

CITY OF BURBANK

BICYCLE MASTER PLAN



burbankbike.org

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By a Resolution (Resolution number: 28-046) of the Council of the City of Burbank, this document was adopted and certified as being in compliance with the State of California Streets and Highways Code Section 891.2 on December 15, 2009.

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1.0 INTRODUCTION

The City of Burbank recognizes that a bicycle friendly environment enhances the quality of life for residents and visitors to the City. The City supports the simple concept that what is good for the bicycling public is good for the community as a whole. The City believes that establishing a bicycle culture will not only lead to a healthy and more active community, but will also decrease the transportation demands on the roadway network often caused by single-occupancy vehicle travel. The City recognizes that all roadways, except where specifically prohibited can and will be used by cyclists, but understands that a bicycle culture is established through the development of a safe and effective bikeway network and extensive community outreach and education programs. The City has adopted this comprehensive Bicycle Master Plan that creates the foundation for this bicycle friendly environment to serve existing and future riders.

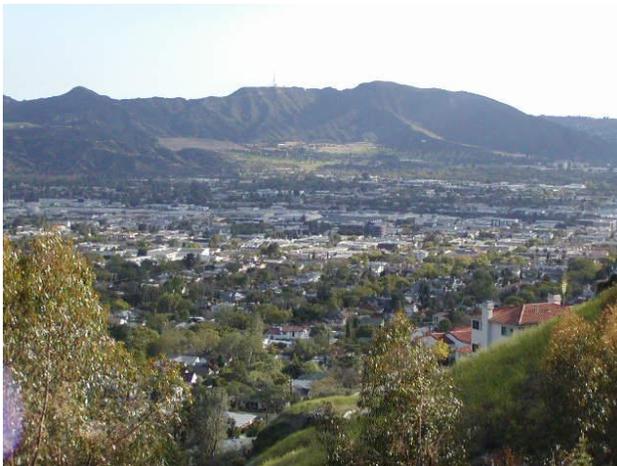


This Master Plan serves as a policy document to guide the development and maintenance of a bicycle network, support facilities, and other programs for Burbank over the next 25 years. These policies address important issues related to the City's bikeways, such as planning, community involvement, utilization of existing resources, facility design, multi-modal integration, safety education, support facilities as well as specific programs, implementation, maintenance, and funding.

The success of the Plan will only be assured by continued support of City staff, elected officials, the bicycling public, and other residents who recognize the benefits of cycling in their community.

1.1 Community Profile

With an estimated population of 108,000 (as of 2009), Burbank is located in the eastern San Fernando Valley region of Los Angeles County. The city is home to a variety of commercial, industrial, and entertainment centers, including the Civic Center, the Downtown business district, the Empire Center, the Bob Hope Airport, and the Media District with its major studios and many entertainment companies.



Two freeways traverse the City: the Golden State (I-5) and Ventura (SR-134). Burbank also has a well-developed grid of arterial and collector streets that traverse the city. Most of the city's destinations are located along these arterial streets. There are two active rail corridors that cross the city. The City's design serves as both its strongest benefit and barrier to bicycle travel. A strong grid pattern of local, collector, and arterial streets provide a diverse road network to meet the comfort level of beginning, novice, and advanced cyclists. However,

as the city is a built-out urban environment, the street right of way is at its maximum in most locations and opportunities for widening are at a minimum. As the community continues to grow in population the roadways are unable to expand beyond current capacities. Opportunities to add bicycle lanes do not come without some sort of trade-off in this environment. The costs are almost always a loss of travel lanes or on-street parking. The freeway and rail corridors present further physical barriers as connectivity opportunities across these facilities are limited.

Connection to transit services in Burbank is both convenient and diverse. Amtrak and Metrolink passenger service is operated along the active rail lines. Commuter service is available at the city's two rail stations: Downtown Burbank and Burbank Airport. Burbank and its surrounding cities are served by Los Angeles County Metropolitan Transportation Authority (Metro) bus service. The City of Burbank through its BurbankBus service also provides transit linkages between the City's many destinations and the Downtown Burbank Metrolink and North Hollywood Redline Stations, as well as youth transit services (Got Wheels) and senior/disabled demand-response services. When these services are coupled with bicycle travel, an individual can reach any destination in the region.

2.0 GOALS AND OBJECTIVES

The overarching goal of the City of Burbank Bicycle Master Plan is a five percent of all trips are made by bicycle travel by the year 2035. The following outlines the means of achieving that measure of performance.

2.1 Goals

Goals provide the context for the specific objectives and policy actions discussed in the Bicycle Master Plan. The overall goal of the plan provides the long-term vision and serves as the foundation of the plan. The plan's goal is a broad statement of purpose that does not provide specific descriptions.

GOAL: BURBANK IS AN URBAN ENVIRONMENT THAT FOSTERS BICYCLE TRAVEL AS A HEALTHY, ENVIRONMENTALLY SUSTAINABLE TRANSPORTATION ALTERNATIVE THAT REDUCES TRAFFIC CONGESTION AND IMPROVES THE CHARACTER OF THE COMMUNITY

2.2 Policies

Policies provide guidance for meeting the Goal listed above. The following Policies coincide with the Policies outlined in the Draft Mobility Element of the City of Burbank General Plan (Policies 5.1-5.5 and 6.1).

POLICY 1: MAKE BICYCLE TRAVEL AN INTEGRAL PART OF DAILY LIFE IN BURBANK, PARTICULARLY 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, MAKING BICYCLING SAFER, AND ENGAGING THE PUBLIC IN BICYCLING RELATED ISSUES AND DECISIONS.

POLICY 2: PROVIDE BICYCLE-FRIENDLY CONNECTIONS TO TRANSIT CENTERS, MAJOR EMPLOYMENT CENTERS, RETAIL DISTRICTS, AND RESIDENTIAL AREAS TO MAKE THE OVERALL ROAD NETWORK MORE HOSPITABLE TO BICYCLE TRAVEL.

POLICY 3: ENSURE THAT NEW COMMERCIAL AND RESIDENTIAL DEVELOPMENT INTEGRATES WITH THE CITY'S BICYCLE NETWORK BY REQUIRING CONTRIBUTIONS TO THE CITY'S NON-MOTORIZED TRANSPORTATION SYSTEM IN PROPORTION TO ITS EXPECTED VEHICLE TRIP-GENERATION.

POLICY 4: ENCOURAGE A LIVABLE STREET ENVIRONMENT THROUGH COMPREHENSIVE ROADWAY PLANNING THAT CONSIDERS THE INTERACTION BETWEEN THE STREET, SIDEWALK, AND ADJACENT LAND-USES.

POLICY 5: ENCOURAGE ALL ROADWAYS AND INTERSECTIONS TO INCORPORATE THE “COMPLETE-STREETS” CONCEPT THAT USERS OF ALL AGES AND ABILITIES, PURSUING ALL ACTIVITIES, SHALL BE ABLE TO MOVE SAFELY THROUGHOUT THE STREET NETWORK.

POLICY 6: PURSUE ROADWAY DESIGN THAT WILL MINIMIZE CUT-THROUGH AND SPILLOVER TRAFFIC IN RESIDENTIAL NEIGHBORHOODS AND MAINTAIN THE NEIGHBORHOODS’ CHARACTER AND QUALITY OF LIFE.



2.3 Objectives

Objectives are more specific statements of purpose, and policy actions provide a bridge between general policies and actual implementation guidelines, which are provided in the Chapters that follow.

OBJECTIVE A:

IMPLEMENT THE BICYCLE MASTER PLAN, WHICH IDENTIFIES EXISTING AND FUTURE NEEDS, AND PROVIDES SPECIFIC RECOMMENDATIONS FOR FACILITIES AND PROGRAMS OVER THE NEXT 25 YEARS.

Objective A Policy Actions

1. Ensure that adequate City staff is available to coordinate Plan implementation.
2. Update the Plan periodically as required by Caltrans to reflect new policies and/or requirements for bicycle funding.
3. Coordinate with other cities, Metro, schools, and community organizations to review and comment on bicycle issues of mutual concern.
4. Regularly monitor bicycle-related accident levels, and seek a reduction in bicycle accident rates over the next 25 years.
5. Identify a Bicycle Advisory Subcommittee of the Transportation Commission that will coordinate with various City departments, schools, neighboring cities, Metro, and community organizations to advise on bicycle issues.

OBJECTIVE B:

IDENTIFY AND IMPLEMENT A NETWORK OF BIKEWAYS THAT IS FEASIBLE, FUNDABLE, AND THAT SERVES ALL BICYCLISTS’ NEEDS, ESPECIALLY FOR TRAVEL TO EMPLOYMENT CENTERS, SCHOOLS, COMMERCIAL AND RETAIL DISTRICTS, TRANSIT STATIONS, AND INSTITUTIONS, WHILE NOT EXCLUDING THE NEEDS OF RECREATIONAL CYCLISTS

Objective B Policy Actions

6. Develop a bikeway network that is continuous, closes gaps in the existing system, and serves important destinations.
7. Develop a bikeway network that provides connections to bikeways in adjacent cities.
8. Create strong connections between the regional Class I bike paths (Los Angeles River, Chandler, and San Fernando) as well as Metrolink stations.
9. Develop a destination-based signage system for the bikeway network with priority given to Class I and II facilities, Class III Bicycle Boulevards, and other projects identified as top priority in this Plan.
10. Coordinate and offer assistance to other city departments and developers to ensure appropriate bicycle connections are planned, constructed, and maintained.
11. Coordinate with Park, Recreation and Community Services staff to promote bicycling as a healthy recreational activity and ensure that recreational bicycle enthusiasts are provided for in plans for future projects.
12. Evaluate the impacts on bicycle travel and integrate bicycle facility improvements into proposed roadway and development projects as part of the project review process.
13. Implement bicycle facilities based on a priority program that considers existing deficiencies, safety, commuting needs, connectivity of routes, and community input.

14. Recognize that bicyclists use all City roadways. Design future roadways to accommodate bicycle travel. Carry out routine maintenance of roadways and eliminate hazards to cyclists.
15. Ensure that when traffic signals are upgraded, the upgrades include bicycle detection as required by the Manual of Uniform Traffic Control Devices.
16. Upgrade existing roadways to enhance bicycle travel, including upgrading on-demand traffic signals to detect bicycles.

OBJECTIVE C:

MAINTAIN AND IMPROVE THE QUALITY, OPERATION, AND INTEGRITY OF THE BURBANK BIKEWAY NETWORK AND ROADWAYS REGULARLY USED BY BICYCLISTS.

Objective C Policy Actions

17. Undertake routine maintenance of bikeway facilities, such as sweeping streets regularly traveled by bicyclists and other designated bikeways. This will include paint and striping, signage, pavement surface maintenance, tree trimming, and other facets of maintaining the operational integrity of the bikeway network.
18. Where applicable, pursue traffic calming improvements on existing residential bicycle facilities to increase safety of cyclists and prevent high-speed motor vehicle cut-through traffic.
19. Implement “sharrow” street markings along all Class III bike route facilities to further alert motorists of the shared use of roadway and increase safety to cyclists by guiding them clear of opening car doors, an area commonly referred to as the “door-zone”.
20. Coordinate roadway improvements to provide reasonable alternate routes if necessary and minimize disruption for cyclists. This includes maintaining bikeway access through construction zones or providing bikeway detours.

OBJECTIVE D:

ENCOURAGE THE DEVELOPMENT OF SAFETY EDUCATION PROGRAMS AIMED AT YOUTH AND ADULTS. INCREASE PUBLIC AWARENESS OF THE BENEFITS OF BICYCLING AND OF AVAILABLE RESOURCES AND FACILITIES.

Objective D Policy Actions

21. Encourage the development and implementation of safe and effective adult and youth cycling programs.
22. Promote the health benefits of bicycling.
23. Promote and pursue funding programs for bicycle safety and education programs.
24. Support Transportation Demand Management programs at worksites to encourage commuters to bicycle to work. This effort will be coordinated through the transportation management organizations.
25. Distribute a regularly updated Burbank bikeway map at local schools, bike shops, the Chamber of Commerce, and other visible areas to encourage cycling.
26. Utilize the BurbankBike.org website as a means of distributing bicycle safety information and encouraging bicycle travel for both recreation and utilitarian trips.
27. Dedicate staff time and solicit volunteer support to set up bicycle repair seminars at major community events.

OBJECTIVE E:

ENCOURAGE SHORT-TERM AND LONG-TERM BICYCLE PARKING AND OTHER BICYCLE AMENITIES IN EMPLOYMENT AND COMMERCIAL AREAS, IN MULTIFAMILY HOUSING, AT SCHOOLS AND COLLEGES, AND AT TRANSIT STATIONS.

Objective E Policy Actions

28. Establish, implement, and revise as needed, bicycle parking requirements on new development projects.
29. Establish an annual budget of transportation funds for the continued installation and maintenance of city-owned public bicycle parking.

30. Encourage the installation of short- and long-term bicycle parking in the public right-of-way through streetscape plans, new development, street improvement projects, and at municipal facilities such as parks, or at other locations where specific needs are identified.
31. Consider revising the existing Transportation Demand Management programs to include bicycle storage standards that would require bicycle parking in new commercial buildings equal to five-percent of the required motor-vehicle parking.
32. As an incentive for increased development densities or as potential measures to mitigate traffic impacts, encourage end-of-trip amenities, such as additional bicycle parking and shower and clothing locker facilities to be located at transit centers and new employment sites to promote bicycle commuting.
33. Include bicycling options in all Transportation Demand Management planning.
34. Encourage and support bike stations and/or attended parking facilities at major events and destinations, such as transit stations, Downtown Burbank, the Bob Hope Airport, and the Media District.

OBJECTIVE F:

INCREASE THE NUMBER OF BICYCLE-TRANSIT TRIPS.

Objective F Policy Actions

35. Support and promote bicycle travel via the Metro and BurbankBus systems, the Metrolink commuter rail service, and Amtrak.
36. Coordinate with Metro and the Southern California Regional Rail Authority (SCRRA) to provide and promote secure bicycle racks and lockers at transit stations.
37. Coordinate with Metro and BurbankBus to provide bicycle access during the design of new transit facilities and the procurement of transit vehicles.

OBJECTIVE G:

INCREASE GOVERNMENT AND PUBLIC RECOGNITION OF BICYCLISTS' EQUAL RIGHT TO USE PUBLIC ROADWAYS.

Objective G Policy Actions

38. Provide bicycle education to City staff involved in decisions regarding transportation facilities. This would include, but would not be limited to, traffic engineers, planners, civil engineers, field inspectors, street maintenance personnel, and parks and recreation staff.
39. Provide bicycle education for law enforcement personnel.
40. Seek funds for a public awareness "Share the Road" campaign to increase public recognition and to educate the general public about the rights and responsibilities of bicyclists.
41. Seek funds for a bicycle confidence education program to instruct existing riders and future riders of all age groups how to utilize the roadway in a safe and confident manner.
42. Build strong connections with local bicycle related businesses and organizations to help establish support and encourage community participation in bicycle education programs.

OBJECTIVE H:

ENCOURAGE ROADWAY DESIGN THAT ALLOWS FOR THE EQUITABLE USE OF ALL TRANSPORTATION MODES.

Objective H Policy Actions

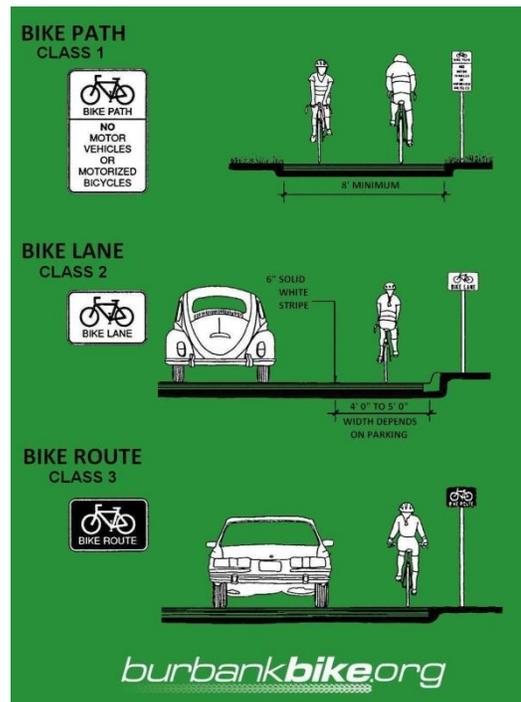
43. Evaluate smoothing and slowing of traffic in certain commercial or residential neighborhoods by reconfiguring travel lanes to remove through-lanes in exchange for turn lanes and bike lanes.
44. Reduce lane widths and in some locations speed to allow for bicycle traffic to safely share the curb lane with automobile traffic.
45. Pursue removal of on-street parking except where it is critical to adjacent land uses to allow for the necessary right-of-way for striped bike lanes
46. Encourage and pursue all opportunities to improve walk-ability and bike-ability in commercial districts through the "complete-streets" re-design of existing rights-of-way to allow for a more proportionally balanced distribution of roadway space.

3.0 BIKEWAY TYPES

3.1 Standard Bikeway Classifications

Bikeways can be classified into three standard types:

- **CLASS I BIKEWAY** – Typically called a bike path, this provides for bicycle travel on a paved right-of-way completely separated from any street or highway. These are particularly popular with novice cyclists and are often avoided by experienced cyclists because they can become overly popular and crowded.
- **CLASS II BIKEWAY** – These are often referred to as a bike lane. It provides a striped and stenciled lane for one-way travel on a street or highway. When properly designed, bike lanes help improve the visibility of bicyclists.
- **CLASS III BIKEWAY** – Generally referred to as a bike route, it provides for shared use with pedestrian or motor vehicle traffic and is identified only by signing. This is recommended when there is enough right-of-way for bicyclists and motorists to safely pass. This treatment is primarily used to point cyclists towards preferred bike friendly corridors, which are often enhanced with bike detection at signalized intersections.



Although these facilities are designed for bicycle travel, it is important to recognize that all public roadways, except for those segments of freeways where it is prohibited, are open to travel by bicycle.

3.2 Non-Standard Bikeway Classifications

BIKEWAY BOULEVARD

A Bicycle Boulevard is generally a low-traffic neighborhood street that has been optimized for bicycling. They provide direct attractive routes for cyclists, while also enhancing and improving the character of the neighborhood. This is accomplished by using a combination of Class III Bike Route and Share the Road signage, "sharrows", and a variety of different traffic calming treatments.

As all roadways and adjacent neighborhoods have different characteristics, each Bicycle Boulevard should individually address these differences. As a result, not all Bicycle Boulevard are the same, but rather "designed to fit". However, the theme remains consistent.

What all Bicycle Boulevards share is commonly referred to as the "Toolbox". This Toolbox consists of the various roadway treatments, or "tools", which can be used to best enhance the roadway and neighborhood for both cyclists and neighborhood residents. The Bicycle Boulevard Toolbox breaks down as follows:

AUTO SPEED REDUCTION – Research shows that by limiting auto speeds to 25mph or less, the risk of collision, injury, or death is greatly reduced. The ideal car speed on bicycle boulevards is 15-20mph. The purpose of the tools in this section is to slow cars down on neighborhood streets making them safer for everyone. Examples include:

- **STOP SIGNS** – Stops car traffic, oriented to favor cyclist traveling on bicycle boulevard
- **MINI TRAFFIC CIRCLES** – Reduces auto speed, only within 100 feet of circle
- **TRAFFIC ISLANDS** – Reduces auto speeds as vehicles turn from major arterials to bicycle boulevard
- **MEDIAN ISLANDS** – Reduces turning radii at intersections



AUTO TRAFFIC REDUCTION – The maximum average daily traffic (ADT) on a bicycle boulevard is 3,000 cars per day or less, preferably as low as 1,500 cars per day. When auto speed reduction is combined with auto traffic reduction or "diversion", safety on bicycle boulevards is maximized. Cars are still allowed on bicycle boulevards, but diversion treatments encourage them to drive on arterial streets instead of neighborhood streets when they need to get somewhere quickly. The tools in this section limit auto access to bicycle boulevards at critical points, while allowing bicycle traffic to get through. Examples include:

- **SEMI-DIVERSION** – Limits auto access while allowing bicycle access
- **FULL-DIVERSION** – Restricts auto access while allowing bicycle access



CROSSING BUSY STREETS – No bicycle boulevard is complete without closing the gaps. Large arterial streets, freeways and railroad tracks all create significant barriers for bicyclists, pedestrians, and neighborhoods. In order to have a working network of bicycle boulevards, it is imperative that cyclists are able to cross major intersections safely. Examples include:

- **HIGH VISIBILITY "ZEBRA" CROSSWALKS** – Increases visibility at crossings
- **CURB EXTENSIONS** – Increases bicycle/pedestrian visibility, shortens crossing distance
- **MEDIANS** – Limits auto access, provides mid-point crossing refuge for bicycles/pedestrians
- **BICYCLE DETECTION** – Cyclist can trigger traffic lights by placing tires over bike symbol. Signal will be actuated by camera or loop detectors.
- **BIKE BOXES** – Brings cyclists to front of the line at traffic lights, priority crossing/turning, reduces right-hook conflicts, as needed filling in the box with color paint can further increase visibility



BOULEVARD SIGNAGE AND MARKINGS – Along a Bicycle Boulevard signage and markings are enhanced beyond the standard Class III Bike Route signage. Smaller markings on the ground tell cyclists where to go while larger markings indicate to drivers that they are on a bike boulevard and should slow down. Signs tell cyclists where they are headed and how much further they have to go to reach their destination. The tools in this section offer a few examples of ways to show cyclists and community residents how to get from here to there.

- **SHARROWS** – “Share the Road” arrow. Indicates that cyclist can use the whole lane. Marking designed so if you ride down the center of the arrows, you will be outside the “door-zone”
- **WAY FINDING SIGNAGE** – Indicates distance to certain districts, gives direction and travel time
- **SHARE THE ROAD SIGNAGE** – Indicates to motor vehicle drivers that cyclists may be present

The design standards and guidelines for each of the tools in the Bicycle Boulevard Toolbox are described in more detail in Chapter 8.



