevard	4
Alhambra Avenue	3
Garfield Avenue	3
Monterey Pass Road	3
Newmark Avenue	3
Riggin Street	3

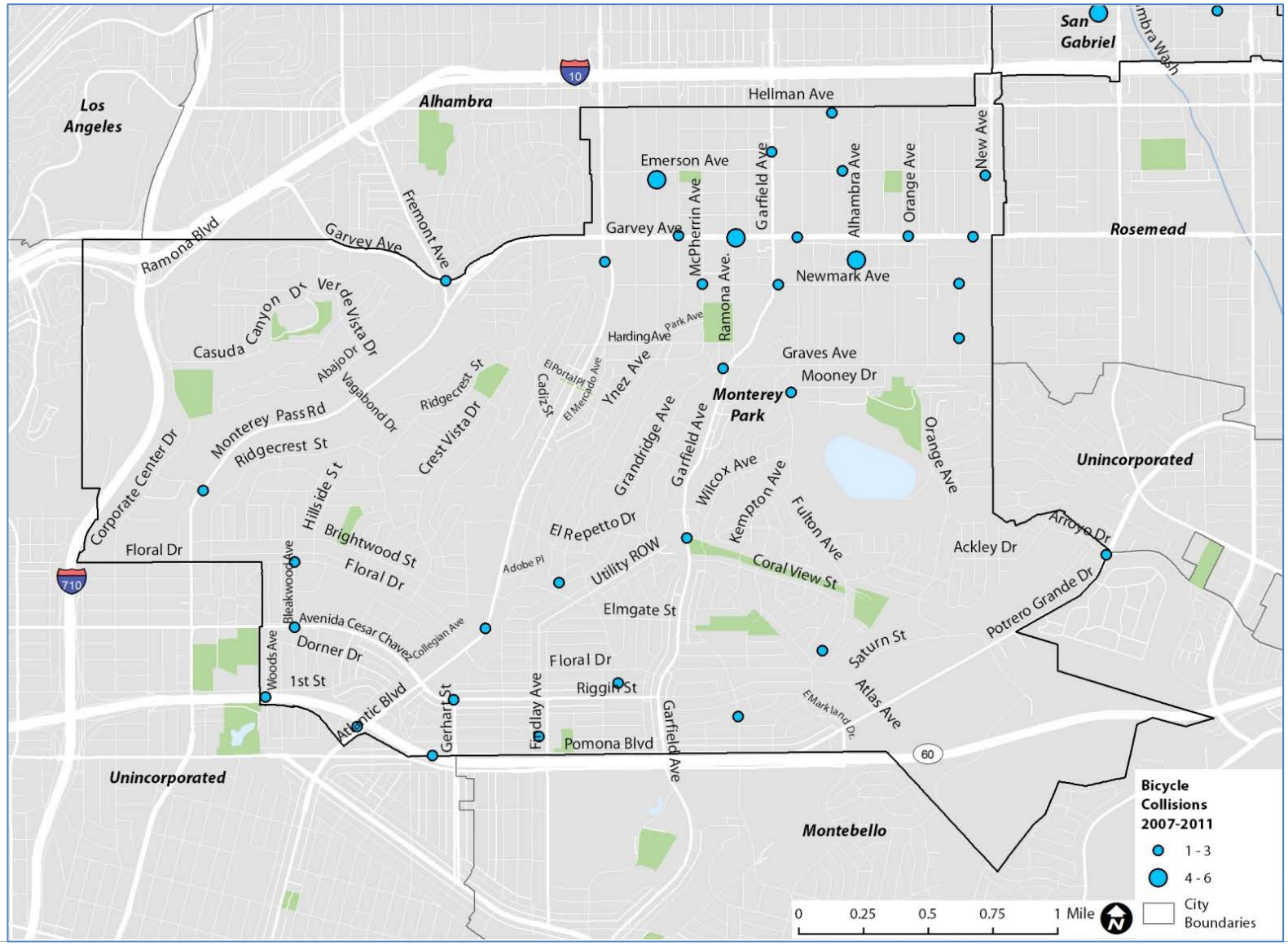
Table 5-11 shows the percent of bike collisions based on the day of the week.

Table 5-11: Bicycle-Related Collisions by Day of the Week

Day of the Week	Percent of Collisions
Monday	14%
Tuesday	13%
Wednesday	**23%**
Thursday	**19%**
Friday	11%
Saturday	14%
Sunday	6%

As shown in **Table 5-11,** the highest percentage of bicycle-related collisions (23%) occurred on Wednesdays, with the second highest percentage (19%) on Thursdays.

Figure 5-8: Bicycle-Related Collisions in Monterey Park, 2007-2011



5.3 Recommended Bikeways

The proposed bikeway network, when completed, will include over 50 miles of bicycle facilities to increase connectivity within Monterey Park and to the surrounding communities. The proposed bikeway network has been developed to create a comprehensive, safe, and logical network.

Recommendations for bikeways within the City are subject to a variety of factors that affect the schedule and final implementation:

- Recommendations have been developed based on technical review and public input, however, the recommendations are conceptual and further feasibility review may be needed to address physical, community, and financial constraints.
- While a prioritized list is provided in the Implementation section (Section 5.5), projects may be implemented sooner based on coordination with other City projects or funding opportunities.
- Funding for the bikeway recommendations is discussed further in the Implementation section, and suggestions are provided to the City to seek funding sources to minimize the effect on the City General Fund for implementation.
- The City may develop further criteria and standards for use of enhanced bicycle treatments such as sharrows, green conflict zone striping, bike lane buffers, bicycle boulevard elements, etc. The City will explore the possibility of providing enhanced Class II or Class III facilities anywhere Class II or III facilities are proposed.

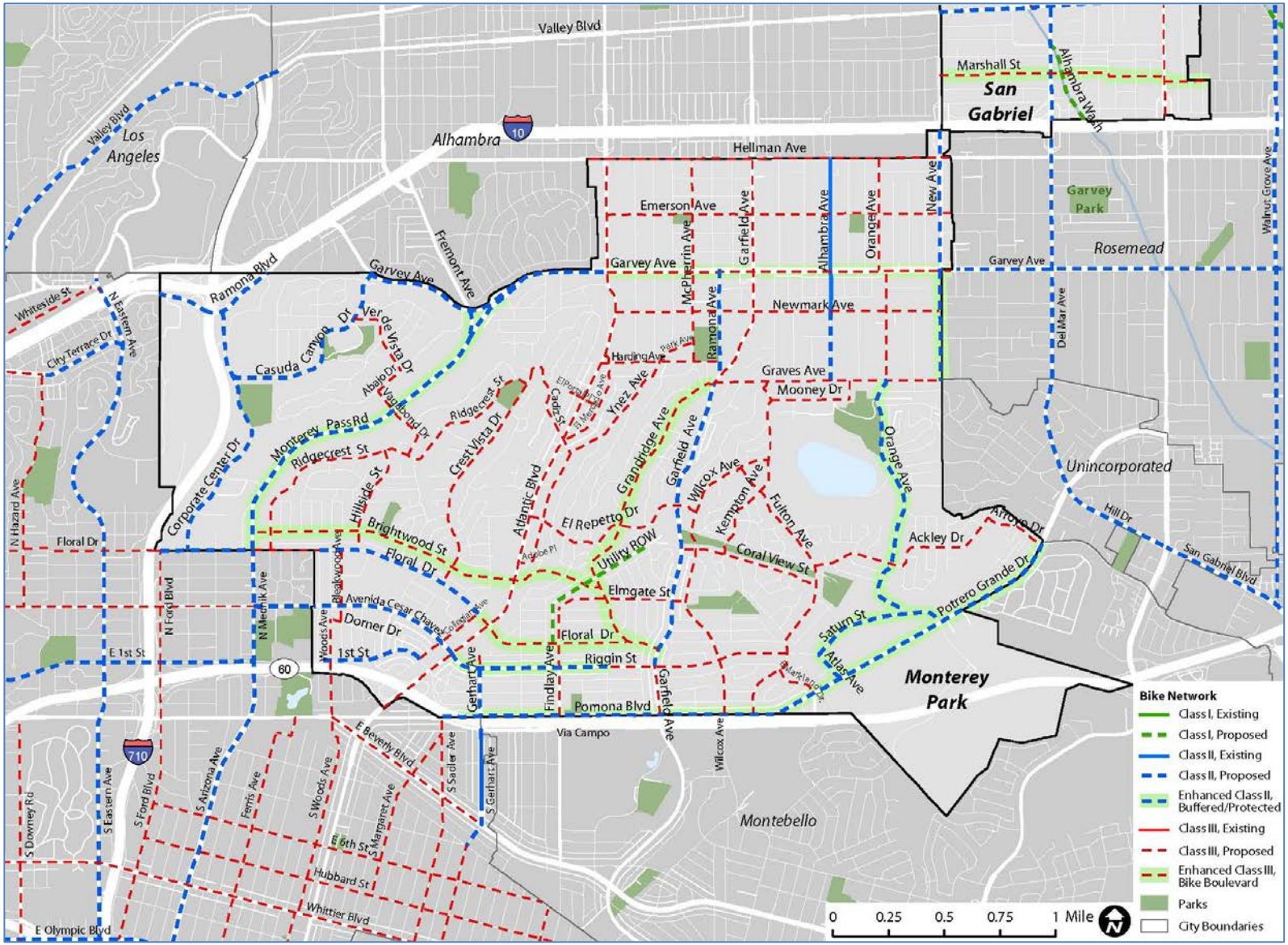
Table 5-12 summarizes the bikeway recommendations and total mileage by category. **Figure 5-9** shows the recommended bikeway network, including potential enhanced Class II and Class III facilities.