4.0 EXISTING CONDITIONS

4.1 Land Use

Maps 4.1 and 4.2 on the following pages show the current and proposed future land use patterns in the City of Burbank. The City consists of a mix of high-, medium-, and low-density residential land uses as well as industrial and commercial uses. Industrial uses are primarily located near the rail lines, particularly in the eastern part of the city and near the airport. Commercial land uses are primarily located along arterial streets with centers of activity located in the Downtown area, at the Empire Center (at Empire Avenue and Victory Place), Magnolia Park (at Hollywood Way and Magnolia Boulevard), and in the Media District. The Media District is home to entertainment-related commerce and industry. This district is located in the southwest corner of Burbank near the Ventura (SR-134) Freeway.

Low-density residential uses are located generally between other land use zones. Medium-density residential areas are often located near arterial streets and near San Fernando and Glenoaks Boulevards. High-density residential uses are located adjacent to the Downtown business district north of Glenoaks Boulevard. Burbank has many parks and schools as well as a large mountain reserve area in the Verdugo Mountains. These are located at various places in the city and are identified on the map on the following page.

There are no major land use changes proposed as part of the Draft Land Use Element.

4.2 Existing Bikeways

Table 4.1 lists the existing bikeway facilities in the city. Burbank currently has eighteen designated bikeways, including Class I, II, and III facilities. Map 4.3 shows the existing bikeways in the City of Burbank. Existing bikeway mileage in Burbank comprises 2.88 miles of Class I, 4.50 miles of Class II, and 11.64 miles of Class III. Total existing bikeway mileage totals 22.30 miles.

There is an existing pedestrian-bicycle bridge that crosses the railroad corridor adjacent to the Golden State Freeway in the vicinity of Providencia Avenue. This bridge and the approaching pathways are currently 8 feet wide and do not meet the minimum standards for them to be classified as a Class I bike path. However, this bridge is planned to be rebuilt as part of the freeway's high occupancy vehicle (HOV) lane construction project over the next several years. The City should encourage Caltrans to rebuild the bridge wide enough to be classified as a Class I path or request a design exception from the agency in order to classify it as such.

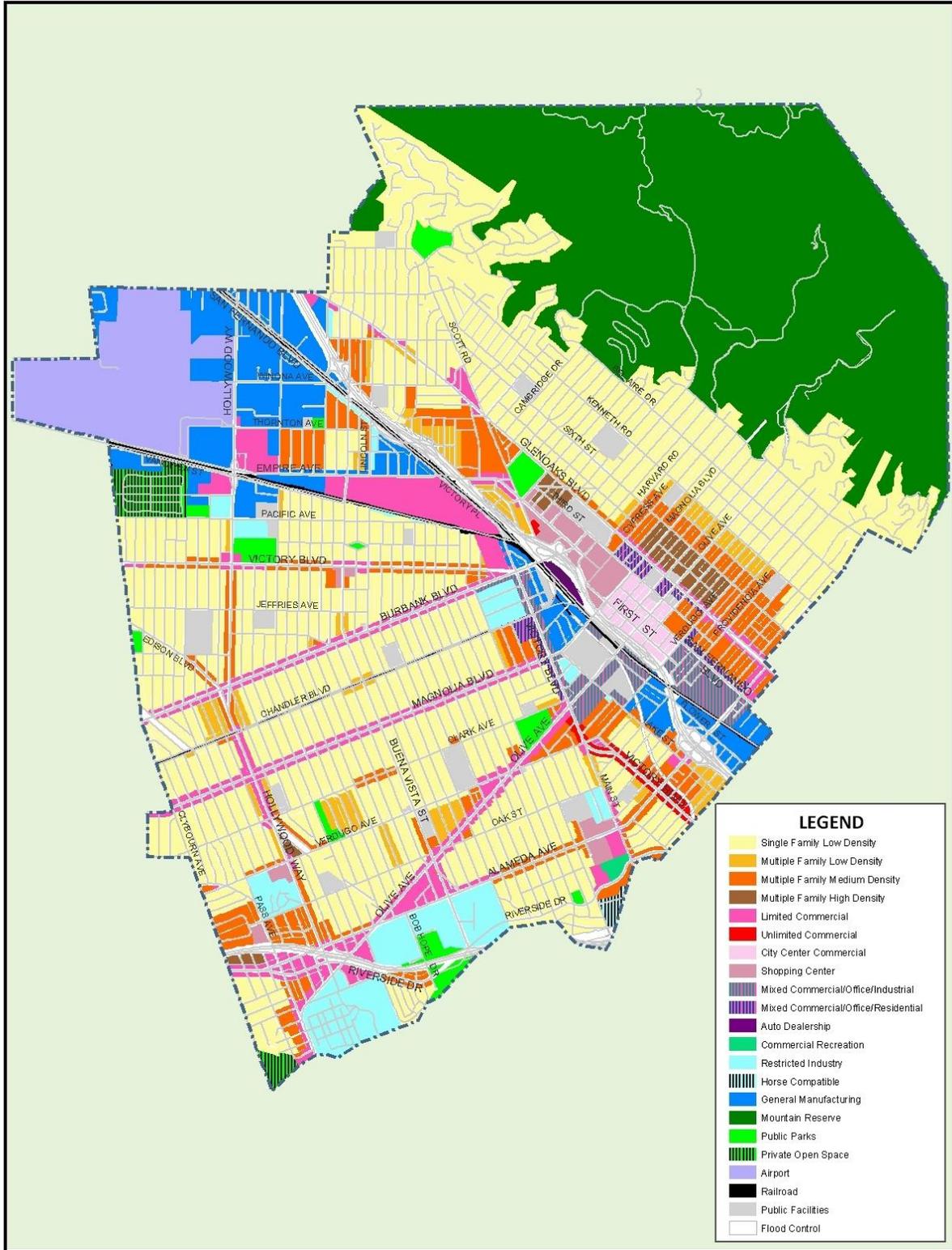
BIKEWAYS PLANNED OR UNDER CONSTRUCTION

The City of Burbank has begun design of a Class I bike path facility along the active rail corridor that parallels San Fernando Boulevard and Victory Place. This bikeway is expected to be open for use sometime in 2014 and will extend from the Los Angeles city limit to the Downtown Burbank Metrolink Station. A planning and feasibility study has been performed for this bikeway and the City is currently in the design phase for this project. The estimated cost for this project is approximately \$8.24 million. The City of Los Angeles has also planned and partially constructed the bikeway to continue north to Sylmar.

Although not much of its alignment actually travels through the City of Burbank, a path along the Los Angeles River is also planned with cooperation from the City of Los Angeles. A feasibility study has been completed that selected a recommended alignment for a path on the south side of the River between Bob Hope Drive and the path's current northern terminus at Riverside Drive. It is envisioned that a bikeway along the Los Angeles River will be eventually extended across the San Fernando Valley to Canoga Park in the City of Los Angeles. Funding has recently been secured through Metro's Call for Projects for a one-mile extension of this facility from Riverside Drive to the Forest Lawn ramps to State Highway 134.

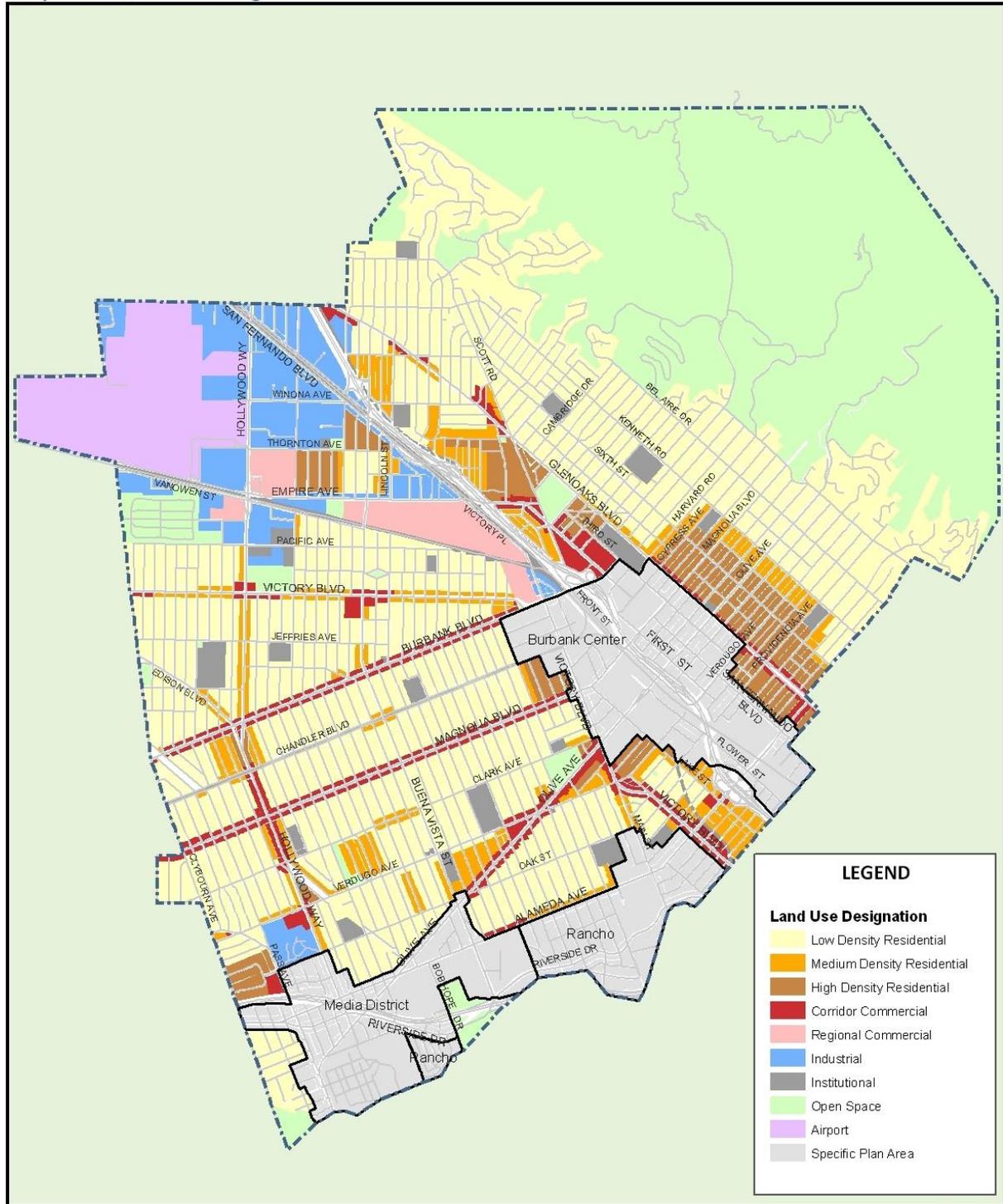
MAP 4.1 EXISTING LAND USE

Land Use Designations



MAP 4.2 PROPOSED LAND USE

Proposed Land Use Designations



*Proposed Land-use pending the adoption of the Land-Use and Mobility Elements

TABLE 4.1: EXISTING BIKEWAYS IN BURBANK

Class	Street/Path	From	To	Length
I	Chandler Bikeway	Clybourn Ave	Mariposa St	1.98
I	Burbank Channel Bike Path North 1	Cohasset St	Tulare Ave	0.30
I	Burbank Channel Bike Path North 2	Buena Vista St/Winona Ave	Jackson St	0.60
II	Riverside Dr	Bob Hope Dr	Glendale city limit	1.60
II	Main St	Alameda Ave	Riverside Dr	0.20
II	Third St	Verdugo Ave	Burbank Blvd	0.79
II	Verdugo Ave	First St	Glenoaks Blvd	0.41
II	Hollywood Way	Pacific Ave	Cohasset St	1.01
II	Victory Blvd	Clybourn Ave	Burbank Blvd	2.10
II	Front St	Burbank Blvd	Downtown Metrolink	0.64
III	Keystone St	Pacific Ave	Riverside Dr	2.32
III	California St	Chandler Blvd	Alameda Ave	1.28
III	Maple St/Pass Ave	Pacific Ave	Magnolia Blvd	1.53
III	Pacific Ave	Maple St	Keystone St	1.14
III	Burbank Blvd	Victory Blvd	Third St	0.54
III	Amherst Dr	Kenneth Rd	San Fernando Rd	0.64
III	Providencia Ave	Bonnywood Pl	Sunset Canyon Dr	1.33
III	Kenneth Rd	Glenoaks Blvd	Glendale city limit	3.40

EXISTING BIKEWAYS IN ADJACENT CITIES

The City of Glendale has two existing bikeway facilities that link with Burbank's bikeway network. The first facility is a Class II bike lane along Riverside Drive. This bikeway is continuous with Burbank's Class II facility along Riverside Drive. The second facility is bike lanes along Glenoaks Boulevard that terminate at the Burbank city limit. Additionally, through a PLACE (Policies for Livable, Active Communities and Environments) grant from the Los Angeles County Department of Public Health the City of Glendale, in conjunction with the Los Angeles County Bicycle Coalition, is developing the City's first "Safe and Healthy Streets Plan". The plan is a policy document intended to help make Glendale a safer and friendlier city for cyclists and pedestrians.

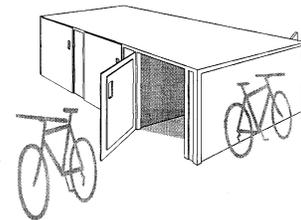
The City of Los Angeles has one Class I bikeway facility that connects with our Chandler Bikeway and using a combination of Class I and Class II treatments extends across the San Fernando Valley to Canoga Park. Los Angeles also has one Class II bike lane facility that connects with the City of Burbank. This facility is located along Glenoaks Boulevard north of Cohasset Street. Two other bikeways exist that are close but do not directly link with Burbank: Class II bike lanes on Forest Lawn Drive and the Los Angeles River Class I bike path.

It is important that regional connectivity be achieved with adjacent cities. Future bikeways that are proposed as part of this Plan take into account those bikeways that currently exist and are proposed in Glendale and Los Angeles.

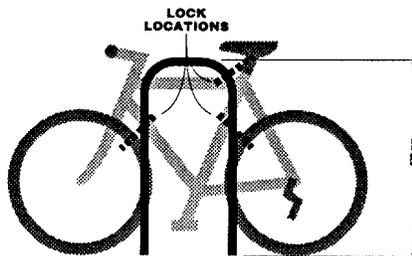
4.3 Bicycle Parking

Bicycle parking accommodation is an important component in planning bicycle facilities and encouraging widespread use. Bicycles are one of the top stolen items in all communities, with components being stolen even when a bicycle is securely locked. Because today’s bicycles often cost between \$350 to over \$2,000, many people won’t use a bicycle unless they have secure parking available. In California, parking facilities are classified as follows:

- **CLASS I BICYCLE PARKING FACILITIES** – accommodate employees, students, residents, commuters, and others expected to park more than two hours. This parking is to be provided in a secure, weather-protected manner and location. Class I bicycle parking will be either a bicycle locker or a secure area like a ‘bike-corral’ that may be accessed only by bicyclists. These enclosed bicycle storage facilities have gained popularity recently as a result of organizations like “BikeStation” which incorporate the bike-corral idea with an attendant and bicycle repair services. BikeStations can be found throughout the state of California, in Seattle, and now in Washington DC.

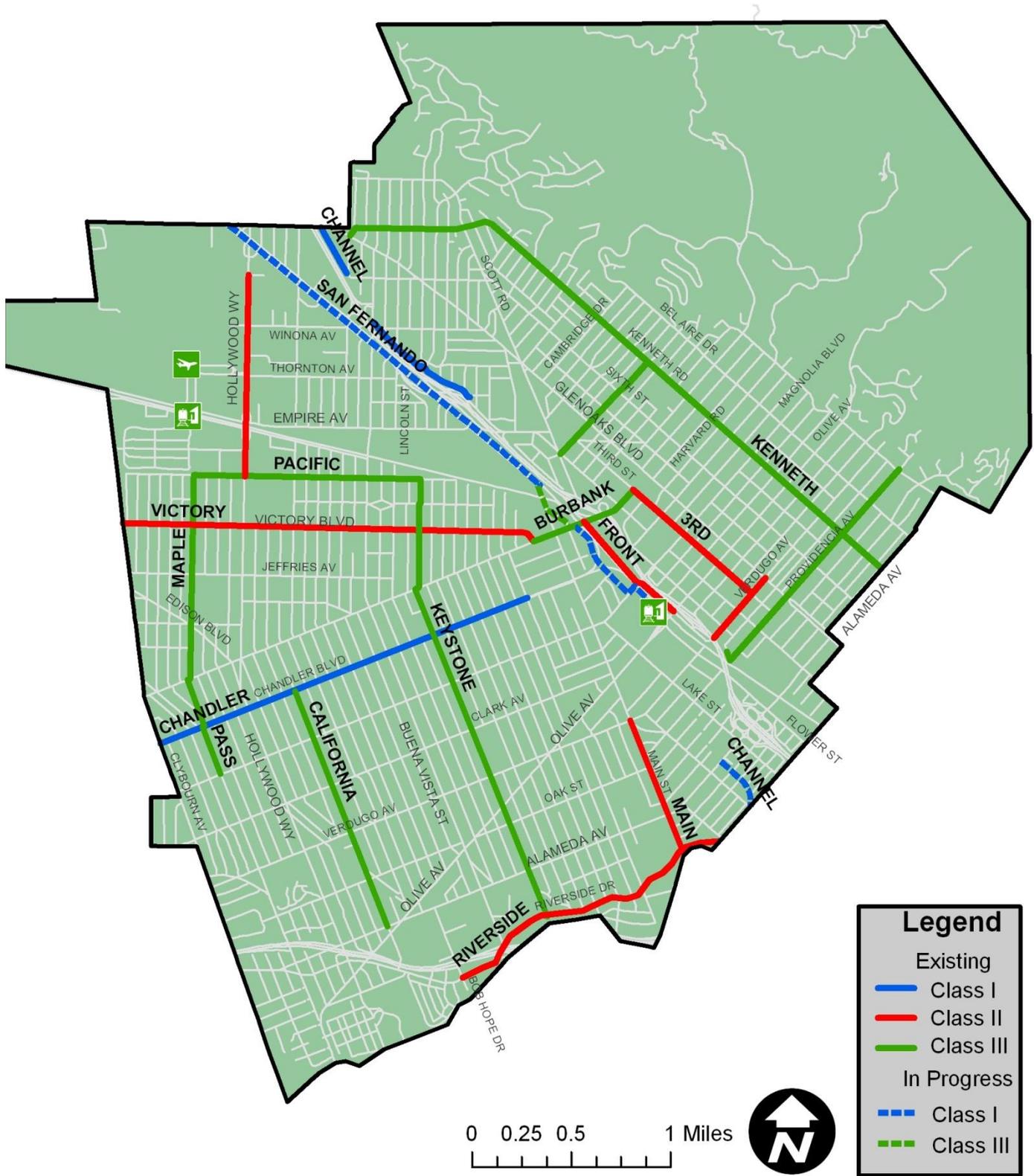


- **CLASS II BICYCLE PARKING FACILITIES** – accommodate visitors, customers, messengers, and others expected generally to depart within two hours. However a well-placed bicycle rack can accommodate long term parking as well. Bicycle racks provide support for the bicycle but do not have locking mechanisms. Racks are relatively low-cost devices that typically hold between two to eight bicycles and allow bicyclists to securely lock their frames and wheels. The racks are



secured to the ground and are generally located in highly visible areas. It is recommended that racks not be of a design that supports the bicycle by the wheel as this may damage the wheel by causing them to bend. Bike racks are usually located at schools, commercial locations, and activity centers such as parks, libraries, retail locations, and civic centers. They can be placed in the public right of way or on private property.

MAP 4.3 EXISTING BICYCLE FACILITIES

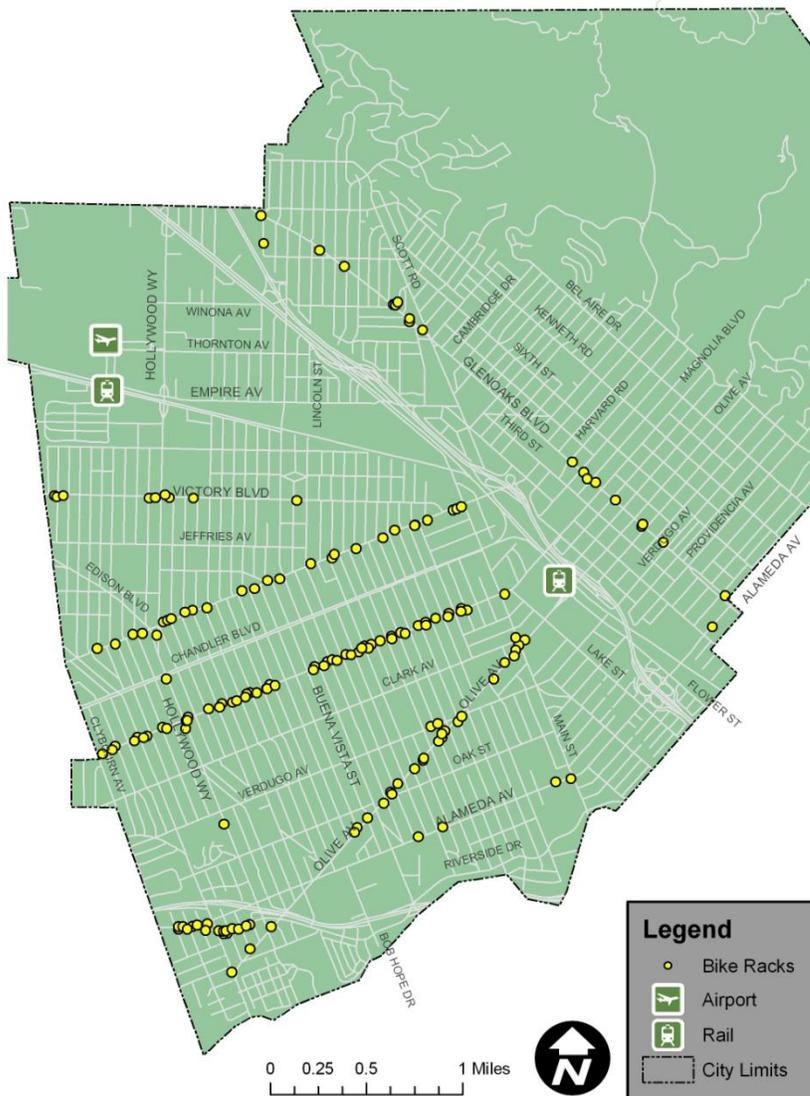


EXISTING BICYCLE PARKING IN BURBANK

Through a Bicycle Transportation Account (BTA) Grant from Caltrans, the City of Burbank has implemented a City-wide bicycle parking program. This program included the installation of:

- 175 INVERTED “U” RACKS THROUGHOUT THE CITY IN EMPLOYMENT CENTERS, RETAIL DISTRICTS AND COMMERCIAL CORRIDORS, PARKS, LIBRARIES, AND TRANSPORTATION HUBS.
- BIKE RACKS ON BURBANKBUS VEHICLES
- BURBANK “BIKESTOP” – A 50-CAPACITY BICYCLE STORAGE FACILITY LOCATED AT THE DOWNTOWN BURBANK METROLINK STATION, WHICH WILL ALLOW MEMBERS TO PARK THEIR BICYCLES IN A SECURE AND WEATHER-PROTECTED LOCATION WITH 24-HOUR ACCESS.

MAP 4.4 EXISTING BICYCLE PARKING



The Municipal Code identifies requirements for bicycle parking in new development. Excerpts from Zoning Code Section 10-1-2304 state the following:

Bicycle racks or other secure bicycle parking shall be provided to accommodate four (4) bicycles per the first fifty thousand (50,000) square feet of non-residential development and one bicycle per each additional fifty thousand (50,000) square feet of non-residential development. A bicycle parking facility may also be a fully enclosed space or locker accessible only to the owner or operator of the bicycle, which protects the bike from inclement weather. Specific facilities and location (e.g. provision of racks, lockers, or locked room) shall be to the satisfaction of the City.

To assist business owners and developers to meet these requirements staff has developed recommended guidelines to ensure proper access to on-site bicycle parking amenities; these guidelines are available in Chapter 8.

4.4 Links to Other Transportation Modes

Improving the bicycle-transit link is an important part of making bicycling a part of daily life in Burbank. Linking bicycles with mass transit (bus, subway, light rail, and commuter rail) overcomes such barriers as lengthy trips, personal security concerns, riding at night, poor weather, or steep hills. Park-and-ride locations provide for intermodal travel by bicyclists to carpools and vanpools. Bicycle parking facilities could be placed at these locations and would facilitate links to ride-sharing activities. Additionally, bicycling to transit, rather than driving, benefits communities with relatively low investment cost by reducing taxpayer costs, air pollution, demand for park-and-ride land, energy consumption, and traffic congestion. There are four main components of bicycle-transit integration:

- ALLOWING BICYCLES ON TRANSIT
- OFFERING BICYCLE PARKING AT TRANSIT LOCATIONS
- IMPROVING BIKEWAYS TO TRANSIT SERVICES
- ENCOURAGING USAGE OF BICYCLE AND TRANSIT PROGRAMS

EXISTING LINKS TO OTHER TRANSPORTATION MODES

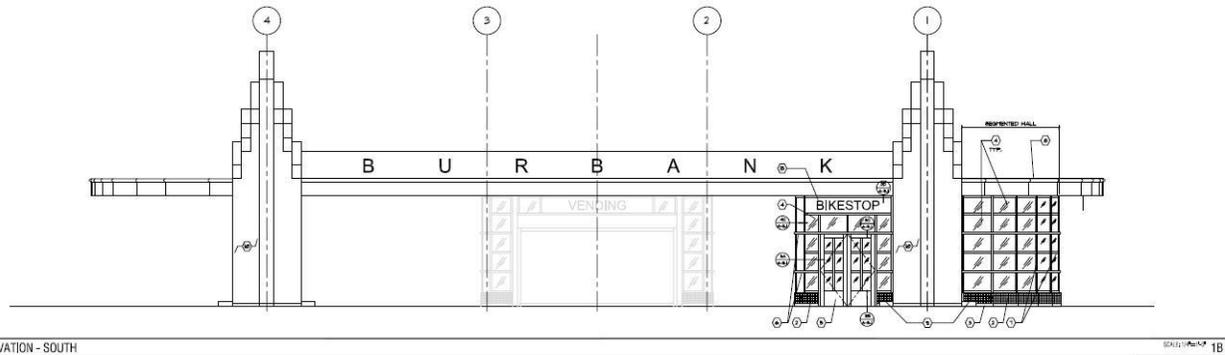
The City is served by BurbankBus, the City's local transit service and Metro bus service provided by the Los Angeles County Metropolitan Transportation Authority. Both transit services currently have bicycle racks on most buses in their fleet. These state-of-the-art bike racks can carry up to two bicycles per bus and are very convenient to use for the bicyclist.



Metrolink trains provide service to Los Angeles, Oxnard, and Lancaster from the Downtown Burbank Metrolink Station. Metrolink service to Ventura County and Amtrak service to San Diego, Santa Barbara, and San Luis Obispo is currently available from the Burbank Airport Station. Bicycles are permitted onboard all Metrolink and Amtrak trains with specifically designated bicycle parking on each train.



Bicycle racks and Burbank BikeStop are currently providing secure bicycle parking at the Downtown Burbank Metrolink Station located on Front Street near Olive Avenue.



4.5 Bicycle Amenities

In addition to parking accommodations, many local employers, colleges and universities provide shower and clothing locker facilities that may be used by bicyclists at the end of their trips to work or school. These amenities make bicycle commuting a viable option for many bicyclists and contribute to the viability of bicycling as a commute option.

EXISTING AMENITIES REQUIREMENTS

The City of Burbank has existing shower and clothing locker facilities for City employees in its Community Services Building, but has no ordinance requiring them of new development except as a transportation demand strategy option for businesses in the Media District and Downtown area to meet the required goals outlined in the Transportation Demand Management ordinance. These programs are supervised and facilitated through the businesses' membership with the Transportation Management Organization.

4.6 Bicycle Safety Education and Enforcement

SAFETY EDUCATION PROGRAM

The City of Burbank does not have a bona fide bicycle safety education program at this time. However, the Police Department assigns one officer to each middle and high school to teach occasionally about general safety and drug issues. At these sessions, bicycle safety is addressed to a minimal extent.

The Police Department also has a program for juveniles under age 13 who are cited for traffic violations while riding a bicycle. These juveniles are required to attend a Saturday bicycle safety education session where they are taught proper riding behavior and the laws of traffic, including for bicycles. It is estimated that these semi-annual sessions have 25-30 juveniles enrolled per session.

In the past, the City has offered bicycle safety classes through various grants. However, the City does not currently have a bicycle safety education program for either youths or adults.

BICYCLE SAFETY AND ENFORCEMENT

The Burbank Police Department has a fleet of approximately 12 officers that patrol the Downtown area by bicycle. These officers perform routine duties, including crowd control, parking enforcement, traffic enforcement, and others. The Department enforces all traffic laws for bicycles and motor vehicles as part of their regular duties. They ticket violators as they see them. This includes bicyclists who break traffic laws as well as motorists who disobey traffic laws and make the cycling environment less safe. The level of enforcement depends on the availability of officers. The Police Department also responds to particular needs and problems as they arise.

BICYCLE ACCIDENTS

Table 4.2 shows the number and rate of accidents involving bicyclists in Burbank for the four years since the City’s current Bicycle Master Plan was adopted: 2004, 2005, 2006, and 2007. This information was gathered from the California Highway Patrol’s SWITRS website, which provides accident information by jurisdiction. The SWITRS data is released on a quarterly basis with a lag time of about three quarters. As the table shows, the accident rate for the City of Burbank decreased during 2006 and 2007. However, the number of bicycle related collisions increased in 2008 with 37 accidents. A considerable increase when compared to previous years.

It is possible that due to the high gas prices experienced in 2007 and 2008, the streets and roadways have seen a dramatic increase in bicycle ridership. Many who have perhaps not been on a bicycle in many years are suddenly on the roadways. These riders represent those who are most likely to benefit from bicycle safety education programs. Additionally, many motorists may not know the proper way to handle the increase in bicycle traffic on the roadway. There is insufficient data presented here to determine whether past safety education programs or the enforcement efforts of the Police Department have had a significant impact on reducing the rate of accidents in the City of Burbank.

TABLE 4.2: ACCIDENT ANALYSIS

Number of Bicycle Involved Collisions 2004 (SWITRS 2004)		Number of Bicycle Involved Collisions 2005 (SWITRS 2005)		Number of Bicycle Involved Collisions 2006 (SWITRS 2006)		Number of Bicycle Involved Collisions 2007 (SWITRS 2007)		Number of Bicycle Involved Collisions 2008 (SWITRS 2008)		Average # of Bicycle Collisions per Year	2007 Estimated Population (U.S. Census)	Accidents per 1000 people/yr.
Fatality	Injury											
0	37	0	36	0	26	0	27	0	37	31.5	103,286	0.31



5.0 PROPOSED PROJECTS AND PROGRAMS

This section identifies specific projects for which the City of Burbank can apply for funding as part of a comprehensive plan for bicycle transportation within the City.

5.1 Bikeways

Potential bikeway projects were compiled and prioritized based on the following criteria:

- REGIONAL CONNECTIVITY
- COMMUNITY FEEDBACK
- CLOSING GAPS IN THE BIKEWAY NETWORK
- CONNECTIONS WITH MAJOR DESTINATIONS
- COMPLETION OF THE BIKEWAY NETWORK
- AVAILABILITY OF STREET WIDTH OR RIGHT-OF-WAY
- EXISTING PLANS THE CITY HAS TO IMPROVE AND/OR WIDEN STREETS
- LINKAGES WITH ADJACENT CITIES

The top ten projects which met the greatest number of the above criteria were included as part of a community outreach survey conducted in 2008. Each survey respondent was asked to select the three projects they would most like to see implemented from a list of ten possible projects. The results, as seen in Table 5.1, were used to organize the Top Priority projects which will form the backbone of the bicycle network.

TABLE 5.1: SURVEY RESPONSES

Project Description	% of Respondents
Bicycle/Pedestrian bridge over I5 from Metrolink Station to Palm Avenue	36.9%
Road diet on Verdugo Avenue to add Class II Bike Lanes and a center turn lane	21.8%
Extend Pass Avenue Class III to Olive Avenue	36.0%
Class II Bike Lanes on First Street	10.6%
Class III Bike Route on Clark Avenue	12.4%
Extend California Avenue Class III to Riverside Drive	15.4%
Extend Chandler Class I to Downtown Burbank Metrolink Station	45.9%
Class II Bike Lanes/Class III Bike Route on Empire Avenue	10.9%
Class II Bike Lanes on San Fernando Road from Burbank Boulevard to I5	32.9%
Bicycle/Pedestrian bridge over the Los Angeles River at Bob Hope Drive	60.1%

Other priority projects are those which are less critical to the network yet still provide needed local circulation. Some of the projects identified in this plan will require further analysis before implementation, or have been earmarked for further study based upon forecasted future conditions of the transportation network. However, all of the projects proposed in this plan are preliminarily feasible and beneficial to bicyclists while at the same time show compatibility with other transportation and community planning goals.

Top priority project costs are based on past expenditures for bikeways throughout California and will vary by location and complexity of the project. Class I projects are estimated at roughly \$500,000 per mile, Class II projects are estimated at \$50,000 per mile, and Class III projects are estimated at \$25,000 per mile. The list of proposed bikeway projects for the City of Burbank is found in the following tables.

TABLE 5.2: TOP PRIORITY PROJECTS

Class	Name	From	To	Mileage	Est Cost	Destinations
-	Bicycle Safety Education Program for All Ages				\$175,000	-
III	Clark Avenue Bicycle Boulevard	Clybourn Avenue	Victory Boulevard	2.30	\$285,000	Theodore Roosevelt and Walt Disney Elementary Schools, John Burroughs High School, Magnolia Park District, Verdugo and George Izay Parks
I	Los Angeles River Bridge	Bob Hope Drive	Forest Lawn Drive	0.08	\$750,000	Media District, Johnny Carson Park, Regional Route
I	Chandler Connector	Mariposa Street	Downtown Burbank Metrolink Station	0.70	\$1,000,000	Burbank Metrolink Station, Regional Route
I	Palm Avenue Bridge	Downtown Burbank Metrolink Station	Palm Avenue/First Street	0.25	\$9,000,000	Burbank Metrolink Station, Downtown Burbank, Regional Route
I	San Fernando Path	Los Angeles city limit	Downtown Burbank Metrolink Station	2.95	\$7,200,000	Burbank Metrolink Station, Empire Center, Regional Route
III	Bicycle Blvd Network	Citywide		15.7	\$2,302,000	Citywide
I	South Burbank Channel Bike Path	Downtown Burbank Metrolink Station	Alameda Avenue	0.80	\$4,750,000	Burbank Metrolink Station, Regional Route Gap Closure
II	Verdugo Avenue	Clybourn Avenue	Victory Boulevard	2.75	\$120,000	Verdugo Park, Lincoln Park, Buena Vista Library, Residential Neighborhoods, Schools
III	Verdugo Avenue	Victory Boulevard	Flower St			
III	Empire Avenue	Clybourn Avenue	Buena Vista Avenue	2.75	\$120,000	Empire Center, Media Studios North, Bob Hope Airport, Downtown Burbank, Regional Route
II	Empire Avenue	Buena Vista Avenue	San Fernando Blvd**			
II	San Fernando Boulevard	Empire Avenue**	Burbank Boulevard			
III	Olive Avenue	Victory Boulevard	Flower Street	2.30	\$65,000	Gap closures, Downtown Burbank Metrolink Station, Media District, Regional Routes
III	Pass Avenue	Magnolia Boulevard	Olive Avenue			
III	California Street	Alameda Avenue	Riverside Drive			
III	Front Street	Downtown Burbank Metrolink Station	Verdugo Avenue			
II	Amherst Drive	Glenoaks Boulevard	San Fernando Blvd	1.15	\$50,000	Downtown District, Media City Center, McCambridge Park, Burbank High School
II	Third Street	Amherst Drive	Burbank Boulevard			
III	Third Street	Verdugo Avenue	Providencia Avenue			
II	Glenoaks Boulevard	Providencia Avenue	Glendale city limit			
III	Riverside Drive	Clybourn Avenue	California Street	1.15	\$50,000	Media District, Regional Route
II	Riverside Drive	California Street	Bob Hope Drive			
II	Orange Grove Avenue	Third Street	Sunset Canyon Drive	2.50	\$130,000	Downtown District, Residential Neighborhoods
II	First Street	Verdugo Avenue	San Fernando Blvd			
II	Magnolia Boulevard	Mariposa Street	Third Street			

**The existing interchange of Interstate 5 at San Fernando Boulevard/Scott Road is being reconfigured. This reconfiguration will include a new interchange and grade separated crossing of the railroad corridor as an extension of Empire Avenue. Staff has been working closely with Caltrans to ensure that Class II bike lanes are included as part of the interchange.

TABLE 5.3: OTHER PRIORITY PROJECTS

Class	Name	From	To
II	Vanowen Street	Clybourn Avenue	Buena Vista Street
II	Ontario Street	San Fernando Boulevard	Empire Avenue
III	Fairview Street	Vanowen Street	Jeffries Avenue
III	Ontario Street	Jeffries Avenue	Chandler Path
III	Mariposa Street	Chandler Path	Palm Avenue
III	Palm Avenue	Mariposa Street	Lake Street
III	Lake Street	Palm Avenue	Glendale city limit
III	Stough Canyon Avenue	End	Lockheed View Drive
II	Walnut Avenue	Lockheed View Drive	Sunset Canyon Drive
III	Walnut Avenue	Sunset Canyon Drive	Glenoaks Boulevard
III	Tulare Avenue	Burbank Western Channel Path	6 th Street
II	6 th Street	Scott Road	Birmingham Road
III	6 th Street	Birmingham Road	Alameda Avenue
II	Lincoln Street	San Fernando Boulevard	Empire Avenue
II	Edison Boulevard	Oxnard Street	Hollywood Way
III	Hollywood Way	Edison Boulevard	Chandler Path
III	Cohasset Street	Hollywood Way	Ontario Street
II	Cohasset Street	Ontario Street	Glenoaks Boulevard
III	Avon Street	San Fernando Boulevard	Cohasset Street
III	Sunset Canyon Drive	Walnut Avenue	Glendale city limit
II	Harvard Road	Wildwood Canyon Road	Sunset Canyon Drive
III	Alameda Avenue	Glenoaks Boulevard	San Fernando Boulevard
II	Alameda Avenue	San Fernando Boulevard	Keystone Street
III	Alameda Avenue	Keystone Street	Riverside Drive
I	Coast Mainline Path	Pacific Avenue	San Fernando Path
III	Pacific Avenue	Coast Mainline Path	Keystone Street
I	Pacific Park-Vanowen Path	Vanowen Street	Pacific Avenue
II	Eton Drive	Glenoaks Boulevard	6th Street
III	Eton Drive	6th Street	Kenneth Road
III	Glenoaks Boulevard	Los Angeles city limit	Providencia Avenue
II	Clybourn Avenue	Victory Boulevard	Chandler Path
III	Jeffries Avenue	Clybourn Avenue	Lincoln Street
III	Olive Avenue	Los Angeles city limit	Sunset Canyon Drive
I	South San Fernando Path	Front Street	Alameda Avenue

Map 5.1 shows the proposed Top Priority bikeways identified in Table 5.2 and represents Phase One of the proposed bikeway network. Map 5.2 adds Other Priority bikeways in Table 5.3 and illustrates Phase Two, the proposed fully-developed bikeway system.

5.2 Bicycle Parking

Through the City's Zoning Ordinance all new non-residential development, based on the square footage will require bicycle parking are part of the project. These requirements will continue to provide bicycle parking facilities in new development. However some modification should be made to the existing Code; bicycle parking requirements should coincide with the development's required vehicle parking. As the mode share goal for bicycle travel is five-percent, the bicycle parking requirement should equal five-percent of the required vehicle parking. Additional modifications should be made to help ensure that all facilities are convenient, consistent, and effective. The following modifications would require an official amendment to the City's Municipal Code and therefore City Council approval. It is recommended that any amendments to the City's code convey the following:

- IN COMMERCIAL ZONES, HALF OF ALL REQUIRED BICYCLE PARKING SHOULD BE LONG-TERM PARKING AVAILABLE TO COMMUTING EMPLOYEES (CLASS I) AND HALF SHOULD BE SHORT-TERM PARKING AVAILABLE TO THE PUBLIC AND BE DIRECTLY VISIBLE AND ACCESSIBLE FROM THE STREET (CLASS II)
- BICYCLE RACKS SHOULD PROVIDE FOR LOCKING AT TWO POINTS AND WHERE POSSIBLE SHOULD NOT HOLD THE BICYCLE UPRIGHT BY THE WHEEL
- BICYCLE RACKS SHOULD BE INSTALLED NO LESS THAN 3-FEET APART TO ALLOW FOR MANEUVERABILITY AND ACCESSIBILITY

Recommendations for bike rack style and spacing are provided in Chapter 8 of this plan.

As part of the existing City-wide Bicycle Parking program, areas where large development may not occur (such as neighborhood commercial and retail areas along arterial corridors), have been retrofitted with bicycle parking along the City's right-of-way. The City will continue to implement bicycle parking in this manner as planned streetscape projects are implemented and location opportunities become available. An annual budget should be put into place to allow for the continued installation and maintenance of city-owned public bicycle parking.