Table 5-12 Recommended Bikeway Network

Facility Type	Existing Bikeways (Miles)	Proposed Bikeways (Miles)	Total Bikeways (Miles)
Class I Shared-Use Path	0.0	0.7	0.7
Class II Bike Lane	0.7	17.3	18.0
Class III Bike Route	0.0	34.7	34.7
Total	**0.7**	**52.7**	**53.4**

As shown in **Table 5-12,** when accounting for existing and proposed bikeways, bikeways identified in this Plan total 53.4 miles.

Figure 5-9: Monterey Park Recommended Bikeway Network



5.3.1 Class I Shared-Use Paths

Class I off-street shared-use paths are often desired by casual bicycle riders, as well as bicycle riders concerned about interacting with vehicular traffic. A network of off-street shared-use paths provides greater opportunities for connectivity to destinations throughout the community, so recommendations have been developed to improve the network within the City given notable property and right-of-way constraints. The recommendation provided for a shared-use path may require coordination with other agencies such as the County of Los Angeles and Southern California Edison.

Where there is not sufficient space or right-of-way for a Class I bicycle facility, buffered or physically protected Class II bike lanes can provide bicycle riders with a more comfortable level of separation from motor vehicle traffic and parked vehicles. The subsequent section discusses Class II bikeway recommendations.

Table 5-13 identifies the proposed Class I shared-use path for the City of Monterey Park bikeways network.

Table 5-13 Proposed Class I Shared-Use Path

Roadway	From	To	Length (Miles)
Utility Right-of-Way	Isabella Avenue	Floral Drive	0.7
		Total Proposed Class I Shared-Use Path	**0.7**

As shown in **Table 5-13**, a 0.7 mile Class I shared-use path is recommended in this Plan along a utility corridor right-of-way between Hendricks Avenue and Findlay Avenue.

5.3.2 Class II Bike Lanes

Many commuters and recreational bicycle riders may prefer bike lanes due to their more direct routing. This report recommends the city improve locations where existing Class II bike lanes may have limited functionality due to potential "dooring" issues adjacent to parked cars, or locations where gutter pans and drainage grates effectively narrow the width of the bike lane. In some locations where wide Class II bike lanes are currently provided, modification of striping to provide a buffer between on-street parking and/or vehicular traffic is recommended. At other locations with minimal crossings, protected bike lanes may be recommended. The use of buffered or protected bike lanes will be considered on a case-by-case basis through the design of the facility.

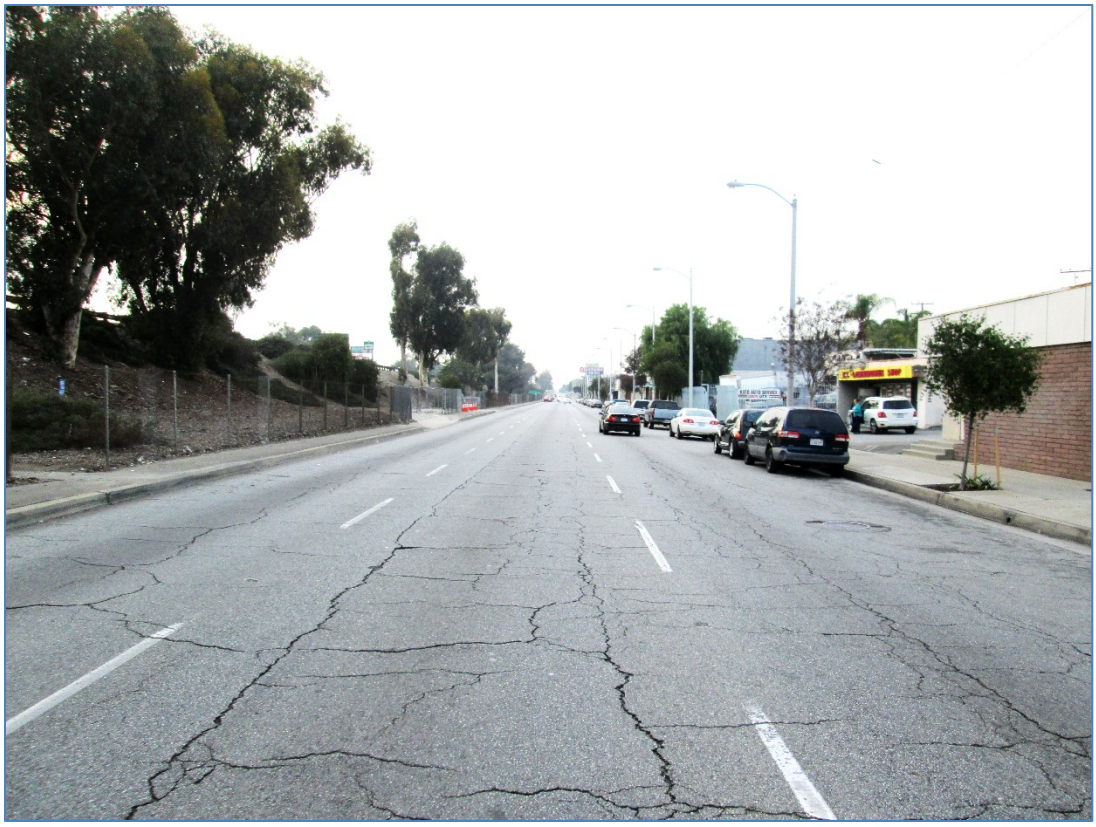
Table 5-14 identifies the proposed Class II bike lanes for the City of Monterey Park bikeways network. **Figure 5-10** illustrates how Pomona Boulevard (between Garfield Avenue and Wilcox Avenue) might look with a paint-buffered Class II bike lane installed in place of an existing motor vehicle travel lane. **Figure 5-11** shows how the same street could look with a physically separated two-way cycle track treatment. **Figure 5-12** illustrates the existing and alternative street cross-sections for this segment of Pomona Boulevard.

Table 5-14 Proposed Class II Bike Lanes

Roadway	From	To	Length (Miles)
1st Street	Vancouver Avenue	Collegian Avenue	0.5
Alhambra Avenue	Newmark Avenue	Graves Avenue	0.3
Atlas Avenue	Saturn Street	Potrero Grande Drive	0.1
Avenida Cesar Chavez	Vancouver Avenue	Atlantic Boulevard	0.7
Casuda Canyon Drive	Corporate Center Drive	Garvey Avenue	0.9
Corporate Center Drive	Ramona Boulevard	Floral Drive	1.2
Floral Drive	Ford Boulevard	Monterey Pass Road	0.4
Floral Drive	Vancouver Avenue	Collegian Avenue	0.8
Fremont Avenue	Garvey Avenue	Monterey Pass Road	0.1
Garfield Avenue	Graves Avenue	Riggin Street	1.3
Garvey Avenue	Casuda Canyon Drive	Atlantic Boulevard	1.2
Gerhart Street	Riggin Street	Pomona Boulevard	0.2
Monterey Pass Road	Garvey Avenue	Floral Drive	1.5
Monterey Pass Road	Garvey Avenue	Fremont Avenue	0.4
New Avenue	I-10 Freeway	Garvey Avenue	0.6
New Avenue	Garvey Avenue	Graves Avenue	0.5
Orange Avenue	Graves Avenue	Saturn Street	1.2
Pomona Boulevard	Sadler Avenue	Westbound SR-60 Off-Ramp	1.5
Potrero Grande Drive	Westbound SR-60 Off-Ramp	Arroyo Drive	1.5
Ramona Avenue	Garvey Avenue	Garfield Avenue	0.5
Ramona Boulevard	City Limit (West of Ameron Way)	City Limit (North of Luminarias Way)	0.6
Riggin Street	Atlantic Boulevard	Ferdinand Avenue	0.7
Saturn Street	Atlas Avenue	Potrero Grande Drive	0.6
		Total Proposed Class II Bike Lanes	**17.3**

As shown in **Table 5-14**, a total of 17.3 miles of Class II bike lanes are recommended in this Plan.