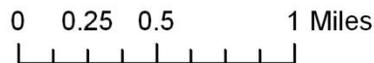
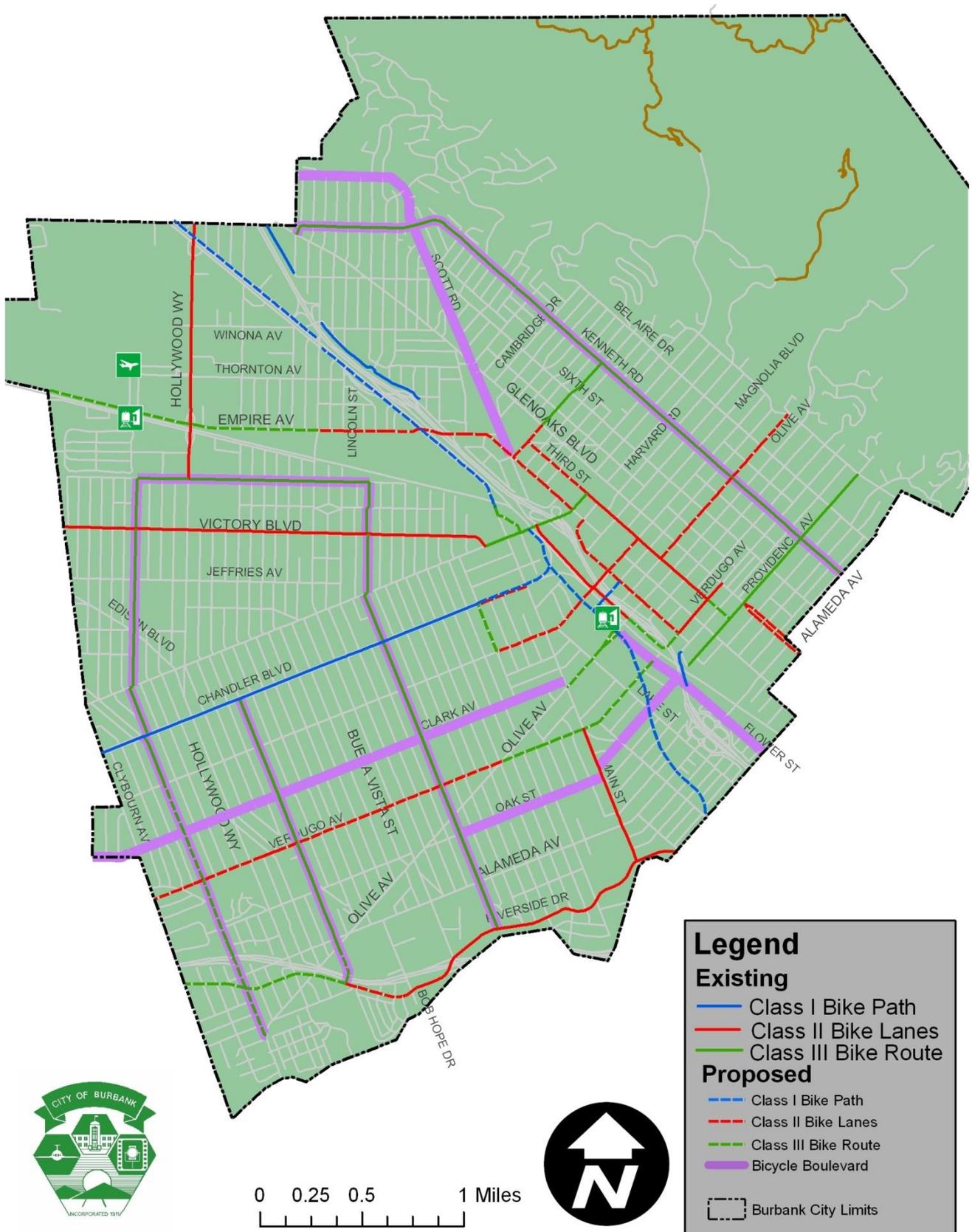
5.3 Bicycle Amenities

In order to encourage bicycle commuting, many bicyclists will need gender-segregated shower and private changing areas. The City will work with developers of new non-residential buildings to offer the option to provide shower and locker facilities that could be used by commuting bicyclists as an option to mitigate a development's traffic impacts. Where developers exercise this option the following guidelines would be encouraged:

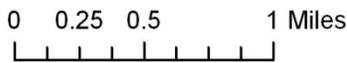
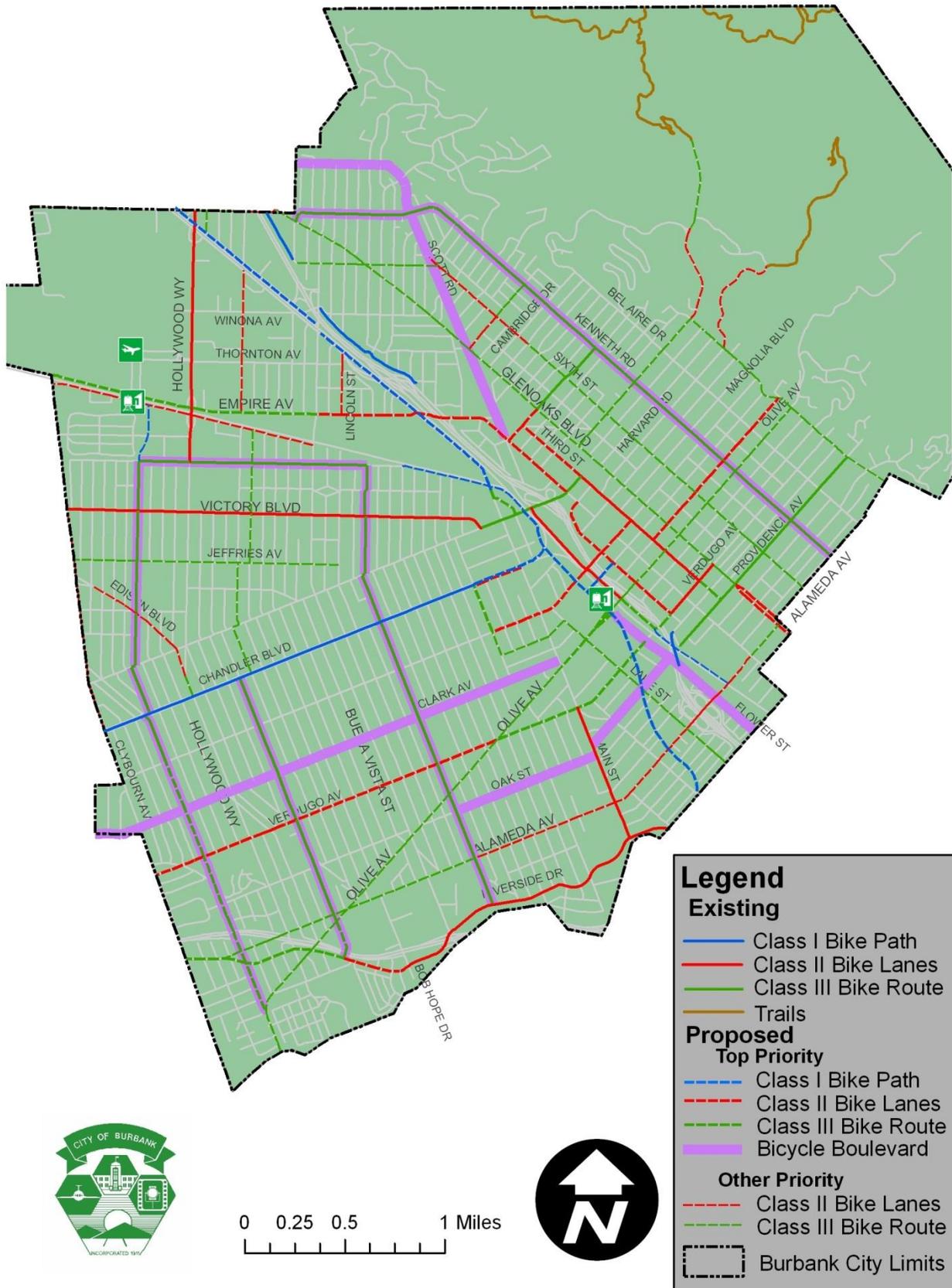
- AT LEAST ONE SHOWER AND CHANGING FACILITY SHOULD BE PROVIDED FOR EACH GENDER.
- SHOWERS SHOULD BE LOCATED ADJACENT TO CLOTHING LOCKERS AND CHANGING AREAS.
- CHANGING FACILITIES AND LOCKERS SHOULD REMAIN AVAILABLE FOR ALL BICYCLE-COMMUTING EMPLOYEES IN THE BUILDING.

Signage that is clearly legible upon approach of every automobile and pedestrian entrance should be displayed indicating the availability and location of bicycle parking, showers, and clothing locker facilities. Signs should also be clearly legible from elevators and entrances and posted at the entrance of the shower and locker rooms.

MAP 5.1 PROPOSED BICYCLE FACILITIES – TOP PRIORITY



MAP 5.2 PROPOSED BICYCLE FACILITIES – OTHER PRIORITY



5.4 Bicycle Education Program

For many cyclists and motorists the shared use of the roadway can be very intimidating. Cyclists are intimidated by the faster and obviously heavier motor vehicles and motorists are intimidated by the unpredictable behavior exhibited by many cyclists. This fear often comes deeply ingrained in our culture, a culture that has historically given preferential treatment and priority to motor vehicles. As children many young cyclists are taught by their parents to ride on the sidewalk. Their parents believe that the sidewalk is the safest place to ride as it appears to be protected from vehicular traffic. When the young cyclists grow up and begin to drive cars of their own, they continue to hold on to the idea that bicycles belong on the sidewalk. The pattern continues. In order to effectively re-educate the community regarding safe and confident cycling the education program must target all age groups and community stakeholders.

This bicycle education program will utilize a multi-faceted approach intended to reach as much of the community as possible by any means feasible. The City's outreach and education opportunities include:

EDUCATION THROUGH ENFORCEMENT

The existing police education program for juveniles should be targeted for expansion to include remediation for all violators regardless of age or transportation mode. This program would consist of a course geared towards both motorists and cyclists regarding the laws pertaining to bicycling in the roadway. This educational component of the enforcement of traffic laws for bicyclists and motorists is important in order to teach those who do not properly follow the traffic laws how to safely and effectively operate their vehicle on the roadway and to avoid future traffic violations. This program may be included as a component of the City's overall safety education program.



EDUCATION THROUGH ENGINEERING

Through the process of engineering roadways with and without bicycle facilities, the City of Burbank has a tremendous opportunity to educate the community about the safe and shared use of the roadway. "Share the Road" signage and "Sharrows" street markings are a simple means of alerting roadway users that the California Vehicle Code allows cyclists to use the roadway with the same rights and responsibilities as a motor vehicle driver. This education not only benefits local residents, but rather the regional community as a whole, as motorists and cyclists cross the City of Burbank limits.

EDUCATION THROUGH ENCOURAGEMENT

Community outreach and encouragement is arguably the City's most rewarding and exciting opportunity for bicycle education. With its pulse on the community's true wants and needs, the City also gains a tremendous opportunity for self-education. The process of encouragement is relatively simple. Staff will

utilize any and all opportunities to reach out to the public to keep bicycling in the minds of community members. These opportunities may include:

- CONDUCT COMMUNITY MEETINGS AND/OR CHARRETTES
- MAINTAIN THE BURBANKBIKE.ORG WEBSITE TO PROVIDE GENERAL BICYCLING INFO AND CONDUCT COMMUNITY OUTREACH SURVEYS
- ORGANIZE AND PARTICIPATE IN EVENTS LIKE BIKE FAIRS, RACES, OR BIKE WEEK/BIKE TO WORK DAY
- CONDUCT DEMONSTRATIONS AND/OR SPEAKING EVENTS AT LOCAL SCHOOLS, BUSINESSES, OR COMMUNITY EVENTS
- PARTNER WITH LOCAL BUSINESSES TO PROVIDE INCENTIVES TO BICYCLE COMMUTERS
- PARTNER WITH NEIGHBORHOOD ORGANIZERS TO DEVELOP A BICYCLE REPAIR CO-OP
- PARTNER WITH LOCAL BUSINESSES AND LAW ENFORCEMENT TO ESTABLISH A REWARD PROGRAM WHERE YOUTH PRACTICING SAFE CYCLING TECHNIQUES RECEIVE “GIVE-A-WAYS” LIKE GIFT CARDS
- ESTABLISH A COMMUNITY BASED BICYCLE SHARING PROGRAM
- PURSUE OPPORTUNITIES TO DEVELOP TECHNOLOGY BASED CYCLING TOOLS LIKE GPS ROUTE MAPPING AND TRACKING OR BICYCLE RELATED SOCIAL NETWORKING



Additionally, the City should implement a bicycle marketing campaign which through branded promotional items would increase awareness about bicycling related issues and programs.

BICYCLE SAFETY EDUCATION

A bicycle safety education program will be encouraged as part of this Plan and would teach bicycle safety to children, adults, and other groups that encounter bicyclists. A specific curriculum geared for each audience, along with a handbook or other literature, is recommended.

YOUTH SPECIFIC

The Burbank youth safety education program will be comprised of three parts:

- DEMOS – City staff will hire a consultant to organize and conduct three assembly style bike safety demonstrations. Each of the demos will be conducted during regular school hours at each of the three public middle-schools (Burbank Unified School District). The demonstrations will include professional bicyclists who will perform stunts for the students and talk to them about bicycle safety. These demonstrations will serve as a kick-off for the youth safety education program and inform the students about what the program offers. At the end of each of the events staff will answer questions, provide educational materials, and create an interest list for further education.
- FOOT 2 PEDAL – In the spirit of a bike rodeo or the League of American Bicyclists Kids II class, the foot2pedal program will teach students how to interact with the roadway and traffic. Whether they are walking or biking, the goal of the course is to increase safety awareness and confidence of the student. The class will cover everything from using the different intersection devices, bicycling in the roadway, bicycle safety inspections, and helmet fit. The course will use a combination of simulation and hands on training to teach the student how to make safe decisions while walking or riding within the roadway. The training will utilize chalk, cardboard cut-outs, and other techniques to simulate possible roadway conditions/hazards. Classes will be conducted on a safe flat area on local public parks and/or school grounds. Registration will be required prior to class and parents will be encouraged to attend (though not required). Funding will cover all incidental operation costs including marketing and facility use permits.

- RE(CYCLE)** – A staff of trained (paid or volunteer) instructors will provide community youth with the basic skills necessary to operate and maintain a safe and ride-able bicycle. Students will be coached to conduct safety checks on their own bicycles, fix flat tires, and perform other basic repairs. Through the collection of unwanted bicycles, students who do not have their own bicycle will be provided with a suitable bicycle which they can repair themselves. Classes will be conducted twice a month during the regular school year (one weekday evening and one weekend day) and an additional day class will be provided once a month during the summer. All tools and necessary equipment will be purchased for the program and provided to the youth during class time. Again, registration will be required prior to class and parents will be encouraged to attend (though not required). The program will utilize a centrally located existing facility to conduct classes and store materials as needed.



ADULT SPECIFIC

The League of American Bicyclists has developed a series of bicycling courses with a standardized curriculum. Courses are taught by League Cycling Instructors (LCI) and cover everything from vehicular cycling and bicycle commuting to motorist education. LCI's must complete a strenuous certification process in order to be eligible to teach courses. The standardized course curriculums could be taught by LCI certified City staff and offered to residents and community members through an enrollment process. The courses can be specifically geared towards bicycling in Burbank and the challenges cyclists may face. For example students who complete the "Traffic Skills 101" course would learn how to ride more confidently with traffic, avoid crashes, and perform safety checks on their own bicycle. They would learn best practices for navigating around barriers like freeway and rail corridors.



The overall result would be a more effective and predictable cycling community. Safety risks would be decreased for all roadway users as trained cyclists provide an example to the motoring public of safe cycling techniques.

6.0 Implementation and Funding

6.1 Existing and Future Bicycle Commuting Ridership Forecast

TABLE 6.1: RIDERSHIP FORECAST AND AIR QUALITY ANALYSIS

Forecast Parameters	Burbank
Population	100316
Bicycle-to-Work Commuters	356
Transit-to-Work Commuters	1240
Students: 5 th -12 th grade	9488
Students: College	5805
Total Bicycle Commuters	2483
Current Daily Bicycle Commuters	5963
Current Vehicle Miles Reduced per Weekday	5445
Future Daily Bicycle Commuters	9600
Future Vehicle Miles Reduced per Weekday	8767
Future Reduced CO2 (lbs/weekday)	438.3

Table 6.1 shows the projected mode share of bicycling for the City of Burbank. This forecast is based on census data and a demand model methodology developed by Metro staff as part of the 2009 Call for Projects process, which estimates the number of bicycle commuters if an expanded bikeway network were to be implemented. Much of the information is extrapolated using 2000 U.S. Census data and a variety of other resource materials. A complete copy of Metro's bicycle demand model output and references is included in this plan as part of the Appendix.

As the table shows, the estimated number of future daily bicycle commuters is 9,600. These estimates would result in a reduction of 8,767 vehicle miles traveled each weekday. This reduction would in turn result in air quality improvements and a reduction of carbon-based emissions amounting to approximately 438.3 pounds per day.

6.2 Past Expenditures for Bicycle Facilities

Prior to the 2003 City of Burbank Bicycle Master Plan, the City funded most of the bikeway development, with the exception of the Class II bike lanes along Riverside Drive (this was funded privately by the Disney Company as transportation mitigation). Opening in 2004, the Chandler Bike Path was funded primarily through Metro's Call for Projects process. A grant of approximately \$1-million was awarded to the City of Burbank and the City of Los Angeles for construction of a bike path which extended from Mariposa Street in Burbank to the North Hollywood Metro Station. Since that time the City of Burbank has been actively pursuing funding opportunities for bicycle projects and has constructed nearly 20-miles of Class I, II, and III bicycle facilities. Most of these expenditures have been funded with non-local funds.



TABLE 6.2: PAST BIKEWAY FUNDING SOURCES

Class	Street/Path	Length	Primary Funding Source	Cost
II	Main St	0.20	Safe Routes to School	\$42,500
II	Third St	0.79	Transportation Impact Fee	\$70,000
II	Verdugo Ave	0.41	Transportation Impact Fee	\$35,000
II	Hollywood Way	1.01	Bicycle Transportation Account	\$305,000
II	Victory Blvd	2.10	Bicycle Transportation Account	\$480,900
III	Burbank Blvd	0.54		
II	Front St	0.64		
III	Keystone St	2.32	Safe Routes to School	\$100,500
III	California St	1.28		
III	Maple St/Pass Ave	1.53		
III	Pacific Ave	1.14		
III	Amherst Dr	0.64		
III	Providencia Ave	1.33		
III	Kenneth Rd	3.40		

6.3 Public Process

Public input has played a crucial role during the development of this plan. In mid-2008 an online survey was posted to the BurbankBike.org website and advertised through community events, the Burbank Transportation Management Organization, local Burbank TV Channel 6, the Los Angeles County Bicycle Coalition, and the Burbank Leader. Over a ten-month period 350 residents, students, and local employees responded to the survey. One of the stand-out themes, which seemed to be echoed throughout the responses, was the need for more safety education and outreach.

In October 2008 staff conducted a community meeting based on preliminary results from the survey and feedback received from previous outreach efforts. The purpose of the meeting was to gain more in-depth feedback from the community, expanding on the information previously received. Based on the feedback received, staff was able to enhance the goals and objectives of the Bicycle Master Plan, prioritize the list of projects, and develop a more creative approach to expanding a bicycle network in an urban, built-out city. The meeting was standing room only, which included a large group of local youth seeking recreational bicycle facilities like trails and a bike park (with ramps and bowls for tricks). Additionally, the concept of Bicycle Boulevards and how they can be implemented in Burbank was derived based in large part to the feedback that was received during this meeting.

These ideas were then presented to the City of Burbank Transportation Commission in mid-2009. The presentation included a new, more detailed, safety education program and a breakdown of the Bicycle Boulevard Toolbox. The Transportation Commission supported these new components and recommended that staff move forward with the development of the City of Burbank Bicycle Master Plan. The completed plan was presented to, and feedback was received from the following groups:

- TRANSPORTATION COMMISSION
- TRAFFIC COMMISSION
- PARKS AND RECREATION BOARD
- PLANNING BOARD
- SUSTAINABLE BURBANK TASKFORCE

The completed draft of this document was made available for public review prior to its finalization. As part of the public review process, staff conducted another community meeting to present the document and the new programs and projects to the public. The goal of the follow-up meeting was to answer any questions and bring in any additional feedback. All feedback received was incorporated into the plan prior to its presentation to City Council for approval.

The City of Burbank recognizes that the “devil is in the details” and understands that each individual project within this plan may have an impact to adjacent residential and commercial uses. Therefore, prior to implementation, each of the individual projects will require direct neighborhood outreach to educate residents and stakeholders of the intent and goal of the project. Property owners adjacent to the proposed facility will be invited to provide feedback in order to ensure that the needs of the community and the bicyclists are being met.

6.4 Consistency with other Planning Efforts

State Streets and Highways Code Section 891.2 requires that all bicycle plans demonstrate consistency with other transportation, air quality, and energy plans. This section analyzes the consistency of the City of Burbank Bicycle Master Plan with local, county, regional, and state plans.

COORDINATION WITH OTHER CITIES

This Plan has been coordinated with the cities of Glendale and Los Angeles in order to ensure bikeway connectivity across jurisdictional boundaries. In particular, the City has worked closely with the Los Angeles Department of Transportation, City of Glendale staff, and Los Angeles elected officials in the council district bordering Burbank in planning for the Chandler Bikeway, San Fernando Bikeway, and Los Angeles River Bikeway and related connectors.

COORDINATION WITH OTHER CITY OF BURBANK PLANS

The Bicycle Plan will be part of, and therefore consistent with, the City of Burbank’s Mobility Element. The Mobility Element, which is currently being updated and is scheduled for adoption in 2010, outlines all future transportation needs in the City and recommends improvements and sets policy to address these needs. The Bicycle Plan is consistent with the Burbank Center Plan and the Media District Specific Plan, which encourage non-motorized transportation as a means of reducing vehicle trips within the Plan areas. It also supports the City’s Sustainable Action Plan, which encourages non-motorized transportation modes as a means to reduce the City’s overall impact on the environment.

COORDINATION WITH REGIONAL PLANS

This Plan supports regional transportation goals, including those of the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), and the Los Angeles County Metropolitan Transportation Authority (Metro). The SCAQMD delegates its transportation planning to SCAG through its Regional Transportation Plan (RTP) document, which identifies goals and objectives that promote bicycling and reducing air emissions. An emphasis on utilitarian bicycling, including supporting amenities and infrastructure, is an important aspect of meeting these goals. The SCAG Regional Mobility Plan incorporates the Metro Countywide Bicycle Transportation Strategic Plan. This plan includes local bicycle routes in Burbank that will link with those in the Metro Plan. Additionally, by encouraging bicycling as a viable means of transportation, the City of Burbank Bicycle Master Plan will also meet the goals of efforts to reduce energy consumption.

6.5 Funding

There are a variety of potential funding sources including local, state, regional, and federal funding programs that can be used to construct the proposed bicycle improvements outlined in this plan. 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. A detailed program-by-program of available funding programs along with the latest relevant information is provided on the following pages. The funding sources are described in the following section.

CALL FOR PROJECTS

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

Every other year, Metro accepts Call for Projects applications in seven modal categories. Local jurisdictions, transit operators, and other public agencies are encouraged to submit applications proposing projects for funding. Metro staff ranks eligible projects and presents preliminary scores to Metro's Technical Advisory Committee (TAC) and the Metro Board of Directors for review. Upon approval, the TIP is developed and formally transmitted to the regional and state transportation planning agencies. The TIP then becomes part of the five-year program of projects scheduled for implementation in Los Angeles County.

Project sponsors are required to either execute a Letter of Agreement (LOA) for projects being funded with State or Federal funds or a Memorandum of Understanding (MOU) for those funded with local sales tax dollars. The LOA or MOU must be executed in the first year that funds are available and prior to starting any work on the project. They include a general description of the project and the specific work elements to be completed, the source of all funds that will be used to complete the project and the project's cash flow..

SAFE ROUTES TO SCHOOL (AB1475)

The Safe Routes to School program is a state program using allocated funds from the Hazard Elimination Safety program of SAFETEA-LU. This program, initiated in 2000, is meant to improve school commute routes by eliminating barriers to bicycle and pedestrian travel through rehabilitation, new projects, and traffic calming. A local match is required for this competitive program. Planning grants are not available.

BICYCLE TRANSPORTATION ACCOUNT (BTA)

The State Bicycle Transportation Account (BTA) is an annual statewide discretionary program that is available through the Caltrans Bicycle Facilities Unit for funding bicycle projects. Available as grants to local jurisdictions, the emphasis is on projects that benefit bicycling for commuting purposes. Agencies may apply for these funds through the Caltrans Office of Bicycle Facilities. Applicant cities and counties are required to have a bicycle plan that conforms to Streets and Highways Code 891.2 in order to qualify to compete for funding on a project-by-project basis. The City of Burbank may apply for these funds through the Caltrans Office of Bicycle Facilities.

TDA ARTICLE 3 (SB 821)

Transportation Development Act Article 3 funds are used by cities within Los Angeles County for the planning and construction of bicycle and pedestrian facilities. Metro is responsible for administering this program and establishing its policies.

These funds are allocated annually on a per capita basis to both cities and the County of Los Angeles. Local agencies may either draw down these funds or place them on reserve. Agencies must submit a claim

form to Metro by the end of the fiscal year in which they are allocated. Failure to do so may result in the lapsing of these allocations.

TDA Article 3 funds may be used for the following activities related to the planning and construction of bicycle and pedestrian facilities:

- ENGINEERING EXPENSES LEADING TO CONSTRUCTION.
- RIGHT-OF-WAY ACQUISITION.
- CONSTRUCTION AND RECONSTRUCTION.
- RETROFITTING EXISTING BICYCLE AND PEDESTRIAN FACILITIES, INCLUDING INSTALLATION OF SIGNAGE, TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
- ROUTE IMPROVEMENTS SUCH AS SIGNAL CONTROLS FOR CYCLISTS, BICYCLE LOOP DETECTORS, RUBBERIZED RAIL CROSSINGS AND BICYCLE-FRIENDLY DRAINAGE GRATES.
- PURCHASE AND INSTALLATION OF BICYCLE AND PEDESTRIAN FACILITIES, SUCH AS IMPROVED INTERSECTIONS, BULB-OUTS, SECURE BICYCLE PARKING, BENCHES, DRINKING FOUNTAINS, CHANGING ROOMS, REST ROOMS AND SHOWERS WHICH ARE ADJACENT TO BICYCLE TRAILS, EMPLOYMENT CENTERS, PARK-AND-RIDE LOTS, AND/OR TRANSIT TERMINALS AND ARE ACCESSIBLE TO THE GENERAL PUBLIC.

AB 2766

AB 2766 Clean Air Funds are generated by a surcharge on automobile registration. The South Coast Air Quality Management District (AQMD) allocates 40 percent of these funds to cities according to their proportion of the South Coast's population for projects that improve air quality. The projects are up to the discretion of the city and may be used for bicycle or pedestrian projects that could encourage people to bicycle or walk in lieu of driving. The other 60 percent is allocated through a competitive grant programs that has specific guidelines for projects that improve air quality. The guidelines vary and funds are often eligible for a variety of bicycle or pedestrian projects.

CITY OF BURBANK TRANSPORTATION IMPACT FEE

A Transportation Improvement Fee is imposed on all new non-residential development in the City of Burbank for the purpose of assuring that the transportation level of service goals of the City are met with respect to the additional demands placed on the transportation system by traffic generated from such development. Funds derived from payment of Transportation Improvement Fees can be used solely and exclusively for the purpose of funding transportation improvements. These funds can be used to match other leveraged funds.

CONGRESSIONAL APPROPRIATIONS AND FEDERAL TRANSPORTATION LEGISLATION

Congress annually considers several appropriations measures, which provide funding for numerous activities including transportation infrastructure. House and Senate representatives submit requests for consideration on behalf of their constituencies. The City of Burbank, through its representatives, has an opportunity to receive federal funds through this process.

7.0 Top Priority Projects

This Chapter of the Plan outlines in greater detail the top priority bikeway projects identified in Table 4.1 in Chapter 4. These projects have been identified as top priority given the criteria outlined in the previous chapter. The following includes a description of each project, a planning-level cost estimate for implementation, and graphics if appropriate. The listing of projects in this section denotes no further ranking. They are all considered top priority and may be implemented in any order based on the availability of funding sources.

7.1 Detailed Project Descriptions

PROJECT 1: BICYCLE SAFETY EDUCATION PROGRAM

EXISTING PROBLEM: SAFETY CONCERNS ARE A BARRIER TO BICYCLES AS A TRANSPORTATION MODE

Estimated Cost: \$175,000

Background

Many people don't ride bicycles or walk because they believe it is not safe to do so. The primary reason listed by survey respondents for not riding a bicycle was safety concerns. Although physical improvements such as signage and adding more facilities can make a difference, it is also imperative that all bicyclists know how to ride safely. Sometimes the fix is not to add more signage or stripping but to teach a potential cyclist how to ride with confidence. Knowing how to ride safely will encourage people to bicycle more confidently, more often, and along more routes. Safety education programs teach people of all ages and lifestyles how to ride safely and effectively on paths, streets, and in traffic.

The Program

A bicycle safety education program will be encouraged as part of this Plan and would teach bicycle safety to children, adults, and other groups that encounter bicyclists. A specific curriculum geared for each audience, along with a handbook or other literature, is recommended.

YOUTH SPECIFIC

The Burbank youth bicycle safety education program will be comprised of three parts:

- **DEMOS** – City staff will hire a consultant to organize and conduct three assembly style bike safety demonstrations. Each of the demos will be conducted during regular school hours at each of the three middle-schools(Burbank Unified School District). The demonstrations will include professional bicyclists who will perform stunts for the students and talk to them about bicycle safety. These demonstrations will serve as a kick-off for the youth safety education program and inform the students about what the program offers. At the end of each of the events staff will answer questions, provide educational materials, and create an interest list for further education.
- **FOOT 2 PEDAL** – In the spirit of a bike rodeo or the League of American Bicyclists Kids II class, the foot2pedal program will teach students how to interact with the roadway and traffic. Whether they are walking or biking, the goal of the course is to increase safety awareness and confidence of the student. The class will cover everything from using the different intersection devices, bicycling in the roadway, bicycle safety inspections, and helmet fit. The course will use a combination of simulation and hands on training to teach the student how to make safe decisions while walking or riding within the roadway. The training will utilize chalk, cardboard cut-outs, and other techniques to simulate possible roadway conditions/hazards. Classes will be conducted on a safe flat area on local public parks and/or school grounds. Registration will be required prior to class and parents will be encouraged to attend (though not required). Funding will cover all incidental operation costs including marketing and facility use permits.

- **RE(CYCLE)** – A staff of trained (paid or volunteer) instructors will provide community youth with the basic skills necessary to operate and maintain a safe and ride-able bicycle. Students will be coached to conduct safety checks on their own bicycles, fix flat tires, and perform other basic repairs. Through the collection of unwanted bicycles, students who do not have their own bicycle will be provided with a suitable bicycle which they can repair themselves. Classes will be conducted twice a month during the regular school year (one weekday evening and one weekend day) and an additional day class will be provided once a month during the summer. All tools and necessary equipment will be purchased for the program and provided to the youth during class time. Again, registration will be required prior to class and parents will be encouraged to attend (though not required). The program will utilize a centrally located existing facility to conduct classes and store materials as needed.

ADULT SPECIFIC

The League of American Bicyclists has developed a series of bicycling courses with a standardized curriculum. Courses are taught by League Cycling Instructors (LCI) and cover everything from vehicular cycling and bicycle commuting to motorist education. LCI's must complete a strenuous certification process in order to be eligible to teach courses. The standardized course curriculums could be taught by LCI certified City staff and offered to residents and community members through an enrollment process. The courses can be specifically geared towards bicycling in Burbank and the challenges cyclists may face. For example students who complete the "Traffic Skills 101" course would learn how to ride more confidently with traffic, avoid crashes, and perform safety checks on their own bicycle. They would learn best practices for navigating around barriers like freeway and rail corridors.

The overall result would be a more effective and predictable cycling community. Safety risks would be decreased for all roadway users. And the pattern of misinformation from one generation to the next would be forever changed for each individual impacted.

MOTORISTS

Safety education should reach anyone who would come into contact with bicyclists even if they were not cyclists themselves. This most certainly includes motorists on the roadways. Motorists as well as bicyclists need to be informed of the rules and laws of the road that pertain to bicycling in traffic. Motorist education will make motorists aware of cyclists' correct lane positioning and rights on the road to ensure the safe co-existence of bicyclists and motorists on streets and roadways.

However, reaching out to the motoring community becomes a difficult task when most motorists do not actively seek traffic related training courses when these courses are not required. This type of education requires a different approach. This can only be accomplished through broad outreach, such as

- PARTNERING WITH LAW ENFORCEMENT TO ENSURE VEHICLE REGULATIONS RELATED TO BICYCLES IN THE ROADWAY ARE INCLUDED IN TRAFFIC SCHOOL PROGRAMS,
- ESTABLISHING A "SHARE THE ROAD" MARKETING CAMPAIGN, OR
- ORGANIZING/PARTICIPATING IN COMMUNITY EVENTS

OTHER GROUPS

Safety education should be taught to other people who come in to contact with bicyclists or who are involved in bicycle programs. These groups of people may include Metro and BurbankBus drivers, Burbank Police officers, and city staff who work with planning, public works and parks projects. Bicycle safety education can be incorporated into existing training or orientations.

Education programs are often sponsored by municipalities or school districts, and paid for by grants. The State Office of Traffic Safety grant program and the Safe Routes to School program have been important sources of grant money for safety education programs. Burbank should pursue funds through these grant opportunities.

PROJECT 2: CLARK AVENUE BICYCLE BOULEVARD

EXISTING PROBLEM: LACK OF AN EAST-WEST CONNECTION TO SCHOOLS AND INCREASING SCHOOL-RELATED TRAFFIC CONGESTION WHICH SERVES AS A DETERRENT TO STUDENTS COMMUTING TO SCHOOL BY BICYCLE

Project Limits: Clybourn Avenue to Victory Boulevard

Length: 2.30 miles

Estimated Cost: \$285,000

Project Summary

This project would enhance Clark Avenue by connecting schools and parks along the primarily residential corridor with a bicycle boulevard by using a series treatments designed to slow and reduce traffic, thereby maintaining the residential nature of the neighborhood, and increasing safety for both cyclists and pedestrians alike.

Existing Conditions

Clark Avenue is a quiet residential street with a wonderful tree canopy that makes it inviting to all users. During the morning hours the street backs up adjacent to John Burroughs High School and Theodore Roosevelt and Walt Disney Elementary Schools with parents dropping off their students. The street currently has traffic signals at Hollywood Way and Buena Vista Avenue. Four-way stop controlled intersections are located at Pass Avenue, Cordova Street, California Street, Fairview Street, Catalina Street, Naomi Street, Keystone Street, Parish Place, Reese Place, and Griffith Park Drive.

Proposed Project Description

This project would establish Clark Avenue as a Class III bicycle facility, with Bike Route and Share the Road signage as well as way-finding signage to point towards key destinations like schools, parks, libraries, transit facilities, and major commercial districts. Additionally large “sharrow” street markings will be installed along the entire corridor. Existing four-way stop intersections will be converted to two-way stop intersections with the stops signs on the north-south streets to remain, except at the following intersections:

- PASS AVENUE
- CALIFORNIA STREET
- CATALINA STREET
- KEYSTONE STREET
- PARISH PLACE
- GRIFFITH PARK DRIVE

At these intersections all stop signs will be removed and a neighborhood traffic circle will be installed. The purpose of these will be to prevent Clark Avenue from being used as detour when Magnolia Boulevard to the north and Verdugo Avenue/Olive Avenue to the south are congested.



To further prevent cut-through traffic, additional treatments will be considered at the signalized intersections of Hollywood Way and Buena Vista Street. At these locations consideration will be given to installing a semi-diversion treatment. These treatments would restrict motor-vehicle cross traffic while allowing bicycles and pedestrians to cross. The diverters will allow left and right-in and right-out traffic movements and will include a cut-out for a through bike lane with bicycle detection. The right-in/right-out treatment at the Victory Boulevard intersection will remain with the addition that bicycles will be allowed to make the left-in/left-out movement after yielding to the Victory Boulevard traffic.

Finally at the Cordova Street, Lamer Street, and Mariposa Street intersections bulb-outs will be installed with high-visibility “zebra” crosswalks to further slow traffic and increase safety for pedestrians crossing to access the adjacent schools.

PROJECT 3: LOS ANGELES RIVER BRIDGE

EXISTING PROBLEM: LACK OF A CONNECTION BETWEEN BICYCLE DESTINATIONS SOUTH OF THE LOS ANGELES RIVER AND THE BURBANK MEDIA DISTRICT

Project Limits: Bob Hope Drive to Forest Lawn Drive
 Length: 0.08 miles
 Estimated Cost: \$750,000

Project Summary

This project would construct a Class I bicycle bridge across the Los Angeles River at Bob Hope Drive, connecting the Burbank Media District with existing Bike Lanes along Forest Lawn Drive, Griffith Park, and the planned extension of the Los Angeles River Bikeway.

Existing Conditions

The Los Angeles River currently presents a barrier to bicycle travel between the City of Burbank and the City of Los Angeles to the south. The only points to cross the river are at Riverside Drive to the east and Barham Boulevard to the west. Nestled between these two-access points is the largest employment center in the area, the Burbank Media District. The Media District is home to Saint Josephs Hospital, three major studios (Disney, Warner Brothers, and NBC) as well as numerous other media support businesses. As part of the community outreach survey, respondents were asked to select three projects they would most like to see implemented. More than 60 percent of survey respondents selected this project, the highest response rate of all the choices.



Proposed Project Description

Bob Hope Drive currently terminates at the Los Angeles River, adjacent to Johnny Carson Park. This proposed project would construct bicycle and pedestrian bridge across the Los Angeles River. On the southern-side of the river a Class I Bike Path would be constructed connecting the bridge to the existing intersection at Forest Lawn Drive and Memorial Drive. The traffic signal would be enhanced with bicycle detectors to allow cyclist to use the signal to safely cross Forest Lawn Drive and access the existing Bike Lanes on either side of the street. The project would be designed to accommodate and minimize any conflicts between bicyclists and the current equestrian users who use an existing dirt trail on the north side of the river. As this project essentially straddles the city boundary between Los Angeles and Burbank, strong coordination between the two cities will be required to ensure its implementation. Future plans for the Los Angeles River Bike Path include an extension along the south-side of the river. Once implemented, the bridge will also provide a direct connection between this regionally significant bike path and the Burbank Media District.

PROJECT 4: CHANDLER BIKEWAY EXTENSION

EXISTING PROBLEM: LACK OF CONNECTIVITY BETWEEN THE EASTERN TERMINUS OF THE CHANDLER BIKEWAY AND THE DOWNTOWN BURBANK METROLINK STATION.

Project Limits: Mariposa Street to the Downtown Burbank Metrolink Station

Length: 0.70 miles

Project Summary

This proposed project would extend the Chandler Bikeway east to the Downtown Burbank Metrolink Station. This project would close the gap linking two regionally significant bikeways and increase connectivity to the Downtown Burbank Metrolink Station for cyclists and pedestrians alike. This gap has been highlighted in Metro's Bicycle Transportation Strategic Plan as essential to regional connectivity. This sentiment was further mirrored by respondents to the community survey conducted by the City of Burbank during the outreach process for the update of this plan, where about 46-percent of respondents selected this extension as one of their top three priority projects.

Existing Conditions

The existing bike path west of Mariposa Street was built along unused rail right of way. However, the tracks east of Mariposa Street remain an active rail corridor, with portions controlled by both Metro and Union Pacific Railroad. This spur is used for the pick-up and drop-off of goods from the established businesses at the corner of Victory Boulevard and Chandler Boulevard, and for maneuvering of local freight trains using the adjacent Pacific Coast and Valley lines. The frequency of trains is very low on the spur with very low speeds, and trains are expected only once a day in the early afternoon to stop, load, and depart. The spur rail corridor is approximately 40-feet wide. The distance from the rail centerline to the edge of the property is approximately 20-feet on each side. There are several obstructions adjacent to the corridor, particularly where the tracks cross Victory Boulevard which causes further barriers. These include:

- EXISTING TRAFFIC SIGNAL POLE
- TWO ACCOMPANYING POLES
- WOODEN POLE
- RAIL SWITCHING DEVICES
- RAIL CROSSING DEVICE AT VICTORY
- EXISTING BUSINESSES AND DRIVE WAYS

Due to the close proximity of Chandler Boulevard west of Victory Boulevard and the rail loading zone located east of Victory Boulevard, it is not recommended that the path be extended along the south-side of the rail spur. Along the north-side of the rail spur, west of Victory Boulevard, a brick wall delineates the property line between the rail right of way and the businesses to the north. The property immediately east of Victory Boulevard on the north-side of the rail spur is a privately owned business, approximately 250-feet beyond that property is a City-owned water treatment facility. Staff has reached out to rail operators to inquire about a potential shared use along the northern portion of the right of way. The response was less than favorable, as the railroad did not support the City's shared use proposal. Despite the high demand for an extension of the Chandler Bikeway, activity along the rail spur and the physical constraints of the corridor have necessitated the need for a more creative solution to close this gap.

Proposed Project Options

Through an analysis of all of the constraints of this corridor, the Bicycle Master Plan includes a series of potential options for closing the gap between the Chandler Bikeway's eastern terminus and the Downtown Burbank Metrolink Station. Due to the complexities of constructing this extension, each potential solution does not come without some trade-offs. The options listed below have been ranked in order of preserving a bicycle-friendly connection with limited motor vehicle interaction.

OPTION 1

This option would extend the Chandler Bikeway as a completely-separated Class I path between Mariposa Street and the Burbank Western Channel, where it would connect to the future San Fernando Bikeway. While this option is the least likely, if at any time rail operations along this rail spur were to cease or if the position of the rail operators on the shared use of this corridor were to change, the City should pursue the acquisition of property and construction of a Class I Bike Path along the entire corridor between Mariposa Street and the Burbank Western Channel.

OPTION 2

If Option 1 is not available, the next-preferred option would involve bypassing the active rail spur between Mariposa and Burbank Western Channel. This Option would install Class II Bike Lanes along Chandler Boulevard between Mariposa Street and Victory Boulevard, adjacent to the active rail spur. The existing street curb-to-curb width is 31-feet. This width accommodates ten-foot east and west bound through lanes and five-foot east and west bound bike lanes. However, in order to obtain this configuration the parking along south-side of Chandler Boulevard would need to be removed for three blocks, including two short blocks of multi-family residential and one large commercial block adjacent to a shopping center. If parking removal along the multi-family blocks is not feasible, a short Class III route could be implemented instead.

At Victory Boulevard the existing traffic signal will be upgraded to allow for bicycle detection. East of Victory Boulevard a Class I Bike Path will be constructed along the north-side of the rail corridor. To do this, a combination of City property, utility easement, and private property would be used to install a Class I bike path between the rail spur on the south, and a private business and City water treatment plant on the north. The path will then intersect the future San Fernando Bike Path which runs along the Burbank Western Channel. Grading, replacement fencing, and relocating existing utility infrastructure would be required as part of the construction of the Class I Bike Path through this portion of the corridor.

OPTION 3

This option uses on street bicycle facilities to close the gap between the Chandler Bike Path and the Downtown Burbank Metrolink Station. Along Mariposa Street, between Chandler Boulevard and Magnolia Boulevard, Class III bicycle signage and roadway markings will be installed. These will include Bike Route and Share the Road signage as well as “sharrow” roadway markings. The existing intersection at Mariposa Street and Magnolia Boulevard will be enhanced with bicycle detection.

Along Magnolia Boulevard, between Mariposa Street and Victory Boulevard, a choice of either Class II bicycle lanes or a Class III bicycle route would be installed. The choice of facility would depend on the feasibility of removing portions of the two-way center turn lane or parking along Magnolia Boulevard.

Between the Victory Boulevard intersection and the Magnolia Bridge over the rail corridor and Interstate 5, Magnolia Boulevard has sufficient right of way to accommodate the existing configuration in addition to bike lanes with a minor modification to the roadway striping. This modification is described later in this chapter as part of Project 14. On the north and south sides of the bridge, there are single lane frontage roads that lead under the bridge where cyclist would be able to access the San Fernando Bike Path that runs along the Burbank Western Channel and connects to the Downtown Burbank Metrolink Station. These frontage roads would be enhanced with directional signage and “sharrow” street markings.

PROJECT 5: PALM AVENUE BICYCLE AND PEDESTRIAN BRIDGE

EXISTING PROBLEM: LACK OF A CONNECTION BETWEEN THE DOWNTOWN BURBANK METROLINK STATION AND THE BUSINESSES IN DOWNTOWN BURBANK EAST OF INTERSTATE 5

Project Limits: Downtown Burbank Metrolink Station to Palm Avenue

Length: 0.70 miles

Estimated Cost: \$9,000,000

Project Summary

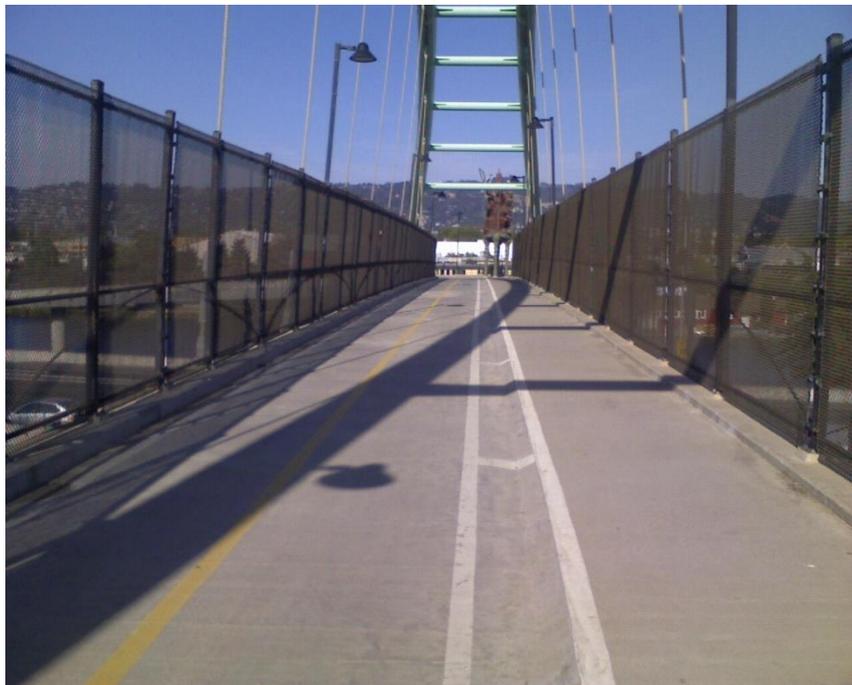
This project would construct a Class I bicycle bridge across the Interstate 5 and rail corridor at Palm Avenue, connecting the Downtown Burbank Metrolink Station with existing Downtown Burbank Commercial District and Civic Center east of the freeway.