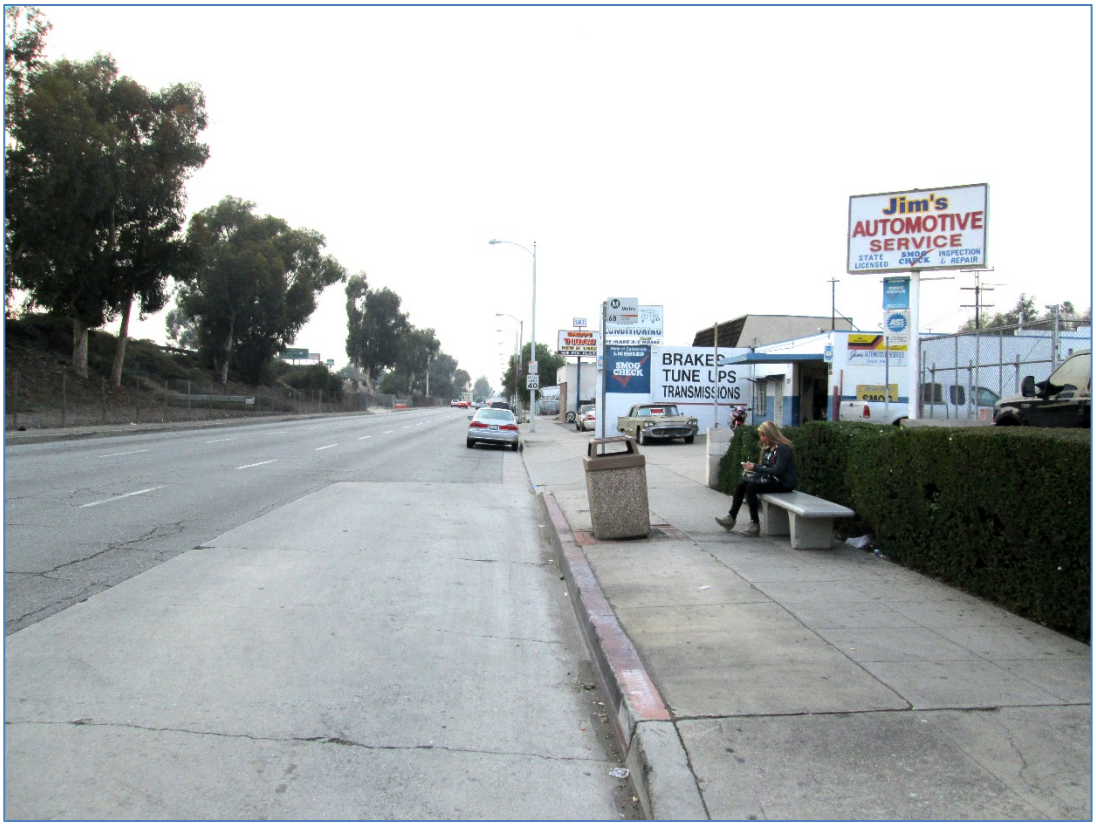
Figure 5-10: Before/After Depiction of Potential Buffered Bike Lane on Pomona Boulevard



(Existing)

(Proposed)

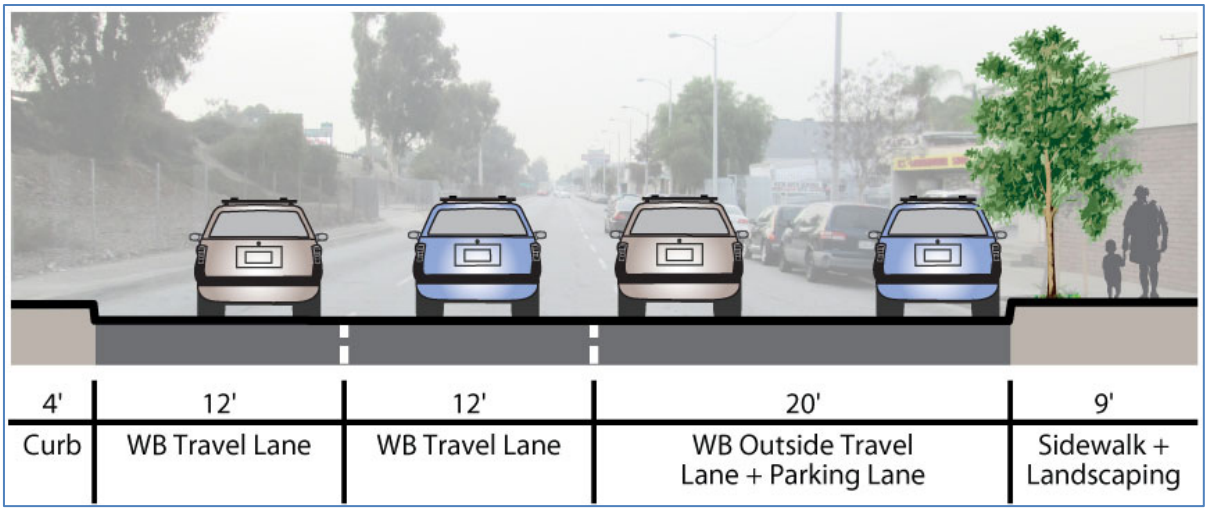
Figure 5-11: Before/After Depiction of Potential Two-Way Cycle Track on Pomona Boulevard



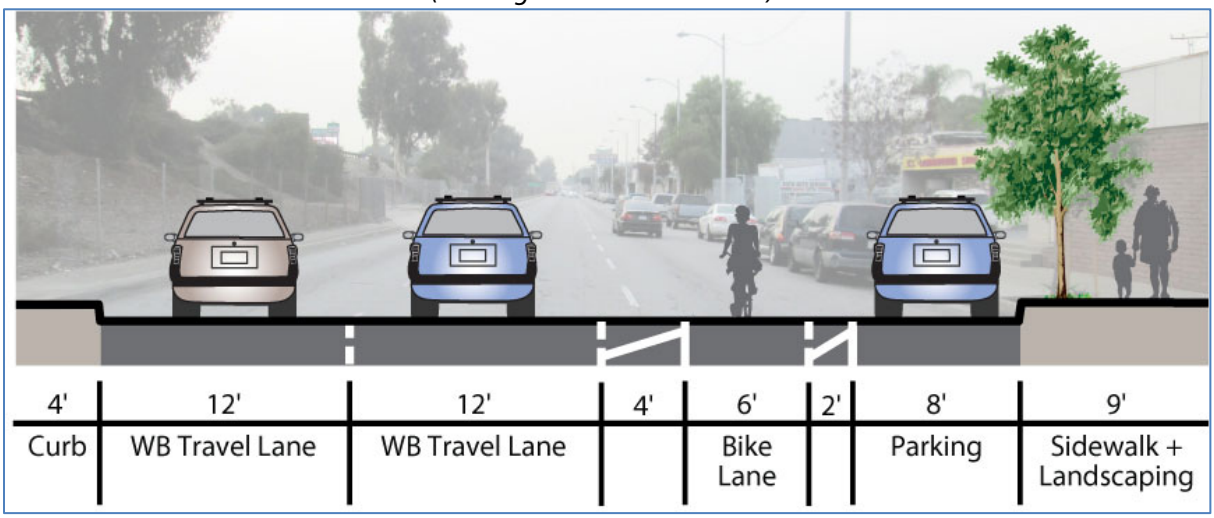
(Existing)

(Proposed)

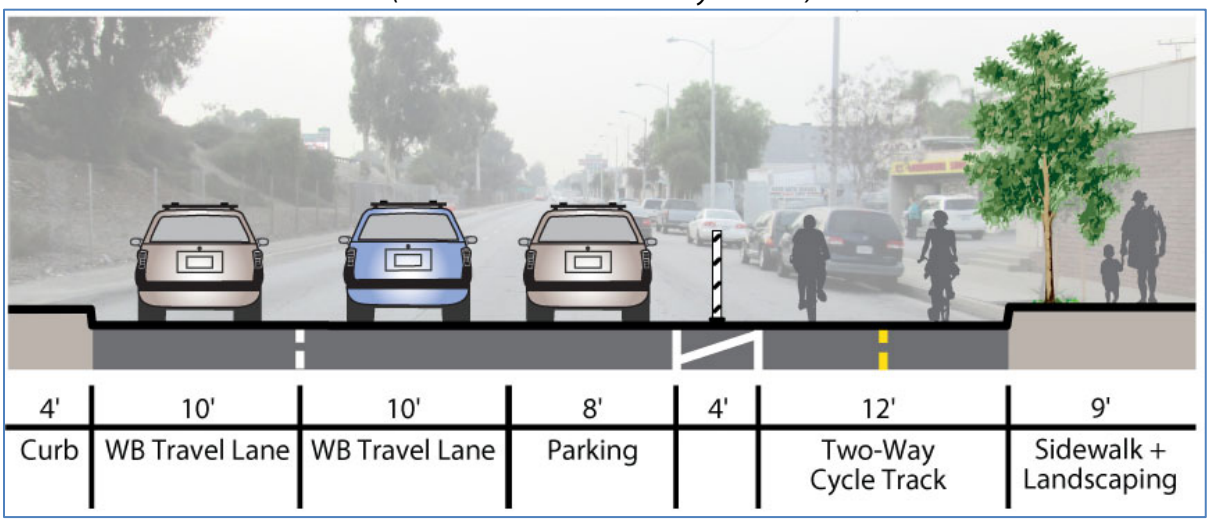
Figure 5-12: Existing & Alternative Street Cross-Sections for Pomona Boulevard



(Existing Street Cross-Section)



(Alternative 1: Buffered Bicycle Lane)



(Alternative 2: Two-Way Cycle Track)

5.3.3 Class III Bike Routes

Any street that is legal for bicycles is inherently a shared roadway in which bicycle riders and drivers share a lane of traffic, and a car cannot necessarily pass a bicycle rider in the same lane. To improve motorists' awareness of the presence of bicycle riders and to indicate good routes for bicycle riders, cities often post signs indicating that the road is a "Class III Bike Route," as well as painting shared roadway markings in the travel lane. Class III bike routes are often identified at locations where the available street width is not wide enough to accommodate an on-street bike lane (Class II facility).

Potential enhancements requested during community engagement activities include the use of shared lane markings (sharrows) and use of the "Bikes May Use Full Lane" signage (MUTCD R4-11).

Another treatment for consideration is designation of bicycle boulevards for improved connectivity and wayfinding by bicycle riders that seek lower stress routes to travel. Bicycle boulevards are generally defined as low-volume, low-speed streets that have been optimized for bicycle travel using treatments such as traffic calming and traffic reduction, signage and pavement markings, and intersection crossing treatments. Class III bike routes will be considered for upgrading to bicycle boulevards on a case-by-case basis by City staff.

Table 5-15 identifies the proposed Class III bike routes for the City of Monterey Park bikeways network.