Existing Conditions

The Interstate 5 and adjacent rail corridor currently present a barrier to bicycle travel between the Downtown Burbank Commercial District and Civic Center and the Downtown Burbank Metrolink Station. The Downtown Burbank Metrolink Station is ranked as one of the highest demand Metrolink stations, serving as both an origin and destination stop. Residents use the station as a direct access point to Downtown Los Angeles, one of the region's most significant employment centers. The major Burbank employment centers like the Burbank Media District and Downtown Burbank Civic Center attract incoming commuters from outside the city. The Metrolink Station serves as the primary transfer point to many of the City's largest employment centers. Current bicycle access between the Downtown Burbank area and the Metrolink Station is critically limited by the Interstate barrier.

Proposed Project Description

Palm Avenue terminates at Interstate 5. From this point a Bridge would progress towards the Interstate gradually reaching the accepted height of 16-feet as it crosses the Interstate. The bridge would continue gradually to a



height of 27-feet as it crosses over the rail corridor. From its peak the bridge will begin wrapping down in a slightly more southerly direction coming down adjacent to the south-bound platform of the Metrolink Station. The major constraint for the bridge will be to reach the necessary height to clear the rail corridor while minimizing the incline required to cross the bridge and maintaining ADA connectivity and compliance. The bridge will have separate pedestrian and bicycle designated lanes, delineated by striping and a slightly rolling lip between the pedestrian and bicycle lanes. Further feasibility study is needed to determine the bridge's final alignment and structure type. This feasibility study would include developing a Caltrans-approved Project Study Report and would also require coordination with railroad operators and businesses adjacent to Palm Avenue.

PROJECT 6: SAN FERNANDO BIKE PATH**EXISTING PROBLEM: LACK OF REGIONAL BIKEWAY ACCESS ALONG THE SAN FERNANDO RAIL CORRIDOR.**

Project Limits: Los Angeles city limit to the Downtown Burbank Metrolink Station

Length: 2.95 miles

Estimated Cost: \$8,240,000

Project Summary

This funded project would establish a Class I bicycle path primarily along the San Fernando railroad corridor. This path would provide for regional bicycle mobility and would link with the Burbank Metrolink Station as well as the proposed Chandler Path extension as part of this Plan. The San Fernando path is also planned to continue in the City of Los Angeles through the communities of Sun Valley, Pacoima, and Sylmar. Eighty percent of the project's estimated \$8.24 million cost is currently funded through a Metro Call for Projects grant.

Existing Conditions

The existing Valley rail corridor currently accommodates Metrolink and Union Pacific freight operations in a large 100' right of way. As part of the nearby Caltrans Empire Interchange project, the railroad tracks will be elevated through this corridor to allow for a grade separated crossing of Buena Vista Street. This project will create a ribbon of unused rail right of way that provides the opportunity to construct a bike path that would extend a regional path in Los Angeles to the Downtown Burbank Metrolink Station.

**Proposed Project Description**

This proposed project would construct a 12-foot wide dedicated off-street path located on the east side of San Fernando Boulevard and Victory Place between Cohasset Street and Lake Street, and also along the Burbank Western Channel near the Downtown Metrolink Station. As part of the Empire Interchange and the railroad grade separation being constructed at Buena Vista Street, the railroad tracks along the corridor will be relocated to the east side of the railroad right of way, and will be gradually elevated between Hollywood Way to the north and the Burbank Animal Shelter to the south. This reconfiguration will result in an approximately 30-foot wide piece of railroad right of way that will remain unused for the immediate future. The San Fernando Bikeway would be constructed in this unused right of way adjacent to the City's street right of way.

The bike path would be completely separated from traffic, and would utilize an existing bridge at Hollywood Way, and a proposed bridge at the new Empire Avenue railroad crossing, to cross over most cross streets. An exception to this would be at Buena Vista, where the bikeway would take advantage of existing crosswalks to cross this street at grade. At Lake Street and Victory Place, the bike path would end and would transition to a short on-street connection along Lake Street to the Burbank Boulevard overpass. At the Burbank overpass, the bike path would resume along a tributary of the Burbank Western Channel and would join the main channel flood control property behind the City's water treatment plant. The path would continue along the Burbank Channel and would cross under two railroad spur tracks behind Stock Lumber. At the Magnolia Overpass, the path would cross the Magnolia frontage roads near the City's Americold property and enter the Burbank Metrolink Station along the railroad tracks in City right of way.

PROJECT 7: CITY-WIDE BICYCLE BOULEVARD NETWORK

EXISTING PROBLEM: RIGHT OF WAY RESTRICTIONS AND HIGH TRAFFIC VOLUMES MAKE CYCLISTS FEEL UNSAFE WHEN RIDING IN THE ROADWAY

Project Limits: City-wide
 Length: 15.7 miles
 Estimated Cost: \$2,302,000

Project Summary

This project would develop a city-wide network of Bicycle Boulevards. Many of the roadways in the City of Burbank have existing Right of Way constraints that restrict the City's ability to install Bike Lanes. The goal of this network of Bicycle Boulevards is to provide cyclists with increased safety measures to give them the confidence they need to ride in the roadway.

CALIFORNIA STREET

Project Limits: Chandler Bike Path to Riverside Drive
 Length: 1.5 miles
 Estimated Cost: \$400,000

Existing Conditions

California Street is a primarily residential street that runs north and south between Hollywood Way and Buena Vista Street. The street is characterized by single family residential with a nice tree canopy. Traffic volumes are relatively low, however due to signalized intersections at most of the major intersections the street has been used historically as a cut-through. Speed bumps along the corridor have mitigated this behavior in the recent past. California Street is currently designated as a Class III bicycle facility between Chandler Boulevard and Alameda Avenue. The extension of this facility is included at a smaller scale as part of Project 11 of this plan. The segment of California Street between Alameda Avenue and Olive Avenue has been vacated for an office project; however bicycle through access has been included as a Condition of Approval for this project.

Proposed Project Description

This project would further enhance the existing Class III designation on California Street by adding traffic calming treatments and increasing the visibility of cyclists. Share the Road and way-finding signage will be supplemented along the corridor and large "sharrow" street markings will be installed. Traffic islands will be installed at Magnolia Boulevard and Verdugo Avenue to reduce the speed of entering traffic. The existing stop control signage at the intersection of Oak Street and California Street will be replaced by a neighborhood traffic circle. A new traffic crossing treatment will be installed at Alameda Avenue. Based on need, this may include up to and including a fully functioning traffic signal, as such the estimate cost for this portion of the project reflects the full cost of such an improvement. Maintaining the existing restrictions, semi-diverters and bicycle detection to facilitate through bicycle movements will be considered at the Alameda Avenue and Olive Avenue intersections. The existing speed bumps will be converted with "bike-friendly" channels installed to allow a bicycle tire to pass through.

FLOWER STREET

Project Limits: Downtown Burbank Metrolink Station to City of Glendale city limits
 Length: 1.0 miles
 Estimated Cost: \$26,000

Existing Conditions

Flower Street is a local street that runs between the Downtown Burbank Metrolink Station and the City of Glendale. The street is characterized by industrial and office uses. Traffic volumes are relatively low,

however due to the land use characteristics the street does have quite a bit of truck traffic. With its connection to the Downtown Burbank Metrolink Station and under-crossing of Interstate 5, Flower Street presents an excellent opportunity for bicycle travel.

Proposed Project Description

This project would establish Flower Street as a Class III bicycle facility, with Bike Route and Share the Road signage as well as way-finding signage to point towards key destinations like schools, parks, libraries, transit facilities, and major commercial districts. Additionally large “sharrow” street markings will be installed along the entire corridor. The existing signalized intersection at Alameda Avenue will be further enhanced with bicycle detection. Due to the low vehicle traffic and frequent truck traffic, traffic calming devices like diverters or traffic circles will not be necessary along this corridor.

KENNETH ROAD

Project Limits: Glenoaks Boulevard to Alameda Avenue

Length: 3.4 miles

Estimated Cost: \$770,000

Existing Conditions

Kenneth Road is a primarily residential street that runs parallel and east of Glenoaks Boulevard. The street is relatively hilly, with numerous rolling peaks and valleys. There are 18 stop controlled intersections along the corridor that when combined with the hills can make Kenneth Road a very challenging street for cyclists. Additionally there are approximately four schools that are on or adjacent to Kenneth that cause an increase in vehicular traffic during pick up and drop off periods. As Kenneth Road runs parallel to Glenoaks Boulevard, the corridor often experiences increases in cut-through traffic during peak-traffic hours, as well as a fair share high speed traffic. Kenneth Road is currently designated as a Class III bicycle facility with Bike Route signage already in place. More experienced recreational cyclists frequently use Kenneth Road as an alternative to Glenoaks Boulevard as they ride around the Verdugo Mountains between Sun Valley and Glendale.

Proposed Project Description

This project would further enhance the existing Class III designation on Kenneth Road by adding traffic calming to increase safety and visibility of the cyclists. Further Share the Road and way-finding signage will be installed along the corridor and large “sharrow” street markings will be painted on the roadway. Stop-controlled intersections along the corridor could be reoriented to better facilitate bicycle travel, and neighborhood traffic circles will be considered to further calm traffic while giving priority to bicycle travel. In addition, one additional traffic circle will be installed at the Orange Grove Avenue intersection where the route intersects a proposed Class II route

The rolling hills along Kenneth will cause complications during the design of the traffic circles. As they will be more complex to allow for proper drainage, they will also be most expensive to construct. The price estimate listed in this plan takes this increased cost into account.

KEYSTONE STREET

Project Limits: Pacific Avenue and Riverside Drive

Length: 2.4 miles

Estimated Cost: \$257,000

Existing Conditions

Keystone Street is a residential street that runs North and South through the center of Burbank east of Buena Vista Street. Keystone Street runs along the eastern edge of Disney Studios and there are four schools on or adjacent to Keystone, including John Burroughs High School. Pick-up and drop-off traffic congestion is common along Keystone in both the morning and afternoon hours. There are signalized intersections along Keystone at each of the major east/west arterials. The result of these signals has

established Keystone Street as a cut-through alternative to Buena Vista Street. To mediate this behavior, traffic median islands have been installed at a number of intersections and speed bumps have been installed along many of the residential blocks. Keystone has been designated by the City of Burbank as a Class III bicycle facility and has existing Bike Route signage along the corridor.

Proposed Project Description

This project would further enhance the existing Class III designation on Keystone Street by improving and adding upon the existing traffic calming and increasing the visibility of cyclists. Share the Road and way-finding signage will be supplemented along the corridor and large “sharrow” street markings will be installed. The existing speed bumps will be converted with “bike-friendly” channels installed to allow a bicycle tire to pass through. A neighborhood traffic circle will be installed at Oak Street and the existing stop signs will be removed. Additional traffic median islands will be installed at the following intersections:

- VICTORY BOULEVARD
- BURBANK BOULEVARD
- MAGNOLIA BOULEVARD
- VERDUGO AVENUE
- OLIVE AVENUE (NORTH-SIDE)
- ALAMEDA AVENUE (SOUTH-SIDE)
- RIVERSIDE DRIVE (NORTH-SIDE)



To improve connection to Edison Elementary School, bulb-outs and “zebra” crosswalks will be installed at Chestnut Street. The existing intersections at Verdugo Avenue and Riverside Drive will be further enhanced with bicycle detection to match the other signalized intersections along the corridor.

OAK STREET/PROVIDENCIA AVENUE

Project Limits: Keystone Street to Flower Street

Length: 1.4 miles

Estimated Cost: \$136,000

Existing Conditions

Oak Street is a primarily residential street with a nice tree canopy. The Oak Street corridor serves David Starr Jordan Middle School, a major trip generator during pick-up and drop-off periods. Providencia Avenue land use characteristics include multi-family residential, single-family residential, and light industrial uses. Both streets experience relatively low traffic speeds. The two streets are connected by Main Street, a designated Class II bicycle facility with Bike Lanes and signage.

Proposed Project Description

This project would establish both Oak Street and Providencia Avenue as Class III bicycle facilities, with Bike Route and Share the Road signage as well as way-finding signage to point towards key destinations like schools, parks, libraries, transit facilities, and major commercial districts. Additionally large “sharrow” street markings will be installed along the two streets to increase visibility for cyclists. Stop-control signage will be replaced with neighborhood traffic circles at the following intersections:

- OAK STREET AND SPARKS STREET
- OAK STREET AND MARIPOSA STREET

The speed bumps on Providencia Avenue between Victory Boulevard and Lake Street will be improved with “bike-friendly” channels to allow bicycle tires to pass through. Traffic islands will be installed where Oak Street intersects with Main Street and at the intersection of Providencia Avenue and Victory Boulevard.

PACIFIC AVENUE

Project Limits: Keystone Street to Maple Street

Length: 1.1 miles

Estimated Cost: \$350,000

Existing Conditions

Pacific Avenue is a primarily residential street that serves Pacific Park, Providencia Elementary School, and runs adjacent to a large U.S. Post Office facility. The corridor is currently designated as a Class III bicycle facility with Bike Route signage. The street experiences relatively low traffic speeds and volumes with the exception of pick-up and drop-off hours at the Providencia Elementary School. There is an existing signalized intersection at Hollywood Way, which provides a direct connection to the Class II Bike Lanes that continue along Hollywood Way north of Pacific Avenue. The Buena Vista Street intersection only has a two-way stop control, presenting a challenge for cyclist attempting to cross the high-volume arterial.



Proposed Project Description

This project would further enhance the existing Class III designation on Pacific Avenue by adding traffic calming treatments and increasing the visibility of cyclists. Share the Road and way-finding signage will be supplemented along the corridor and large “sharrow” street markings will be installed. Traffic islands will be installed on the eastbound and westbound approaches to Hollywood Way and the intersection will be enhanced with bicycle detection to provide convenient connection to the existing Class II facility. To improve connection to Providencia Elementary School, bulb-outs and “zebra” crosswalks will be installed at Ontario Street. This treatment will aid in reducing speeds along the corridor. The existing intersection at Buena Vista Street will require some type of crossing treatment. The cost estimate for this corridor includes the cost to signalize this intersection. However, refuge medians and high-visibility “zebra” crosswalks may be used as an alternative.

PASS AVENUE/MAPLE STREET

Project Limits: Pacific Avenue to Olive Avenue

Length: 2.9 miles

Estimated Cost: \$184,000

Existing Conditions

Pass Avenue and Maple Street are primarily residential streets that run north and south a few blocks west of Hollywood Way. The streets are characterized by multi-family and single-family residential under a nice tree canopy. South of Verdugo Avenue, commercial development is scattered along Pass Avenue. The corridor also provides access to Luther Burbank Middle School and Burbank Adult School on Maple Street and Warner Brothers Ranch studio campus on Pass Avenue. Traffic volumes are relatively low between

Pacific Avenue and Verdugo Avenue with the exception of pick-up and drop-off hours at the middle school. However, south of Verdugo Avenue the corridor widens with increased traffic volumes to match. North of Verdugo, speed bumps have assisted to maintain low traffic speeds and prevent cut-through traffic behaviors. Pass Avenue and Maple Street are currently designated as a Class III bicycle facility between Pacific Avenue and Magnolia Boulevard. An extension of this facility is included at a smaller scale as part of Project 11 of this plan.

Proposed Project Description

This project would further enhance and expand the existing Class III designation on Pass Avenue and Maple Street by adding traffic calming treatments and increasing the visibility of cyclists. Share the Road and way-finding signage will be supplemented along the corridor and large “sharrow” street markings will be installed. Traffic islands will be installed at Victory Boulevard and Burbank Boulevard to reduce the speed of entering traffic. The existing stop control signage at the intersection of Jefferies Avenue and Maple Street will be replaced by a neighborhood traffic circle. Between Verdugo Avenue and the State Route 134 Ramps, Class II bicycle lanes will be considered if sufficient right of way is available. Sidewalk bulb-outs and high visibility “zebra” crosswalks will be installed at the Edison Boulevard and Maple Street intersection to improve connection to Luther Burbank Middle School and the adjacent Burbank Adult School. For the purpose of slowing traffic transitioning to Toluca Park Drive, the striping will be reconfigured to establish the intersection in a more perpendicular fashion to Pass Avenue.

SCOTT ROAD

Project Limits: Naomi Street to San Fernando Boulevard

Length: 2.0 miles

Estimated Cost: \$179,000

Existing Conditions

Scott Road is a primarily residential street that runs from the base of the Verdugo Mountains to Interstate 5. The street is relatively hilly, with numerous grade changes. As Scott Road runs downhill towards Glenoaks Boulevard, the corridor often experiences its fair share of high speed traffic. These speeds are further amplified by the 45-degree angle at which Scott Road crosses two major arterials, Glenoaks Boulevard and San Fernando Boulevard. Between these major arterials Scott Road is characterized by multi-family residential on the west and Mc Cambridge Park on the east. This portion of the corridor experiences relatively high traffic volumes from these generators as well as a high instance of cut-through traffic.

Proposed Project Description

This project would establish Scott Road as a Class III bicycle facility, with Bike Route and Share the Road signage as well as way-finding signage. Additionally large “sharrow” street markings will be installed along the entire corridor. The intersection at Sixth Street will be improved to reduce the angle at which the streets intersect. The existing stop control signage at Tulare Avenue will be replaced with a neighborhood traffic circle. Sidewalk bulb-outs will be installed at Glenoaks Boulevard and San Fernando Boulevard to reduce the angle of these intersection and slow traffic transitioning to Scott Road. The intersection at Andover Drive will also receive a traffic calming treatment with pedestrian bulb-outs and high-visibility “zebra” crosswalks.

PROJECT 8: SOUTH BURBANK CHANNEL BIKE PATH

EXISTING PROBLEM: LACK OF REGIONAL BIKEWAY ACCESS BETWEEN THE DOWNTOWN BURBANK METROLINK STATION AND THE LOS ANGELES RIVER BIKE PATH.

Project Limits: Downtown Burbank Metrolink Station to Victory Boulevard

Length: 1.1 miles

Estimated Cost: \$4,750,000

Project Summary

This project would establish a Class I bicycle and pedestrian path along the Burbank Western Channel from the Downtown Burbank Metrolink Station to Victory Boulevard, improving connection between the City's busiest transit hub and the region's most significant bikeways.

Existing Conditions

The Burbank Western Channel is a Los Angeles County Flood Control facility that directs the flow of run-off water towards the Los Angeles River. The sides of the channel are vertical walls with a dirt embankment at the top. The embankments are characterized by gentle slopes away from the channel with extensive overgrowth from both native and residential plants. The communities immediately surrounding the Burbank Channel have been identified by the City of Burbank as "Focus Neighborhoods". These neighborhoods are vulnerable residential areas with a concentration of low-income residents where access to private vehicles is reduced. Planned infrastructure improvements and enhanced code enforcement activities have improved the quality of life for residents in these communities. This project would complement these efforts as well and provide a valuable alternative transportation link between these neighborhoods and the Downtown Burbank Metrolink Station.

Proposed Project Description

The preferred alignment of the pathway would begin at the Downtown Burbank Metrolink Station, just under the Olive Avenue Bridge. Following the south-side of the Olive frontage the sidewalk would be widened to meet Class I standards. Improvements would be made to the intersection at Flower to increase visibility. Continuing down Flower on the west-side of the roadway paralleling the channel, the sidewalks would again be widened to meet Class I standards. Using an existing bridge across the channel the pathway would cross to the west-side



of the channel. Primarily the pathway from this point would be paved in asphalt; consideration will be given to using concrete for the pedestrian portion of the path to further delineate uses. Fencing would be replaced to maximize safety along the pathway. Landscaping would be used to provide a higher quality experience aesthetically to users. The pathway would continue in this fashion along the west-side of the channel, crossing Verdugo Avenue at grade with enhanced crossing treatments. At Lake and Providencia, through the use of sidewalk widening and intersection improvements, the pathway would switch to the east-side of the channel and continue along the bank. At Alameda Avenue a grade-separated crossing would be accomplished by constructing an elevated underpass in the channel. On the other side of Alameda the pathway would continue along the bank of the channel toward Victory Boulevard. This alignment does not come without barriers. Grading, retaining walls, and landscaping will be necessary to level a surface to construct the bikeway. The corridor's current use as a flood control channel also presents further challenges as measures will need to be taken to ensure proper drainage. The bikeway will need to be constructed over several small drainage channels, as well as existing utility pipes.

PROJECT 9: VERDUGO AVENUE BIKEWAY

EXISTING PROBLEM: LACK OF AN EAST-WEST CONNECTION TO THE DOWNTOWN BURBANK METROLINK STATION.

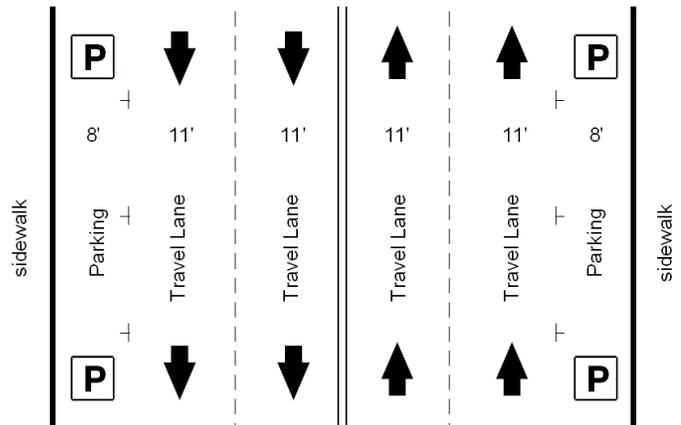
Project Limits: Flower Street to Clybourn Avenue
 Length: 2.76 miles
 Estimated Cost: \$120,000

Project Summary

This project would provide a combination Class II and III bikeway facility that would connect the neighborhoods adjacent to the Downtown Burbank Metrolink Station to key destination points in the western portion of the city, like John Burroughs High School, the Buena Vista Library, and the Burbank Media District.

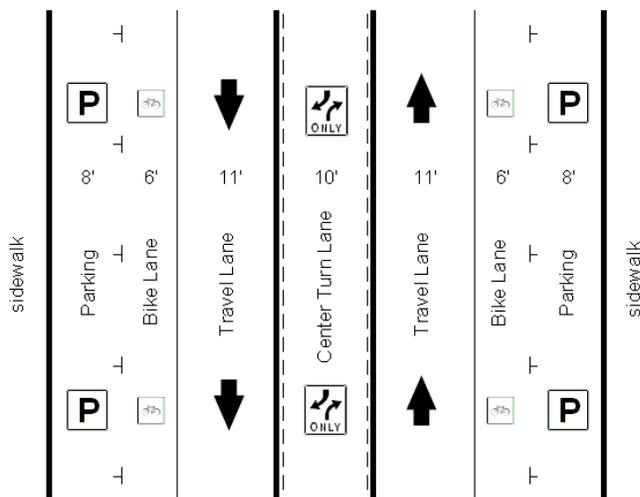
Existing Conditions

The portion of Verdugo Avenue between Hollywood Way and Olive Avenue is the most moderately traveled segment of the collector. The current configuration as seen in the diagram at right includes two travel lanes in the eastbound and westbound directions, with on-street parking along the curb. West of Hollywood Way and east of Olive Avenue (between Olive Avenue and Victory Boulevard) currently have on-street parking at the curb and one travel lane in each direction, separated by a continuous left-turn lane. East of Victory Boulevard the center turn lane drops. The entire corridor is characterized by single-family and multi-family residential with some neighborhood commercial. East of Victory Boulevard, where multi-family residential is the primary land-use, the on-street parking is dense.



Proposed Project Description

The proposed project would establish Verdugo Avenue west of Olive Avenue as a Class II bicycle facility with a six-foot striped bike lane for bicycle travel in the eastbound and westbound directions and applicable Bike Lane signage. To facilitate this improvement it is proposed that one lane of travel be removed in order to provide a center turn lane as well as bike lanes in each direction of travel as seen in the diagram at left.



Between Olive Avenue and Victory Boulevard, it is proposed that the center turn lane be removed in order to create space for bike lanes in each direction. East of Victory Boulevard Verdugo Avenue will be designated as a Class III bicycle facility with Bike Route and Share the Road signage. Additionally, large "sharrow" street markings will be installed on the roadway. A preliminary analysis of the Average Daily Traffic (ADT) volumes along this corridor suggests that the reduction in travel lanes will not significantly impact the roadway's current Level of Service (LOS). The addition of a center turn lane may improve traffic flow at intersections that currently do not have a left turn pocket.

PROJECT 10: EMPIRE AVENUE INTERCHANGE BIKEWAY**EXISTING PROBLEM: LACK OF AN EAST-WEST CONNECTION BETWEEN THE AIRPORT AND DOWNTOWN BURBANK.**

Project Limits: Clybourn Avenue to Burbank Boulevard
 Length: 2.75 miles
 Estimated Cost: \$120,000

Project Summary

This project would provide a combination Class II and III bikeway facility that would connect the neighborhoods east of Interstate 5 with the neighborhoods on the west, providing crucial connection along the Empire/San Fernando corridor between the Bob Hope Airport, Empire Center, and North San Fernando neighborhoods.

Existing Conditions

Empire Avenue and North San Fernando Boulevard are currently separated by the SCRRRA Valley Line corridor. However, CalTrans is currently finalizing the design for a new interchange at Interstate 5 and Empire Avenue, which will also elevate the rail corridor. The project will connect Empire Avenue and North San Fernando Boulevard creating a single throughway between the Bob Hope Airport in the west and the Downtown Burbank in the east. The interchange is scheduled to include bicycle lanes through the grade-separated crossing of the rail and Interstate corridors. Once completed, the project will connect Downtown Burbank, the North San Fernando commercial business district and neighborhoods, Empire Center, Golden State neighborhood, Media Studios North, and the Bob Hope Airport.

Proposed Project Description

The proposed project would establish North San Fernando Boulevard, between Burbank Boulevard and the new Empire Interchange, as a Class II bicycle facility with bike lane roadway markings and applicable signage. This Class II designation will continue on Empire Avenue between the Empire Interchange and Buena Vista Street. West of Buena Vista Street, Empire Avenue will be designated as a Class III bicycle facility with Bike Route and Share the Road signage. Additionally, large “sharrow” street marking will be installed on the roadway.

PROJECT 11: NETWORK GAP CONNECTIVITY**EXISTING PROBLEM: GAPS IN THE EXISTING NETWORK PRESENT BARRIERS THAT LIMIT CYCLISTS ABILITY TO TRAVEL.**

Length: 2.3 miles
 Estimated Cost: \$65,000

Project Summary

This project would establish Class III bicycle facilities along multiple roadways throughout the city that connect existing facilities, close existing gaps in the city-wide network, and enhance overall connectivity for bicycle travel.

Existing Conditions

The Downtown Burbank Metrolink Station is located on Front Street with additional access on from Olive Avenue via one-way frontage roads that run at-grade beside the Olive Avenue Bridge. On the Front Street side of the station there is an existing Class II facility that connects the Metrolink Station with Burbank Boulevard to the north. However, south of the station is the Verdugo Avenue on and off ramp providing access to southbound Interstate 5, the bike lanes do not continue as the Right of Way constricts to provide additional lanes to access the ramp. Front Street continues south connecting to Verdugo Avenue, which provides access under the Interstate to the Downtown Burbank area and is also designated as a

Class II bicycle facility. The gap between the bike lanes on Front Street and the bike lane on Verdugo Avenue is approximately 400-yards.

Riverside Drive is a very pleasant ride for cyclists; the corridor through Burbank sees relatively moderate traffic volumes and speeds while providing access between the Burbank Media District and the City of Glendale. The street has nice tree canopy, providing shade through the residential portions of the corridor and has Class II Bike Lanes east of Bob Hope Drive and continuing into the City of Glendale. The bicycle facility is planned to continue west of Bob Hope Drive as Project 13 of this plan. The Class III bicycle facility on Keystone Street provides access to the north. However, the Class III facilities on California Street and Pass Avenue do not currently connect with Riverside Drive and the Burbank Media District. The bike route on California Street ends at Alameda Avenue and at Magnolia Boulevard on Pass Avenue.

Proposed Project Description

This project would establish a Class III bicycle facility along four gaps in the bicycle network. The roadways will be enhanced with Bike Route and Share the Road signage, and large “sharrow” street markings will be installed along each corridor. The Class III facilities will be installed on the following:

- OLIVE AVENUE – VICTORY BOULEVARD TO THE DOWNTOWN BURBANK METROLINK STATION
- FRONT STREET – THE DOWNTOWN BURBANK METROLINK STATION TO VERDUGO AVENUE
- CALIFORNIA STREET – ALAMEDA AVENUE TO RIVERSIDE DRIVE
- PASS AVENUE – MAGNOLIA BOULEVARD TO OLIVE AVENUE

PROJECT 12: THIRD STREET BIKEWAY EXTENSION

EXISTING PROBLEM: LACK OF A BIKEWAY THROUGH THE DOWNTOWN BUSINESS AND RETAIL DISTRICT.

Project Limits: City of Glendale city limit to Mc Cambridge Park

Length: 1.15 miles

Estimated Cost: \$50,000

Project Summary

This proposed project would complete a combination Class II and III bikeway facility parallel to San Fernando Boulevard through the Downtown business and retail district. It provides access to the Downtown retail district as well as McCambridge Park, Burbank High School, and the City of Glendale.

Existing Conditions

Completed as the first phase of this project, portions of Third Street were redesigned by removing a travel lane in order to provide sufficient roadway space for Class II bike lanes. This reconfigured alignment runs from Verdugo Avenue to Burbank Boulevard. The Third Street corridor represents the eastern boundary of the Downtown Burbank district and intersects the City of Burbank Civic Center. The areas south of Verdugo Avenue and north of Burbank Boulevard are characterized by primarily multi-family residential, with heavy volumes of on-street parking. The corridor’s proximity to Glenoaks Boulevard and Downtown Burbank makes it a key connection for bicycles traveling in the City.

Proposed Project Description

This project would establish, through signage, striping, and stencils, a Class II bicycle facility on Amherst Drive between San Fernando Boulevard and Glenoaks Boulevard and Third Street between Amherst Drive and Burbank Boulevard, transitioning to the existing Class II Bike Lanes. Third Street between Verdugo Avenue and Providencia Avenue will be established as a Class III bicycle facility through the installation of Bike Route and Share the Road signage and enhanced with large “sharrow” street markings. The portion of Glenoaks Boulevard between Providencia Avenue and the Glendale city limit will be restriped with bike lanes to mirror the Class II facility on Glenoaks Boulevard in the City of Glendale.

PROJECT 13: RIVERSIDE DRIVE BIKEWAY

EXISTING PROBLEM: LACK OF A CONTINUOUS EAST-WEST BIKEWAY LINKING THE MEDIA DISTRICT TO REGIONAL BICYCLE FACILITIES.

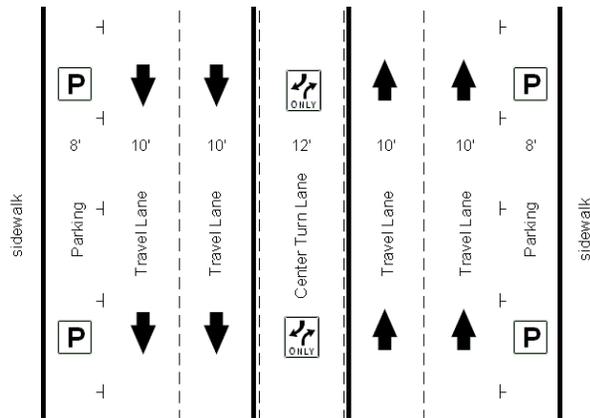
Project Limits: Clybourn Avenue/Los Angeles city limit to Bob Hope Drive
 Length: 1.15 miles
 Estimated Cost: \$50,000

Project Summary

This proposed project would provide a continuous bikeway facility through the Media District in the southern part of the City. It would link with the existing bike lanes along Riverside Drive east of Bob Hope Drive. This bikeway would provide part of the link to the Los Angeles River bike path. It will also provide access to the Media District employment center.

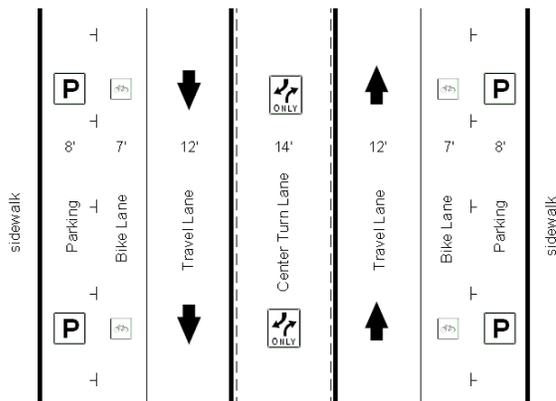
Existing Conditions

Riverside Drive runs east and west, through the Burbank Media District and the Burbank Rancho and Equestrian Center, a residential neighborhood. The corridor runs adjacent to the Disney, Warner Brothers, and NBC studio campuses, as well as Saint Josephs Hospital and Johnny Carson Park. The adjacent residential neighborhoods are characterized by single-family ranch style homes with a nice tree canopy shading the street. The portion of Riverside Drive east of Bob Hope Drive was reconfigured in the 1990's with a continuous center left-turn lane, a through travel lane and a bike lane in the eastbound and westbound directions, and on-street parking. West of Bob Hope Drive, as seen in the diagram at right, there are two-travel lanes in each direction.



Proposed Project Description

Mirroring the existing configuration of Riverside Drive east of Bob Hope Drive, it is proposed that one travel lane in each direction be removed in order to provide Class II bike lanes between California Street and Bob Hope Drive. A preliminary analysis of the Average Daily Traffic volumes in this area suggests that this reduction in travel lanes will not significantly impact the roadway's current Level of Service. The portion of Riverside Drive between California Avenue and Clybourn Avenue will be enhanced as a Class III bicycle facility with Bike Route and Share the Road signage and large "sharrow" street markings.



PROJECT 14: DOWNTOWN BURBANK BIKEWAY ACCESS

EXISTING PROBLEM: LACK OF ACCESS TO THE DOWNTOWN BURBANK RETAIL DISTRICT AND CIVIC CENTER.

Length: 2.5 miles
 Estimated Cost: \$130,000

Project Summary

This proposed project would establish Class II bicycle facilities along three-corridors in the Downtown Burbank area to provide increased connectivity to the Downtown Burbank retail district and Civic Center.

ORANGE GROVE AVENUE

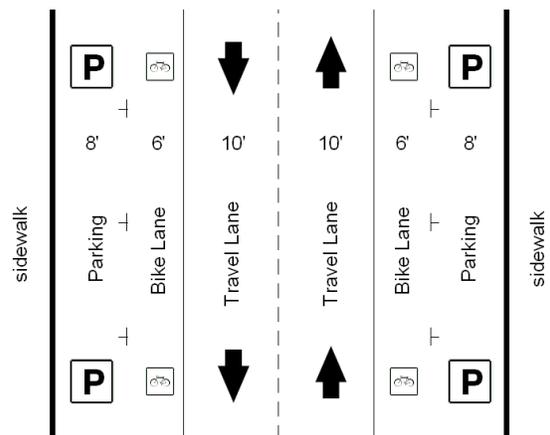
Project Limits: Third Street to Sunset Canyon Drive

Existing Conditions

Between Third Street and Glenoaks Boulevard, there is currently no on-street parking on Orange Grove, allowing enough width for Class II lanes to be striped without impact to the existing geometry and use of the roadway. The adjacent land-uses along this portion of the corridor are primarily government uses. Above Glenoaks Boulevard the neighborhood is characterized by multi-family and single-family residential. The current street width allows for bike lanes to be striped while maintaining existing on-street parking.

Proposed Project Description

This portion of the project would install Class II Bike Lanes along Orange Grove Avenue between Third Street and Sunset Canyon Drive. See the configuration diagram at right. The restriping would be further enhanced by Bike Lane signage and street stencils.



FIRST STREET

Project Limits: Verdugo Avenue to San Fernando Boulevard

Existing Conditions

The southern boundary to the Downtown Burbank retail district, First Street provides access all the retail uses along San Fernando Boulevard. The current lane configuration includes two travel lanes in each direction and a continuous center left-turn lane. On-street parking is currently prohibited along the corridor.



Proposed Project Description

This portion of the project would install Class II Bike Lanes along First Street between Verdugo Avenue and San Fernando Boulevard. The restriping would be further enhanced by Bike Lane signage and street stencils. The restriping plan may require the removal or relocation of existing traffic medians along the corridor.

MAGNOLIA BOULEVARD

Project Limits: Victory Boulevard to Third Street

Existing Conditions

Perhaps the most difficult physical barrier to bicycle travel in the City of Burbank is the Interstate 5 and the adjacent SCRRA rail corridor. These corridors separate the Downtown Burbank and Hillside areas from the rest of the City. The existing bridges have Right of Way constraints; narrow lanes and narrow sidewalks. Additionally, the graded incline of the bridges slow bicycles down creating conflicts when a cyclist is riding in the lane. The sidewalks are narrow and have low railings to the freeway below. Magnolia Boulevard's direct access to the Downtown Burbank retail district and lack of freeway access makes it ideal for bicycle travel.



With only two-travel lanes in each direction, the portion of magnolia between Victory Boulevard and the crest of the bridge has sufficient enough width to allow for the striping of bicycle lanes. However as Magnolia reaches the top of the bridge and approaches First Street a center left-turn constrains the available Right of Way. Between First Street and Third Street can accommodate the lanes again.

Proposed Project Description

This portion of the project would install Class II Bike Lanes Over the Magnolia Boulevard Bridge between Victory Boulevard and Third Street. At the First Street intersection the center left-turn lane on the bridge



would be removed and the signal phasing split to allow for the left turn movement from the travel lanes.

Future plans to widen the Magnolia Bridge would restore the center-turn lane and provide standard-width lanes, including bicycle lanes on this structure. Between First Street and Third Street the existing landscaped medians would need to be relocated or removed. With these improvements the street striping can be reconfigured to allow for the installation of bike lanes through the corridor.

8.0 Appendix

8.1 Design Guidelines

This section provides details on the recommended design and operating standards for the City of Burbank's Bicycle Master Plan.

National design guidelines for bikeways have been developed by the American Association of State Highway and Transportation Officials (AASHTO) and Caltrans. These guidelines include the AASHTO Guide for the Development of Bicycle Facilities, the Manual on Uniform Traffic Control Devices, the Caltrans Highway Design Manual Chapter 1000, and the Caltrans Traffic Manual.

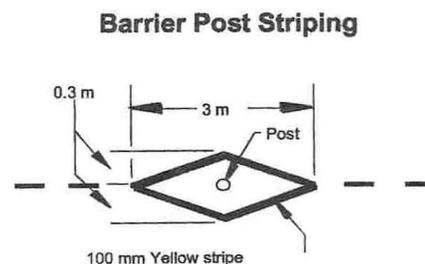
The following section summarizes key operating and design definitions.

- **BICYCLE:** THE AASHTO DEFINITION OF A BICYCLE IS "EVERY VEHICLE PROPELLED SOLELY BY HUMAN POWER WHICH ANY PERSON MAY RIDE, HAVING TWO TANDEM WHEELS, EXCEPT SCOOTERS AND SIMILAR DEVICES. THE TERM 'BICYCLE' ALSO INCLUDES THREE- AND FOUR-WHEELED HUMAN-POWERED VEHICLES, BUT NOT TRICYCLES FOR CHILDREN."
- **CLASS I:** REFERRED TO AS A BIKE PATH, SHARED-USE PATH, OR MULTI-PURPOSE TRAIL. PROVIDES FOR BICYCLE TRAVEL ON A PAVED RIGHT-OF-WAY COMPLETELY SEPARATED FROM ANY STREET OR HIGHWAY. OTHER USERS MAY ALSO BE FOUND ON THIS TYPE OF FACILITY, INCLUDING PEDESTRIANS AND IN-LINE SKATERS.
- **CLASS II:** REFERRED TO AS A BIKE LANE. PROVIDES A STRIPED LANE FOR ONE-WAY TRAVEL ON A STREET OR HIGHWAY.
- **CLASS III:** REFERRED TO AS A BIKE ROUTE. PROVIDES FOR SHARED USE WITH PEDESTRIANS OR MOTOR VEHICLE TRAFFIC.

The following guidelines present the recommended minimum design standards and other recommended ancillary support items for shared use paths, bike lanes, and bike routes. Where possible, it may be desirable to exceed the minimum standards for shared use paths or bike lane widths, signage, lighting and traffic signal detectors.

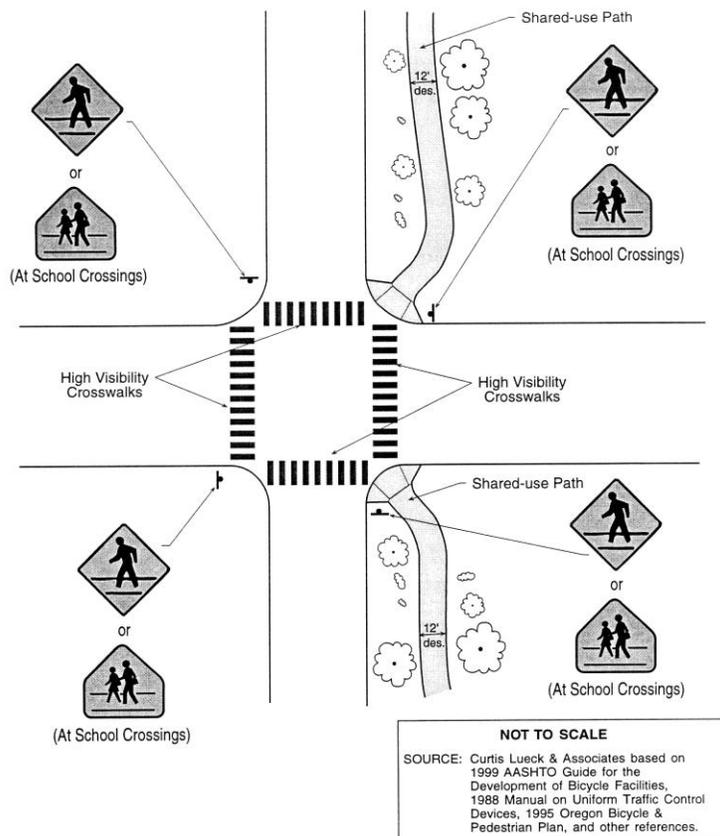
CLASS I BIKE PATH FACILITIES DESIGN RECOMMENDATIONS

1. Bike paths should typically be designed with 8 feet minimum of pavement with minimum 2 feet of shoulder on each side. In areas of high usage, 12 feet of pavement or more is recommended, and in some cases a separate unpaved parallel path is optimal.
2. Bike path crossings of roadways require preliminary design review. Generally speaking, shared use paths that cross roadways with Average Daily Traffic (ADT) volumes of over 20,000 vehicles per day will typically require signalization or grade separation.
3. Landscaping should generally be low water consuming native vegetation unless recycled water is available and should have the least amount of debris.
4. Lighting should be provided where commuters will likely use the shared use path in the evenings.
5. Barriers to prevent unauthorized use-at shared use path entrances should only be used if warranted; the least entry restriction is



preferred. The barriers should be clearly marked with reflectors and should be ADA accessible (minimum five feet clearance).