Table 5-15 Proposed Class III Bike Routes

Roadway	From	To	Length (Miles)
Abajo Drive	Verde Vista Drive	Vagabond Drive	0.1
Ackley Street	Fulton Avenue	Arroyo Drive	0.9
Adobe Place	Atlantic Boulevard	Ynez Avenue	0.1
Arroyo Drive	Ackley Street	Potrero Grande Drive	0.3
Atlantic Boulevard	Hellman Avenue	Eastbound SR-60 Off-Ramp	2.8
Bleakwood Avenue	Floral Drive	Dorner Street	0.3
Brightwood Street	Monterey Pass Road	Grandridge Avenue	1.6
Cadiz Street	Crest Vista Drive	Ynez Avenue	0.5
Collegian Avenue	Floral Drive	1st Street	0.3
Coral View Street	South Garfield Avenue	Fulton Avenue	0.6
Crest Vista Drive	Cadiz Street	Floral Drive	1.1
Dorner Drive	Woods Avenue	Bleakwood Avenue	0.1
East Markland Drive	Fulton Avenue	Potrero Grande Drive	0.2
El Mercado Avenue	Atlantic Boulevard	Cadiz Street	0.5

Roadway	From	To	Length (Miles)
El Portal Place	De La Fuente Street	El Mercado Avenue	0.3
El Repetto Drive	Atlantic Boulevard	Wilcox Avenue	0.9
Elmgate Street	Almora Street	Wilcox Avenue	0.6
Emerson Avenue	Atlantic Boulevard	City Limit (East of New Avenue)	1.6
Findlay Avenue	Almora Street	Pomona Boulevard	0.5
Floral Drive	I-710 Freeway	Ford Boulevard	0.1
Floral Drive	Monterey Pass Road	Vancouver Avenue	0.3
Floral Drive	Collegian Avenue	Garfield Avenue	0.9
Fulton Avenue	Wilcox Avenue	Pomona Boulevard	1.3
Garfield Avenue	Riggin Street	Pomona Boulevard	0.2
Garfield Avenue	Hellman Avenue	Graves Avenue	1.1
Garvey Avenue	Atlantic Boulevard	Dequine Avenue	1.6
Gerhart Street	Hammel Street	Riggin Street	0.1
Grandridge Avenue	Garfield Avenue	Floral Drive	1.4
Graves Avenue	South Garfield Avenue	New Avenue	1.0
Harding Avenue	Atlantic Boulevard	Ramona Avenue	0.5
Hellman Avenue	Hathaway Avenue	New Avenue	1.6
Hillside Street	Ridgecrest Street	Floral Drive	0.5
Kempton Avenue	South Lincoln Avenue	Coral View Drive	0.8
McPherrin Avenue	Hellman Avenue	Harding Avenue	0.9
Mooney Drive	Kempton Avenue	Sefton Avenue	0.3
Newmark Avenue	Atlantic Boulevard	New Avenue	1.5
Orange Avenue	Hellman Avenue	Graves Avenue	1.0
Ridgecrest Street	Crest Vista Drive	Floral Drive	1.6
Riggin Street	Ferdinand Avenue	Fulton Avenue	0.8
South Lincoln Avenue	Graves Avenue	Kempton Avenue	0.1
Sefton Avenue	Graves Avenue	Mooney Drive	0.1
Vagabond Drive	Abajo Drive	Ridgecrest Street	0.4
Verde Vista Drive	Casuda Canyon Drive	Abajo Drive	0.4
Wilcox Avenue	Kempton Avenue	Pomona Boulevard	1.4
Woods Avenue	Dorner Drive	City Limit (South of SR-60)	0.2
Ynez Avenue/Park Avenue	McPherrin Avenue	Atlantic Boulevard	1.3

Roadway	From	To	Length (Miles)
		Total Proposed Class III Bike Routes	**34.7**

As shown in **Table 5-15**, a total of 34.7 miles of Class III bike routes are recommended.

5.3.4 End-of-Trip Bicycle Facilities

Support facilities and connections to other modes of transportation are essential components of a bicycle system because they enhance safety and convenience for bicycle riders at the end of every trip. With nearly all utilitarian and many recreational bike trips, bicycle riders need secure and well-located bicycle parking. A comprehensive bicycle parking strategy is one of the most important things that a jurisdiction can apply to immediately enhance the bicycling environment. Moreover, a bicycle parking strategy with connections to public transit will further the geographical range of residents traveling without using an automobile.

Bicycle parking can be categorized into short-term and long-term parking. Bicycle racks are the preferred device for short-term bike parking. These racks serve people who leave their bicycles for relatively short periods of time, typically for shopping or errands, eating or recreation. Bicycle racks provide a high level of convenience and moderate level of security. Long-term bike parking includes bike lockers and bike rooms and serves people who intend to leave their bicycles for longer periods of time and are typically found in multifamily residential buildings and commercial buildings. These facilities provide a high level of security but are less convenient than bicycle racks.

Recommended bicycle parking standards are presented in **Appendix G.** In addition, **Appendix H** presents a comprehensive bicycle parking study for Monterey Park and the other four regional bike plan partner cities. [5]

Short-Term Bicycle Parking

This Plan recommends the City adopt the short-term bicycle rack types shown in **Figure 5-13** as the standard short-term parking.

Figure 5-13: Types of Bicycle Racks

U-Rack | *Post and Loop* | *Horseshoe* | *Lightning Bolt™ or Varsity Rack™*

[5] The Bicycle Parking Study for the partner cities was conducted by Jonathan Rodriguez, a graduate student in the Department of Community and Global Health at Claremont Graduate University.

This Plan also recommends implementation of adequate short-term bicycle parking in the form of bicycle racks at major trip attractors, including commercial and civic activity centers and transit hubs. The City should prioritize the installation of bicycle parking throughout the City, with particular attention directed at the following locations:

- Monterey Park Library
- Monterey Park Civic Center
- Langley Senior Center
- Monterey Park Historical Museum
- East Los Angeles Community College (Campus & Transit Center)
- Garvey Avenue Commercial District
- South Garfield Commercial District
- City Parks
- Monterey Park Hospital
- Monterey Park Post Office
- Schools
- Atlas Employment Center
- Future Gold Line Station

Although the number of racks is determined by the space available, it is recommended that short-term bicycle parking capacity to accommodate eight bicycles is provided at each of the civic uses identified above, and short-term bicycle parking for commercial and office areas be determined based on intensity of development. The adequacy of short-term bicycle parking requires regular review to determine if additional capacity is needed.

Long-Term Bicycle Parking

Locations where visitors are expected to park their bicycles for longer than 2 hours should provide more secure, long-term bicycle parking options, such as bicycle lockers.

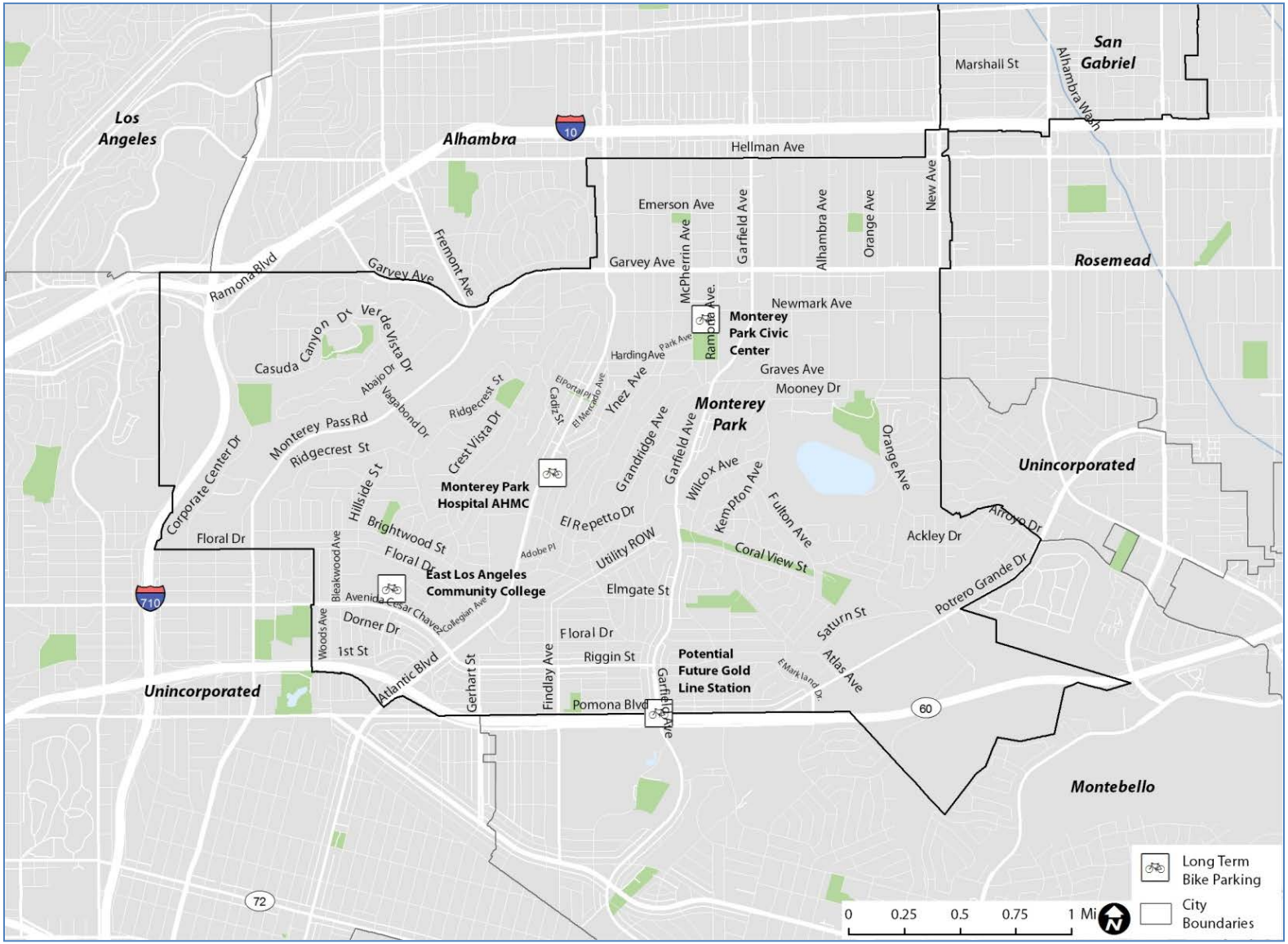
City staff may coordinate with public and private sector development opportunities to determine which projects and facilities should incorporate secure bicycle parking areas into their design. Secure bicycle parking areas that provide services, such as bicycle rentals and repair may be considered. The following are locations where long-term bicycle parking is recommended, and these are shown in **Figure 5-14**.

- Monterey Park Civic Center
- East Los Angeles Community College (Campus & Transit Center)
- Monterey Park Hospital
- Atlas Employment Center
- Future Gold Line Station

Municipal Code Bicycle Parking

This Plan recommends the City amend its Municipal Code to include requirements on types of short-term and long-term bicycle parking facility designs. Bicycle rack designs should include racks that provide two points of contact with the bicycle so that it can be locked from both the front wheel/frame and the rear wheel. This will provide a higher degree of security and support for the bicycle. This will more accurately address the bicycle demand at a given development. Additionally, space to maneuver the bicycle away from fixed objects and buildings is required to accommodate short-term bicycle parking needs.

Figure 5-14: Monterey Park Recommended Long-Term Bicycle Parking Facilities



Key design aspects related to long-term bicycle parking includes:

- Covered, lockable enclosures with permanently anchored racks for bicycles.
- Lockable bicycle rooms with permanently anchored racks; or
- Lockable, permanently anchored bicycle lockers.

When people commute by bicycle, they often sweat or become dirty from weather or road conditions. Providing changing and storage facilities encourage commuters to travel by bicycle because they have a place to change and prepare before work or school. This Plan recommends the City Municipal Code be revised as needed to require all new mid-size and large employers, offices, and businesses to supply changing and storage facilities, such as by providing showers and locker space within the buildings or arranging agreements with nearby recreation centers to allow commuters to use their facilities.

As noted in the Recommended Programs section, the installation of bicycle maintenance hubs or stations at key high-traffic locations can accommodate bicycle riders for a variety of needs (such as minor repairs, inflating tires, filling water bottles, providing wayfinding information, and promotion of local businesses).

5.3.5 Recommended Programs

Improvements to and continued support of education, enforcement and evaluation programs have been proven to increase the number of bicycle trips and bicycling safety. These programs can ensure that more community members know about new and improved facilities, learn the skills they need to integrate bicycling into their activities, and receive positive reinforcement about integrating bicycling into their daily lives. In essence, the new and enhanced programs market the idea of bicycling to the community and encourage a shift to bicycling as a transportation option. This Plan supports the continuation and enhancement of the City's education, encouragement, and enforcement programs that are currently in place. The following additional programs are each designed to promote bicycling in the City, increase safety for those traveling by bicycle, and raise awareness of the benefits of bicycling. **Table 5-16** provides a summary of the recommended programs.

Further details on recommended programs are included in **Chapter 8**.

Table 5-16 Recommended Programs

Category	Program	Responsible Party	Funding Source	Schedule
Education	Bicycle Safety and Share the Road Campaigns	Metro, SGVCOG, City	City; Grants	Near-Term
	Bicycle Resource Website	City	City	Near-Term
	Adult Bicycling Skills Classes	Bicycle Clubs, City, Metro	City; Grants	Near-Term
	Youth Bicycle Safety Education Classes	Bicycle Clubs, City	City; Grants	Near-Term

Category	Program	Responsible Party	Funding Source	Schedule
	Youth Bicycle Safety Clinics & Bicycle Campus	City, Safe Routes to School National Partnership	City; Grants	Middle-Term
	Senior Bicycle Education Classes	Bicycle Clubs, City	City; Grants	Middle-Term
Encouragement	Bike Valet at City Events	Special Event Promoter, City	City	Near-Term
	Youth and Family-Oriented Bicycle Rides	Advocacy Groups, City	Private	Near-Term
	"Be Seen" Bike Light Campaign	City	City; Grants	Near-Term
	Bike Festivals & Family Bike Fest/Family Biking Day	City, Advocacy Groups	City; Sponsorships	Near-Term
	Launch Party for New Bicycle Facilities	City	City	Near-Term
	Bicycle Friendly Community Designation	City	N/A	Near-Term
	Tourism Integration	City	City	Near-Term
	Commuter Incentive Programs	Metro, SGVCOG, City	City; Grants	Middle-Term
	Safe Routes to School Program	City, Advocacy Groups	Grants	Near-Term
	Bicycle Friendly Business Districts	Business Improvement District/Association, City	City; Contributions from Business Associations	Middle-Term
	Bicycle Hubs	City	City; Grants	Middle-Term
	Media Outlets	City	In-Kind Contributions; Grants	Middle-Term
	Individualized Marketing Campaigns	Metro, SGVCOG, City	Grants	Middle-Term
	Mobility Coordinator	City	City; Grants	Long-Term
	Ride with the City	City	City	Near-Term
	Open Streets/Ciclovía Events	City	City; Grants	Long-Term
	Bicycle Sharing	Metro, SGVCOG, City	Grants; Sponsorships	Long-Term
Enforcement	Speed Radar Trailer/Feedback Signs	City	Grants	Near-Term
	Bicycle Patrol Units	City	City	Near-Term

Category	Program	Responsible Party	Funding Source	Schedule
	Undercover Officer Enforcement	City	City	Near-Term
	Bicycle Theft Abatement Program	City	Grants	Middle-Term
Evaluation	Bicycle Counts and Survey Program	City	City; Grants	Near-Term
	Mapping Bikeway Investments	City	City	Near-Term
	Bicycle Report Card	City	City	Middle-Term
	Complete Streets Policy	City	City; Grants	Middle-Term
	Bicycle Parking Policy and Enforcement	City	City; Grants	Middle-Term
	Bike Counters/Bicycle Barometers	City	Grants	Middle-Term

Note: Near-term = 0-3 years, Middle-Term = 3-6 years, Long-Term = 6+ years.

5.4 Project Costs

5.4.1 Implementation Costs

The following planning-level costs are typically utilized to estimate capital expenditures required for implementation of bikeways by classification:

- Class I Shared-Use Path: $1,000,000 per mile;
- Class II Bike Lane: $50,000 per mile; and
- Class III Bike Route: $20,000 per mile.

The planning level cost estimates do not include potential right-of-way acquisition, extensive grading, landscaping, or potential utility impacts. Cost estimate refinements still may occur based on further engineering review and are intended to provide an estimate for budgeting purposes.
Table 5-17 summarizes the total cost of implementation for the bikeways recommendations.

Table 5-17 Recommended Bikeway Network Cost Estimate

Facility Type	Proposed Bikeways (Miles)	Unit Cost ($/Mile)	Total Cost ($)

Class I Shared-Use Path	0.7	$1,000,000	$700,000
Class II Bike Lane	17.3	$50,000	$865,000
Class III Bike Route	34.7	$20,000	$694,000
Total	**52.7**	--	**$2,259,000**

As shown in **Table 5-17** the total cost estimate for recommended bicycle infrastructure projects is $2,259,000, of which almost $865,000 is attributed to Class II bike lanes.

5.4.2 Maintenance Costs

Bicycle facilities require regular maintenance and repair. On-street bicycle facilities are maintained as part of the normal roadway maintenance program and extra emphasis should be placed on keeping bike lanes and roadway shoulders clear of debris and keeping vegetation overgrowth from blocking visibility. The cost of maintaining Class I facilities may be shared among various agencies or departments. The typical maintenance costs for the existing and proposed bikeway network are shown in **Table 5-18**, and the cost for maintaining the built out network is provided (accounting for existing bikeways within the City).

Table 5-18: Annual Bikeways Network Maintenance Cost Estimates

Facility Type	Total Length (Miles)	Unit Cost ($/Mile)	Annual Cost ($)	Typical Maintenance Items
Class I Shared-Use Path	0.7	$15,000	$10,500	Lighting and removal of debris and vegetation overgrowth
Class II Bike Lane	18.0	$5,000	$90,000	Repainting lane stripes and stencils, sign replacement as needed
Class III Bike Route	34.7	$5,000	$173,500	Sign replacement as needed
Total	**53.4**	--	**$274,000**	

As shown in **Table 5-18**, the annual cost for maintaining bikeways network assuming implementation of all paths, bike lanes, and bike routes is approximately $274,000. It should be noted this cost will be realized over time as implementation of the network is completed, and actual costs will be lower until the entire network is constructed.

5.5 Project Implementation

This chapter provides a strategy for implementing the capital project recommendations in this Plan. This implementation strategy and sequence is guided by a criteria-based ranking consistent with the goals of this Plan as well as the goals of other City, region, and State plans and policies.

A lengthy list of recommendations has been provided in this Plan, and ranking allows staff to prioritize the projects to advance to implementation. A variety of variables will influence the implementation including the availability of funding, engineering analysis, and support from community stakeholders and representatives.

Many signing and striping projects can be completed by the City Department of Public Works and are exempt from CEQA requirements. Such projects can be implemented using City or grant funds with approval by the City Management and/or City Council, if required due to the visibility or importance of the project. More complex projects with greater associated impacts typically include the following steps to advance to implementation:

1. Preparation of a Feasibility Study involving a conceptual design (with consideration of possible alternatives and environmental issues) and cost estimate for individual projects as needed.
2. Secure funding and any applicable environmental approvals.
3. Completion of final plans, specifications and estimates, advertising for bids, receipt of bids and award of contract(s).
4. Approval of the project by the City Council.
5. Construction of Project.

5.5.1 Prioritization Criteria

The intent of ranking projects is to create a prioritized list of bicycle projects for implementation. As projects are implemented, lower ranked projects move up the list. The project list and individual projects outlined in this Plan are flexible concepts that serve as a guideline. The ranked project list, and perhaps the overall system and segments themselves, may change over time as a result of changing bicycling patterns, land use patterns, implementation constraints and opportunities and the development of other transportation system facilities.

Projects may be implemented out of scoring order as opportunities arise. Opportunities may include grant availability, new development projects, capital improvement projects, or roadway repaving. The City can review the project list and project ranking at regular intervals to ensure it reflects the most current priorities, needs, and opportunities for implementing the bicycle network in a logical and efficient manner.

Each ranking criterion contains information about a facility and its ability to address an existing or future need in the San Gabriel Valley. The resulting project ranking determines each project's relative importance in funding and scheduled construction.

The following criteria are used to evaluate each proposed bicycle facility, its ability to address demand and deficiencies in the existing bicycle network and its ease of implementation. The criteria are organized into "utility" and "implementation" prioritization factors.

Utility Prioritization Factors

Utility criteria include conditions of bicycle facilities that enhance the bicycle network. Each criterion is discussed below.

Bicycle Collisions

Bicycle facilities have the ability to increase safety by reducing potential conflicts between bicycle riders and motorists, which often result in collisions. Proposed facilities that are located on roadways with past bicycle-automobile collisions are important to the partner cities.

Public Input

The Project Team solicited public input through a series of booths at local events, jurisdiction-wide workshops, community street audits, a web-based feedback portal, monthly polls and an opinion survey. Facilities that community members identified as desirable for future bicycle facilities are of priority to the network because they address the needs of the public.

Gap Closure

Gaps in the bicycle network come in a variety of forms, ranging from a "missing link" on a roadway to larger geographic areas without bicycle facilities. Gaps in the bikeway network discourage bicycle use because they limit access to key destinations and land uses. Facilities that fill a gap in the existing and proposed bicycle network are of high priority.

Connectivity to Existing Facilities

Proposed bikeways that connect to existing bicycle facilities in the partner cities and to adjacent jurisdictions' bikeways increase the convenience of bicycle travel. Proposed facilities that fit this criterion are of high importance to the cities.

Connectivity to Regional Facilities

Linkage to existing and future regional bikeways in the San Gabriel Valley will enhance future connectivity between the partner cities and surrounding communities. For the purposes of this evaluation, linkage to the following facility types would be identified as regional connections:

- Existing/Planned off-street trails along waterways, utility corridors, etc.
- Existing/Planned on-street bikeways that continuously span across two or more jurisdictions

Connectivity to Activity Centers

Improved linkage to key employment, recreational, commercial and civic destinations within the community can increase bicycling activity and reduce in-town vehicular travel for short-distance trips. These activity centers generate many trips which could be made by bicycle if the proper facilities were available. The following activity centers will be reviewed for improved access related to the recommended bikeway improvements:

- Major Employment & Commercial Areas
- Civic Centers
- Public Libraries
- Community Centers
- K-12 Public Schools
- East Los Angeles College
- Major Cultural Destinations, such as museums and interpretive centers
- Hospitals & Medical Centers
- Parks & Recreation Centers

- Commercial/retail business centers (shopping malls, downtown districts, retail complexes, etc.)

Connectivity to Multi-Modal Transportation Centers

Bicycle facilities that link to modes of public transportation increase the geographical distance bicycle riders are able to travel. Proposed bicycle facilities that connect to transit stops and centers improve bicycle riders' mobility and are therefore key pieces of the bicycle network. Priority ranking will be given to bikeways that connect to the following major transportation centers:

- Baldwin Park Metrolink Station
- El Monte Bus Station
- El Monte Metrolink Station
- East Los Angeles College Transit Center
- Proposed future Metro Gold Line stations

Implementation Prioritization Factors

Implementation criteria address the ease of implementing each proposed project. Each criterion is discussed below.

Permitting

Projects that can be implemented solely by the participating cities have higher readiness factors, whereas those that require permitting and approvals from other agencies governing roadways and land within the individual cities will score lower. Examples include collaboration with adjacent jurisdictions, approval by Caltrans, or permitting by the Los Angeles County Department of Public Works for projects utilizing local washes, creeks, storm channels, etc.).

Project Cost

Projects that are less expensive do not require as much funding as other projects and are therefore easier to implement. Projects that cost less are of higher priority to the partner cities.

Parking Displacement

Installing safe, easily accessible and attractive bicycle facilities occasionally requires the displacement of on-street vehicular parking. Therefore, projects that do not require parking displacement are of increased importance.

5.5.2 Project Ranking

Table 5-19 shows how the criteria are weighted for project prioritization and ranking.

Table 5-19 Ranking Criteria and Weighting

Criteria	Score	Multiplier	Total	Description
Utility Prioritization Factors				
Bicycle-Related Collisions	2	3	6	Provides a bicycle facility on a roadway that experienced 3 or more bicycle-related collisions between 2007-2011
	1	3	3	Provides a bicycle facility on a roadway that experienced 1-2 bicycle-related collisions between 2007-2011
	0	3	0	Provides a bicycle facility on a roadway that did not experience any bicycle-related collisions between 2007-2011
Public Input	2	3	6	Roadway was identified by the public as desirable for a future facility multiple times
	1	3	3	Roadway was identified by the public as desirable for a future facility once
	0	3	0	Roadway was not identified by the public as desirable for a future facility
Gap Closure	2	3	6	Fills a network gap between two or more existing facilities
	1	3	3	Fills a network gap between an existing facility and a proposed facility
	0	3	0	Does not directly or indirectly fill a network gap
Connectivity: Existing	2	2	4	Provides direct access to an existing bicycle facility
	1	2	2	Provides secondary connectivity to an existing bicycle facility
	0	2	0	Does not directly or indirectly access an existing bicycle facility
Connectivity: Regional	2	1	2	Provides direct access to a regional existing/proposed bicycle facility
	1	1	1	Provides secondary connectivity to a regional existing/proposed bicycle facility
	0	1	0	Does not directly or indirectly access a regional existing/proposed bicycle facility
Connectivity: Activity Centers	2	1	2	Provides access to more than 3 activity centers
	1	1	1	Provides access to 1-3 activity centers
	0	1	0	Does not provide access to an activity center
Connectivity:	2	1	2	Provides direct access to a major Transportation Center

Multi-Modal	1	1	1	Provides secondary connectivity to a major Transportation Center
	0	1	0	Does not directly or indirectly access to a major Transportation Center
Implementation Prioritization Factors				
Permitting	2	1	2	Does not require permitting from agency (other than the respective city)
	1	1	1	Requires permitting or approval from 1 agency
	0	1	0	Requires permitting or approval from 2 or more agencies
Project Cost	2	1	2	Will cost less than $40,000 to implement
	1	1	1	Will cost between $40,001 and $200,000 to implement
	0	1	0	Will cost over $200,000 to implement
Parking Displacement	2	1	2	Does not require any parking removal
	1	1	1	Requires removal of some on-street parking stalls
	0	1	0	Requires removal of all on-street parking stalls

Each recommended project was evaluated based on the ranking criteria and scored to develop the prioritization tables. As shown in **Table 5-19,** the maximum potential score for a recommended project is 34 points.

Within the City of Monterey Park, a total of 71 bicycle facility projects were identified and grouped into the following three tiers by each projects prioritization score:

- **Tier 1** (34-17 points): Tier 1 projects have the highest potential for addressing the City's goals for bicycle transportation and are intended for near-term project implementation. The highest score received by a project was 24 points. A total of 18 projects are listed in Tier 1 and are shown in **Table 5-20**.
- **Tier 2** (16-13 points): Tier 2 projects are intended for mid-term implementation. A total of 18 projects are listed in Tier 2 and are shown in **Table 5-21**.
- **Tier 3** (12-0 points): Tier 3 projects are not currently ready for implementation but are included as long-term potential bicycle-specific projects. A total of 35 projects are listed in Tier 3 and are shown in **Table 5-22**.

All of the projects are recommended for implementation over the next twenty (20) years. However, due to the unpredictability of funding sources, economic conditions, and community support, some projects, especially those that require right-of-way purchase or coordination with multiple jurisdictions, may not be completed within the next twenty years.

Table 5-20 Tier 1 Projects (Score of 34-17)

Facility Type	Location	Start	End	Bicycle-Related Collisions	Public Input	Gap Closure	Connectivity: Existing	Connectivity: Regional	Connectivity: Activity Centers	Connectivity: Multi-Modal	Permitting	Project Cost	Parking Displacement	Total Score (34 max)
III	Garvey Avenue	Atlantic Boulevard	Dequine Avenue	6	0	6	4	2	1	0	2	2	1	**24**
III	Garfield Avenue	Riggin Street	Pomona Boulevard	3	6	3	0	2	1	2	2	2	2	**23**
II	Alhambra Avenue	Newmark Avenue	Graves Avenue	3	3	3	4	2	1	0	2	2	2	**22**
III	Emerson Avenue	Atlantic Boulevard	City Limit (East of New Avenue)	6	0	3	4	2	1	0	2	2	2	**22**
III	Garfield Avenue	Hellman Avenue	Graves Avenue	3	6	3	0	2	1	1	2	2	2	**22**
III	Garfield Avenue	Hellman Avenue	Graves Avenue	3	6	3	0	2	1	1	2	2	2	**22**
III	Newmark Avenue	Atlantic Boulevard	New Avenue	6	0	3	4	2	1	0	2	2	2	**22**
II	Floral Drive	Ford Boulevard	Monterey Pass Road	6	6	0	0	2	0	0	2	2	2	**20**
II	Garvey Avenue	Casuda Canyon Drive	Atlantic Boulevard	3	6	6	0	2	0	0	2	1	0	**20**
II	Garfield Avenue	Graves Avenue	Riggin Street	3	6	3	0	2	1	1	2	1	0	**19**

Facility Type	Location	Start	End	Bicycle-Related Collisions	Public Input	Gap Closure	Connectivity: Existing	Connectivity: Regional	Connectivity: Activity Centers	Connectivity: Multi-Modal	Permitting	Project Cost	Parking Displacement	Total Score (34 max)
III	Hellman Avenue	Hathaway Avenue	New Avenue	3	0	3	4	2	1	0	2	2	2	**19**
II	Floral Drive	Vancouver Avenue	Collegian Avenue	3	6	0	0	2	1	0	2	2	2	**18**
II	Ramona Avenue	Garvey Avenue	Garfield Avenue	3	6	0	0	2	1	0	2	2	2	**18**
III	Floral Drive	I-710 Freeway	Ford Boulevard	3	6	0	0	2	0	0	2	2	2	**17**
III	Floral Drive	Monterey Pass Road	Vancouver Avenue	3	6	0	0	2	0	0	2	2	2	**17**
III	Floral Drive	Collegian Avenue	Garfield Avenue	3	6	0	0	2	0	0	2	2	2	**17**
II	Monterey Pass Road	Garvey Avenue	Floral Drive	6	6	0	0	2	0	0	2	1	0	**17**
III	Riggin Street	Ferdinand Avenue	Fulton Avenue	3	6	0	0	2	0	0	2	2	2	**17**

Table 5-21 Tier 2 Projects (Score of 16-13)

Facility Type	Location	Start	End	Bicycle-Related Collisions	Public Input	Gap Closure	Connectivity: Existing	Connectivity: Regional	Connectivity: Activity Centers	Connectivity: Multi-Modal	Permitting	Project Cost	Parking Displacement	Total Score (34 max)
II	Avenida Cesar Chavez	Vancouver Avenue	Atlantic Boulevard	3	6	0	0	2	1	0	2	2	0	**16**
III	Graves Avenue	South Garfield Avenue	New Avenue	3	0	3	2	2	0	0	2	2	2	**16**
II	Pomona Boulevard	Sadler Avenue	Westbound SR-60 Off-Ramp	6	3	0	0	2	1	2	1	1	0	**16**
II	Riggin Street	Atlantic Boulevard	Ferdinand Avenue	3	6	0	0	2	1	0	2	2	0	**16**
I	Utility Right-of-Way	Isabella Avenue	Floral Drive	6	6	0	0	1	0	0	1	0	2	**16**
II	Gerhart Street	Riggin Street	Pomona Boulevard	6	0	0	0	2	0	1	2	2	2	**15**
III	Grandridge Avenue	Garfield Avenue	Floral Drive	6	0	0	0	2	1	0	2	2	2	**15**
III	McPherrin Avenue	Hellman Avenue	Harding Avenue	6	0	0	0	2	1	0	2	2	2	**15**
II	New Avenue	I-10 Freeway	Garvey Avenue	6	3	0	0	2	1	0	1	2	0	**15**
III	Orange Avenue	Hellman Avenue	Graves Avenue	3	0	3	0	2	1	0	2	2	2	**15**
II	1st Street	Vancouver Avenue	Collegian Avenue	3	3	0	0	1	1	0	2	2	2	**14**

Facility Type	Location	Start	End	Bicycle-Related Collisions	Public Input	Gap Closure	Connectivity: Existing	Connectivity: Regional	Connectivity: Activity Centers	Connectivity: Multi-Modal	Permitting	Project Cost	Parking Displacement	Total Score (34 max)
III	Atlantic Boulevard	Hellman Avenue	Eastbound SR-60 Off-Ramp	6	0	0	0	2	1	1	1	1	2	**14**
II	New Avenue	Garvey Avenue	Graves Avenue	3	3	0	0	2	0	0	2	2	2	**14**
II	Orange Avenue	Graves Avenue	Saturn Street	0	3	3	0	2	1	0	2	1	2	**14**
II	Potrero Grande Drive	Westbound SR-60 Off-Ramp	Arroyo Drive	0	6	0	0	2	0	1	2	1	2	**14**
III	Bleakwood Avenue	Floral Drive	Dorner Street	6	0	0	0	1	0	0	2	2	2	**13**
III	Findlay Avenue	Almora Street	Pomona Boulevard	3	0	0	0	2	1	1	2	2	2	**13**
III	Wilcox Avenue	Kempton Avenue	Pomona Boulevard	3	0	0	0	2	1	1	2	2	2	**13**

Table 5-22 Tier 3 Projects (Score of 12 or less)

Facility Type	Location	Start	End	Bicycle-Related Collisions	Public Input	Gap Closure	Connectivity: Existing	Connectivity: Regional	Connectivity: Activity Centers	Connectivity: Multi-Modal	Permitting	Project Cost	Parking Displacement	Total Score (34 max)
II	Fremont Avenue	Garvey Avenue	Monterey Pass Road	0	6	0	0	2	0	0	2	2	0	**12**
II	Monterey Pass Road	Garvey Avenue	Fremont Avenue	0	6	0	0	2	0	0	2	2	0	**12**
II	Ramona Boulevard	City Limit (West of Ameron Way)	City Limit (North of Luminarias Way)	0	6	0	0	2	0	0	2	2	0	**12**
III	Arroyo Drive	Ackley Street	Potrero Grande Drive	3	0	0	0	2	0	0	2	2	2	**11**
II	Casuda Canyon Drive	Corporate Center Drive	Garvey Avenue	0	3	0	0	2	1	0	2	1	2	**11**
III	Fulton Avenue	Wilcox Avenue	Pomona Boulevard	3	0	0	0	2	0	0	2	2	2	**11**
III	Gerhart Street	Hammel Street	Riggin Street	3	0	0	0	1	0	0	2	2	2	**10**
III	Kempton Avenue	South Lincoln Avenue	Coral View Drive	3	0	0	0	1	0	0	2	2	2	**10**
III	Brightwood Street	Monterey Pass Road	Grandridge Avenue	0	0	0	0	2	1	0	2	2	2	**9**

Facility Type	Location	Start	End	Bicycle-Related Collisions	Public Input	Gap Closure	Connectivity: Existing	Connectivity: Regional	Connectivity: Activity Centers	Connectivity: Multi-Modal	Permitting	Project Cost	Parking Displacement	Total Score (34 max)
III	Coral View Street	South Garfield Avenue	Fulton Avenue	0	0	0	0	2	1	0	2	2	2	**9**
III	East Markland Drive	Fulton Avenue	Potrero Grande Drive	0	0	0	0	2	0	1	2	2	2	**9**
III	El Portal Place	De La Fuente Street	El Mercado Avenue	0	0	0	0	2	1	0	2	2	2	**9**
III	Elmgate Street	Almora Street	Wilcox Avenue	0	0	0	0	2	1	0	2	2	2	**9**
III	Harding Avenue	Atlantic Boulevard	Ramona Avenue	0	0	0	0	2	1	0	2	2	2	**9**
II	Saturn Street	Atlas Avenue	Potrero Grande Drive	0	0	0	0	2	1	0	2	2	2	**9**
III	Woods Avenue	Dorner Drive	City Limit (South of SR-60)	3	0	0	0	0	0	0	2	2	2	**9**
III	Adobe Place	Atlantic Boulevard	Ynez Avenue	0	0	0	0	2	0	0	2	2	2	**8**
II	Atlas Avenue	Saturn Street	Potrero Grande Drive	0	0	0	0	2	0	0	2	2	2	**8**
III	Cadiz Street	Crest Vista Drive	Ynez Avenue	0	0	0	0	2	0	0	2	2	2	**8**

Facility Type	Location	Start	End	Bicycle-Related Collisions	Public Input	Gap Closure	Connectivity: Existing	Connectivity: Regional	Connectivity: Activity Centers	Connectivity: Multi-Modal	Permitting	Project Cost	Parking Displacement	Total Score (34 max)
II	Corporate Center Drive	Ramona Boulevard	Floral Drive	0	0	0	0	2	1	0	2	1	2	**8**
III	Crest Vista Drive	Cadiz Street	Floral Drive	0	0	0	0	1	1	0	2	2	2	**8**
III	Dorner Drive	Woods Avenue	Bleakwood Avenue	0	0	0	0	1	1	0	2	2	2	**8**
III	El Mercado Avenue	Atlantic Boulevard	Cadiz Street	0	0	0	0	2	0	0	2	2	2	**8**
III	El Repetto Drive	Atlantic Boulevard	Wilcox Avenue	0	0	0	0	2	0	0	2	2	2	**8**
III	Hillside Street	Ridgecrest Street	Floral Drive	0	0	0	0	1	1	0	2	2	2	**8**
III	Ridgecrest Street	Crest Vista Drive	Floral Drive	0	0	0	0	1	1	0	2	2	2	**8**
III	Vagabond Drive	Abajo Drive	Ridgecrest Street	0	0	0	0	2	0	0	2	2	2	**8**
III	Verde Vista Drive	Casuda Canyon Drive	Abajo Drive	0	0	0	0	1	1	0	2	2	2	**8**
III	Ynez Avenue/Park Avenue	McPherrin Avenue	Atlantic Boulevard	0	0	0	0	1	1	0	2	2	2	**8**
III	Abajo Drive	Verde Vista Drive	Vagabond Drive	0	0	0	0	1	0	0	2	2	2	**7**

Facility Type	Location	Start	End	Bicycle-Related Collisions	Public Input	Gap Closure	Connectivity: Existing	Connectivity: Regional	Connectivity: Activity Centers	Connectivity: Multi-Modal	Permitting	Project Cost	Parking Displacement	Total Score (34 max)
III	Ackley Street	Fulton Avenue	Arroyo Drive	0	0	0	0	1	0	0	2	2	2	**7**
III	Collegian Avenue	Floral Drive	1st Street	0	0	0	0	1	0	0	2	2	2	**7**
III	Mooney Drive	Kempton Avenue	Sefton Avenue	0	0	0	0	0	1	0	2	2	2	**7**
III	South Lincoln Avenue	Graves Avenue	Kempton Avenue	0	0	0	0	1	0	0	2	2	2	**7**
III	Sefton Avenue	Graves Avenue	Mooney Drive	0	0	0	0	0	0	0	2	2	2	**6**

5.5.3 Implementation Strategies

The Bicycle Master Plan provides the long-term vision for the development of a citywide bicycle network that can be used by all residents for all types of trips. The following strategies, action items and measures of effectiveness are provided to guide the City toward the vision identified in the Plan.

Strategy 1: Strategically Pursue Infrastructure Projects

City staff can strategically pursue funding and implementation of infrastructure projects recommended in this Plan. Ideally, City staff will pursue capital improvements funding or grant funding for high-priority bicycle improvements first. If grant requirements or construction in conjunction with another roadway project make construction of a lower priority project possible, then the City might advance that project regardless of priority.

Action Item: On an annual basis the City can publish a public report documenting the status and ongoing actions for all bicycle infrastructure projects. This report may be combined with the prioritization review discussed below. The first update is recommended to occur in Fall 2015.

Strategy 2: Review Capital Improvement Program (CIP) Concurrence

The opportunity to implement projects concurrent with the CIP can reduce the burden of implementing bicycle facility projects, and improve the schedule for use regardless of priority ranking for each project.

Action Item: Annually evaluate the CIP for opportunities to implement recommended bicycle facility projects included within this Plan.

Strategy 3: General Plan Incorporation

Key policies, strategies and recommendations included in this Bicycle Master Plan can be incorporated into the General Plan Circulation Element during the next update. At the least, the Circulation Element update can incorporate the recommended bikeways network, add revisions to the roadway cross-sections showing dimensions for on-street bike lanes, and incorporate policies for public and private realm accommodation of bicycling activities. Additionally, roadways with excess vehicular capacity can be reviewed to modify travel lanes and provided on-street or protected bike lanes. The City can also develop engineering standards for NACTO-type bicycle treatments for ongoing use.

Action Item: Update the General Plan Circulation Element and incorporate key items from the Bicycle Master Plan.

Strategy 4: Review City Representative

Current work on bicycle facility projects at the City has been implemented by planning and engineering staff within multiple City Departments. The City may review the designated bikeways representative to determine if other staff within the City have availability or are suited to help secure funding or programmatic recommendations provided within this Plan.

Action Item: Designate a single point person at the City to focus on implementation of bikeway infrastructure and non-infrastructure projects.

Strategy 5: Regularly Revisit Project Prioritization

Projects have been prioritized based on safety, public input, transportation benefit, connectivity benefit, cost, and feasibility. It is recommended that the prioritized list be reviewed every fiscal year, with new projects added, completed projects removed, and the priorities revised as conditions change.

Action Item: Annual review and update of the bicycle master plan's recommended facilities list and programs schedule. Updates to the list can be shared with the public. The first update is recommended in Fall 2015.

Strategy 6: Update the Bicycle Master Plan

While this Plan is intended to guide bikeways planning in the City for the next 20 years, updates may be needed to address changes in priority and evaluation efforts. State funding has typically required updates to bicycle master plans every five years to establish funding opportunity for active transportation projects. Often, cities provide a compliance update within five years and a comprehensive update every ten years.

Action Item: Provide compliance update to the Bicycle Master Plan in five years, and a more comprehensive full update in ten years. Other elements of the Plan shall be reviewed and updated as needed.

Strategy 7: Collaborate with Caltrans

Caltrans manages and operates various freeways adjacent the city with interchange ramps and bridges that often are higher-stress locations for bicycle riders. This Plan includes bicycle facility recommendations that require regular coordination and collaboration with Caltrans.

Action Item: Collaborate with Caltrans to implement bicycle facility improvements on Caltrans-managed facilities, including innovative and conventional treatments using examples of similar facilities within the City, County, and State as precedents.

Strategy 8: Establish Measures of Effectiveness

Measures of effectiveness (MOEs, also known as targets or indicators) are used as a quantitative way to measure the City's progress toward implementing the Bicycle Master Plan. Well-crafted MOEs track progress toward meeting an agreed-upon goal within an established timeframe. **Table 5-23** describes several MOEs recommended for use by the City to track key achievements.

Table 5-23 Recommended Measures of Effectiveness

Measure	Benchmark	Target
Bicycle journey to work mode share	0.4% bicycle mode split per Census	Increase bicycle mode split to 0.8% by 2035.
Bicycle Facility Improvements Implementation	Approximately 1 mile of bikeways	Increase bikeways network by implementing bicycle facility recommendations.
Bicycle counts	Bike counts included in this Plan	Annually collect bike counts at baseline locations to document ridership volumes.
Bicycle rider trends/behaviors	Bike counts included in this Plan	Increase bicycling by women 10% per year up to 50% of total bicycling population, focus efforts to reduce wrong way bicycling where reported as cause in bike incidents.
Public attitudes about bicycling	Bike survey provides indication of challenging locations and current perspectives	Increase in positive attitudes about bicycling within community.
Bicycle boulevard demonstration project	Not applicable	Develop demonstration bicycle boulevard on selected corridor and evaluate for success in usage and connectivity.
Bicycle Friendly Community Designation	Designated bronze level Bicycle Friendly Community by League of American Bicyclists	Secure League of American Bicyclists Bronze Award by 2015 and Silver Award by 2020.
Grant funding	Baseline to be established	Attain an annual average funding of $200,000 or more for infrastructure and non-infrastructure projects.

As new baseline information is discovered as conditions change, and as the City implements the Bicycle Master Plan, the MOEs should be reevaluated, revised and updated.

An example evaluation or MOEs ("indicators") report is produced by the City of Santa Monica which evaluates sustainability indicators as well as non-motorized program measures. The Santa Monica Sustainable City Report Card is provided online at the following location

http://www.smgov.net/Departments/OSE/categories/sustainability.aspx

5.5.4 Potential Funding Sources

Potential funding sources for implementation of recommended bicycle facility infrastructure projects and programs has been identified for further consideration. The funding sources listed are typically competitive in nature, so the City will evaluate the applicability of potential projects and likely scoring before developing a grant application. Additionally, the City will determine the availability of staff to prepare grant applications and to administer the grant. Preparation of grant applications can often be a time-intensive effort, and receipt of funding is not guaranteed due to increasing competition for active transportation projects. Resource demands should be considered by the City given the potential benefit of each grant opportunity.

We recommend the City identify potential projects that would fit well with the following funding sources and initiate/continue discussions with key agencies and stakeholders; funding sources are identified with the date of the next anticipated call listed in parentheses:

- Caltrans Active Transportation Program (Late 2014 or Early 2015)
- Metro Call for Projects (2015)
- Metro ExpressLanes Net Toll Revenues (Date Unknown)
- SCAG Sustainability Program (Future date subject to SCAG Regional Council action)
- Land and Water Conservation Fund (2015)

Preliminary consideration of applicability and discussion with stakeholders can help verify that a potential opportunity is well-suited for the grant source, and can help position the City to document a history of collaboration and provide a venue to secure letters of support for incorporation into the grant application. Refer to **Chapter 9** for a listing of additional funding sources that may be considered for funding bicycle facility improvements and programs.

5.6 Active Transportation Program (ATP) Compliance

The Active Transportation Program (ATP) is an annual statewide discretionary grant program that funds bicycle and pedestrian projects through the California Department of Transportation (Caltrans). Available as grants to local jurisdictions, the ATP emphasizes projects and programs that enhance bicycling for transportation purposes. In order for the City to qualify for ATP funding in future cycles, the Bicycle Master Plan must contain specific elements. **Appendix I** displays the requisite ATP components and their location within this Plan.