6. Shared use path construction should take into consideration maintenance and emergency vehicles but minimize their impacts on shared use path width, shoulders, and vertical clearance requirements.
7. Unpaved shoulders of width two feet for pedestrians/runners or a separate tread way should be provided where feasible. Pedestrians should be directed to right side of the pathway with signing and/or stenciling.
8. Where paths are heavily used, consideration should be made to install emergency phone service.
9. Grades that meet Americans with Disabilities Act (ADA) provisions are important to accommodate users with disabilities. ADA requires that the grade of shared-use paths not exceed 8 percent.
10. In the design of shared use paths, attention should be paid to preventing illegal use of the shared use path by motor vehicles.
11. Where shared use path design occurs in environmentally sensitive areas, design exceptions should be pursued to minimize environmental impacts.
12. Shared-use paths and sidewalk paths located immediately adjacent to the roadway are discouraged by AASHTO. This is due to several factors including the potential for high numbers of intersecting roadways, opposite direction travel by bicyclists and resulting conflicts at intersections, potential insufficient sight distances due to walls and other obstructions, and possible conflicts within the right-of-way such as utility poles.
13. Shared-use paths and sidewalk bicycle facilities should not be considered a substitute for on-road bicycle facilities. Paved shoulders or wide curb lanes (14 feet or wider) should be implemented along roadways that have adjacent paths or sidewalk bicycle facilities. As stated within AASHTO, many bicyclists will use the roadway instead of the shared-use path or sidewalk because they have found the roadway to be safer, more convenient, or better maintained.



City of Burbank Bike Path & Bicycle Boulevard Route and Guide Signage

Not to Scale - See Caltrans Traffic Manual

Chandler Bike Path Route Sign

Reduced R15-1 symbol used in S17 Special Guide Sign

Use S17 font and spacing dimensions



S17: 2003 MUTCD California Supplement

D11-1: 2003 MUTCD

San Fernando Bike Path Route Sign

"Bell Symbol" used in S17 Special Guide Sign

Use S17 font and spacing dimensions



S17: 2003 MUTCD California Supplement

D11-1: 2003 MUTCD

Washington Bike Path Route Sign

State of Washington State Highway Marker used in S17 Special Guide Sign

Use S17 font and spacing dimensions except where noted at right



S17: 2003 MUTCD California Supplement

D11-1: 2003 MUTCD

Lake-Alameda Bike Path Route Sign

"LA River Egret" used in S17 Special Guide Sign

Use S17 font and spacing dimensions



S17: 2003 MUTCD California Supplement

D11-1: 2003 MUTCD

Bikeway Connections to LA River Path (per LA River Master Plan)

LA River Egret Symbol used in S17 Special Guide Sign

Use S17 font and spacing dimensions



Bicycle Boulevard Signage



CLASS II BIKE LANE FACILITIES DESIGN RECOMMENDATIONS

1. All bike lanes should generally conform to the minimum design standard of 5 feet in width in the direction of vehicle travel adjacent to the curb lane. Under very restricted circumstances, bike lanes may be 4 feet in width in uncurbed sections. These include bike lanes squeezed between through traffic lanes and right turn pockets and for paved shoulder locations where right-of-way is restricted or there are topographical constraints.

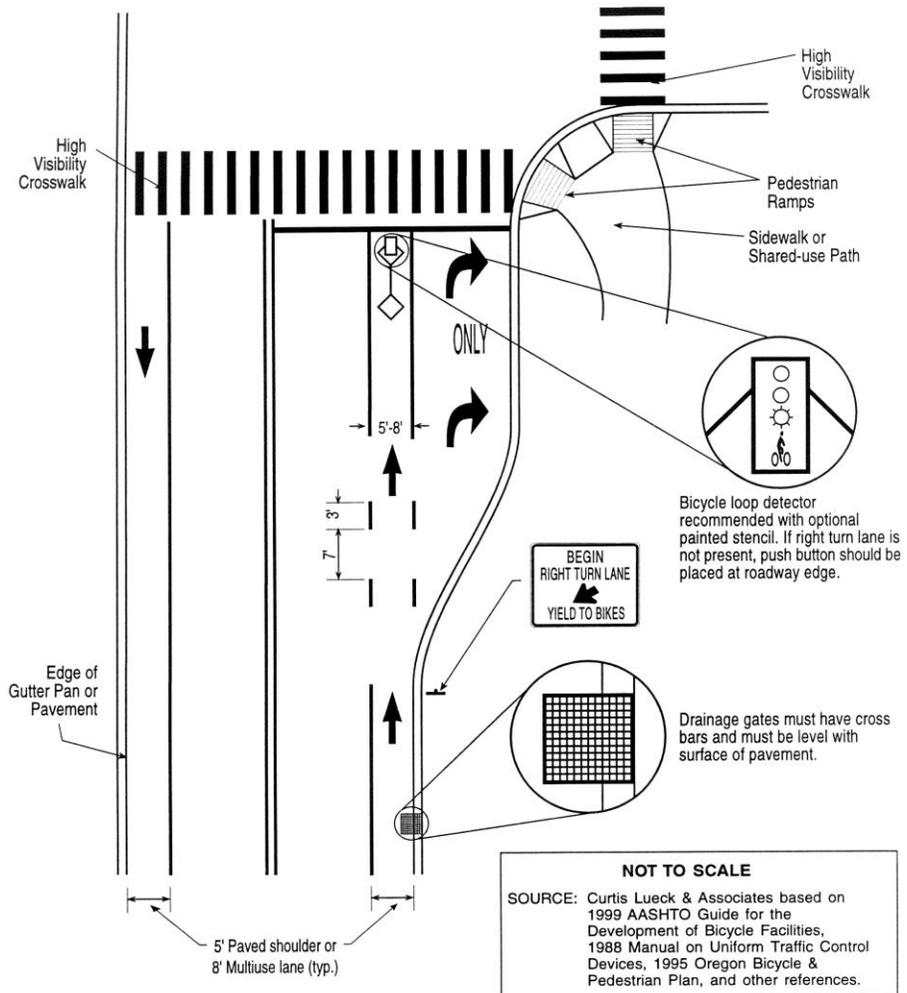


2. Intersection treatments should include bike lane 'pockets' and signal loop detectors or video detectors where necessary. A colored lane treatment may also be used to guide bicyclists through the transition to a right turn lane. A blue lane treatment is currently being studied in Portland, Oregon. Other cities have implemented a red color as well. This will also alert drivers to the path of bicyclists as they cross the path of the bicycle lane.

3. Signal loop detectors that sense bicycles should be considered for all arterial/arterial, arterial/collector, and collector/collector intersections. The location of the detectors should be identified by a stencil of a bicycle. Video and curbside push buttons should also be considered where right turn only lanes are not present

4. Loop detectors should be installed at all signalized intersections, and signalization should be set to accommodate bicycle acceleration speeds.

5. Where bottlenecks preclude continuous bike lanes, these segments of bike lanes should be connected with bike routes as designed in the following section. Bike lane projects should provide for continuous bike lane travel with minimal interruptions.





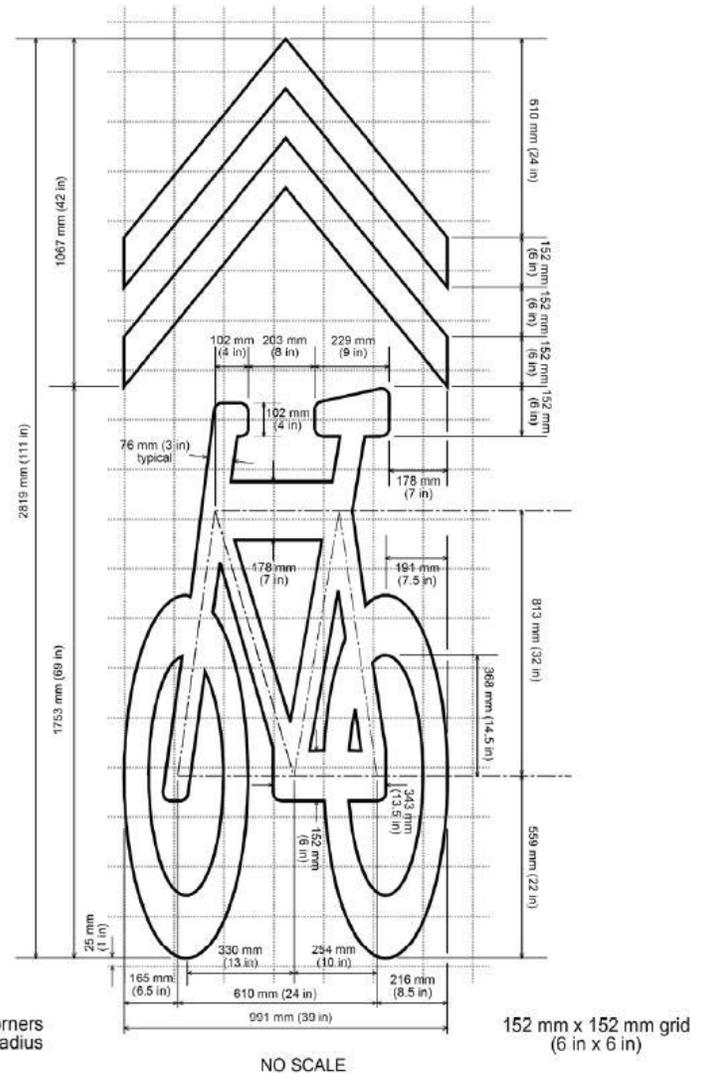
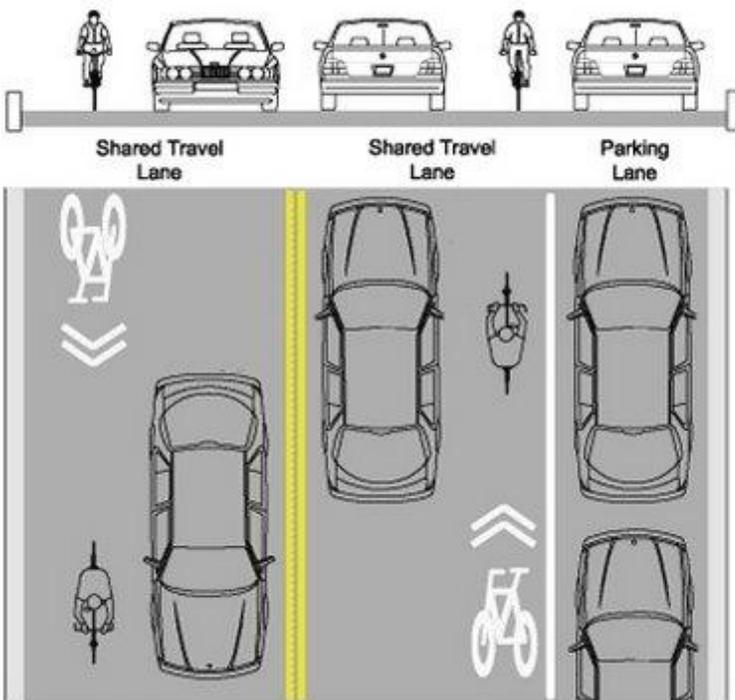
CLASS III BIKE ROUTE FACILITIES DESIGN RECOMMENDATIONS

Bike routes have been typically designated as simply signed routes along street corridors, usually local streets and collectors, but sometimes along arterials. With proper route signage, design, and maintenance, bike routes can be effective in guiding bicyclists along a route that is more suited for bicycle riding without having enough roadway space to provide a bike lane. Bike routes can become more useful when coupled with such techniques as:

- ROUTE, DIRECTIONAL, AND DISTANCE SIGNAGE
- WIDE CURB LANES
- ACCELERATED PAVEMENT MAINTENANCE SCHEDULES
- TRAFFIC SIGNALS TIMED FOR CYCLISTS (WHERE WARRANTED)
- TRAFFIC CALMING

There are a variety of other improvements that can enhance the safety and attraction of streets for bicyclists. Class III Bike Routes can be designed in a manner that encourages bicycle usage, convenience, and safety.

Stencils can also be included on bicycle facilities to help cyclists and motorists more easily identify the bike route. The “sharrow” street markings should be large enough to be obviously visible to both motorists and cyclists.



All rounded corners
25 mm (1 in) radius

152 mm x 152 mm grid
(6 in x 6 in)



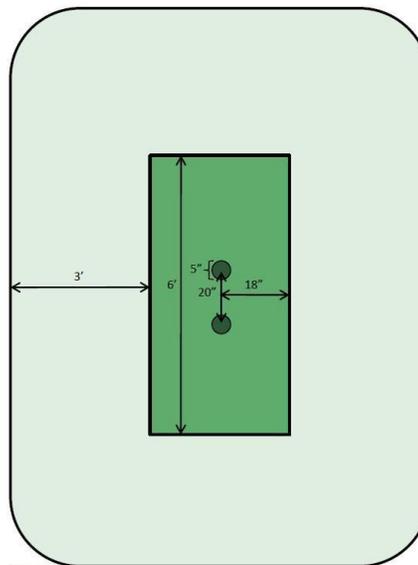
BICYCLE PARKING

Bicycle parking is not standardized by any state or municipal codes. However, there are preferable types of secure bicycle furnishings available. Bicycle parking is a critical component of the network of mobility and facilitates bicycle travel within the City. The provision of bicycle parking at every destination ensures that bicyclists have a place to safely secure their bicycle. Elements of proper bicycle parking accommodation are outlined below.

1. Short-term parking should be accomplished through the provision of bike racks the “inverted U rack” is highly recommended.
2. Long-term parking should be provided for those needing all day storage or enhanced safety. These parking facilities should consist of bike lockers. The e-Locker, which is a new type of bike locker that does not require administration of a bike locker program, is also a new option for providing long-term parking for bicyclists.
3. Bicycle parking should be clearly identified by signage. Signage shall also identify the location of racks and lockers at the entrance to shopping centers, buildings, and other establishments where parking may not be provided in an obvious location, such as near a front door.
4. Bicycle parking should be located as close to the front door of buildings and retail establishments in order to provide for the convenience, visibility, and safety of those who park their bicycles.
5. Bicycle lockers shall have informational signage, placards, or stickers placed on or immediately adjacent to them identifying the procedure for how to use a locker. This information at a minimum shall include the following:

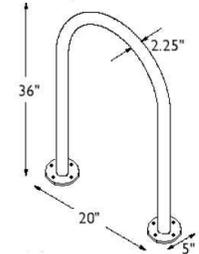
- a. Contact information to obtain a locker at City Hall or other administrating establishment
- b. Emergency contact information
- c. Cost to use a locker
- d. Terms of use

6. Bicycle lockers shall be labeled explicitly as such and shall not be used for other types of storage.
7. Bicycle racks and storage lockers shall be bolted tightly to the ground using surface or in-ground mounts in a manner that prevents their tampering.
8. The required spacing between bike racks shall be 3 feet to allow maneuvering room for people to lock their bicycles.

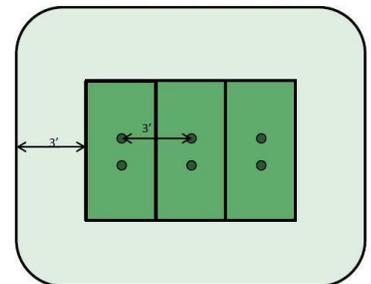


Area needed for two bikes (one on each side of the “U”)
 Three foot buffer to allow for movement and access

Typical inverted “U” style rack
Allows for a bike to be secured at two points (wheel and frame) on each side of the “U”



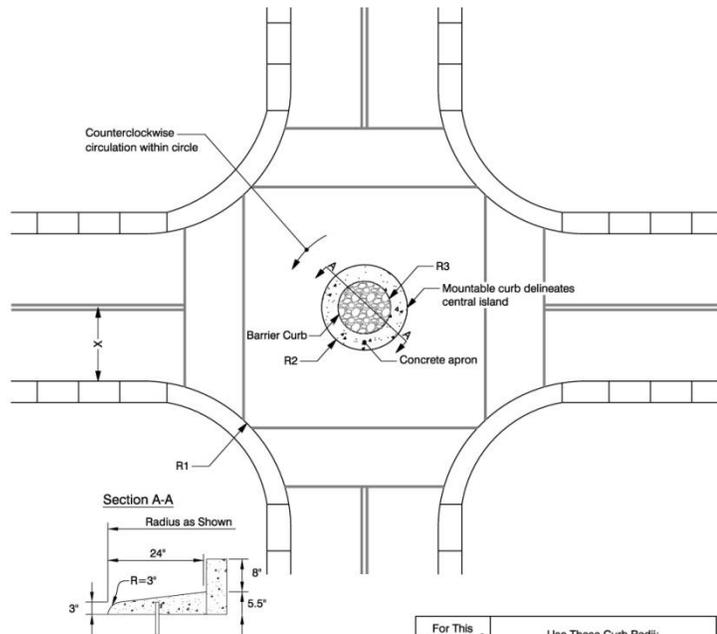
When installing multiple racks



TRAFFIC CALMING

Traffic calming includes any effort to moderate or reduce vehicle speeds and/or volumes on streets where traffic has a negative impact on automotive, bicycle, or pedestrian movement and on area residences. Because these efforts may impact traffic outside the immediate corridor, a study of traffic impacts is typically required. For example, some cities have instituted traffic calming techniques by blocking access into residential streets. The impact was less traffic on local streets, but more traffic on arterials and collectors. Other techniques include installing traffic circles, intersection islands, partial street closures, curb extensions (bulb outs), pavement treatments, lower speed limits, signal timing changes, and the narrowing of travel lanes.

One treatment for calming traffic and enhancing bicycle access is the “bicycle and neighborhood parkway”. These treatments provide for through travel along quiet residential streets for bicyclists through the use of traffic signals at major cross streets that require motorists to turn right or left. By diverting traffic, the bikeway becomes a through street for bicyclists but not for vehicles. The result is a street with low volumes of traffic, which also serves as a route for some bicyclists who prefer to ride on non-arterial roadways. This treatment should only be implemented in areas where there are alternatives for motorists, such as on a grid street system. The cities of Portland, Oregon and Berkeley, California have implemented “bike and neighborhood parkways”.

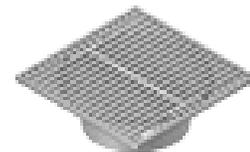


NOTES: 1. Distance X is referenced from the center of the roadway to the lip of gutter.
 2. Assumes equal street widths; For unequal street widths, use truck turning template (AASHTO or local truck dimensions) to ensure adequate turning radii for the desired design vehicle.

For This Street Width:	Use These Curb Radii:		
X	R1	R2	R3
16'	15'	12'	7'
	20'	18'	7'
	25'	20'	7'
14'	15'	10'	5'
	20'	11'	5'
	25'	12'	5'
12'	15'	6'	3'
	20'	8'	3'
	25'	9'	3'

DRAINAGE GRATES

Care must be taken to ensure that drainage grates are bicycle-safe. If not, a bicycle wheel may fall into the slots of the grate causing the cyclist to fall. Replacing existing grates or welding thin metal straps across the grate perpendicular to the direction of is required. Care must be taken to ensure that drainage grates are bicycle-safe. If not, a bicycle wheel may fall into the slots of the grate causing the cyclist to fall. Replacing existing grates or welding thin metal straps across the grate perpendicular to the direction of is required. These should be checked periodically to ensure that the straps remain in place. Grates with bars perpendicular to the roadway must not be placed at curb cuts, as wheelchairs could get caught in the slot. Figure 7.15 shows the appropriate types of drainage grates that should be used.



8.2 Survey Responses

Do you ride a bicycle in the City of Burbank?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	283	80.9	80.9	80.9
	No	67	19.1	19.1	100.0

What prevents you from using a bicycle?				
		Frequency	Percent of Responses	Percent of Cases
Valid	Do not have a bicycle	12	14.8	18.5
	Do not have time	6	7.4	9.2
	Health reasons	1	1.2	1.5
	Safety	32	39.5	49.2
	Too far to primary destinations	14	17.3	21.5
	Other	16	19.8	24.6
Total		81	100.0	124.6

How frequently do you ride?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5-7 times per week	79	22.6	27.7	27.7
	2-4 times per week	122	34.9	42.8	70.5
	1-4 times per month	55	15.7	19.3	89.8
	Less than once per month	29	8.3	10.2	100.0
	Total	285	81.4	100.0	

What is the primary purpose of most of your bicycle trips?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Commute to/from work	108	30.9	37.9	37.9
	Shopping	10	2.9	3.5	41.4
	Recreation/fitness	163	46.6	57.2	98.6
	School	1	.3	.4	98.9
	Visiting friends/family	3	.9	1.1	100.0
	Total	285	81.4	100.0	
Missing	System	65	18.6		
Total		350	100.0		

How would you rank the following bicycle amenities in order of importance where "1" is the most important and "5" is the least important?

Designated bicycle routes					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	232	66.3	66.3	66.3
	2	32	9.1	9.1	75.4
	3	26	7.4	7.4	82.9
	4	20	5.7	5.7	88.6
	5	40	11.4	11.4	100.0
	Total		350	100.0	100.0
Safe and secure bike parking					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	91	26.0	26.0	26.0
	2	57	16.3	16.3	42.3
	3	82	23.4	23.4	65.7
	4	77	22.0	22.0	87.7
	5	43	12.3	12.3	100.0
	Total		350	100.0	100.0
Showering facilities					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	70	20.0	20.0	20.0
	2	28	8.0	8.0	28.0
	3	42	12.0	12.0	40.0
	4	39	11.1	11.1	51.1
	5	171	48.9	48.9	100.0
	Total		350	100.0	100.0
Connectivity to other transportation modes					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	89	25.4	25.5	25.5
	2	58	16.6	16.6	42.1
	3	102	29.1	29.2	71.3
	4	66	18.9	18.9	90.3
	5	34	9.7	9.7	100.0
	Total		349	99.7	100.0
Missing	System	1	.3		
Total		350	100.0		

Bicycle friendly freeway and rail crossings					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	137	39.1	39.4	39.4
	2	96	27.4	27.6	67.0
	3	43	12.3	12.4	79.3
	4	34	9.7	9.8	89.1
	5	38	10.9	10.9	100.0
	Total		348	99.4	100.0

The following list includes some of the bicycle projects that are currently being considered for the City of Burbank. Please select 3 projects you believe should be ranked as a top priority.

		Frequency	Percent of Responses	Percent of Cases
Valid	Interstate 5 bike/pedestrian bridge from the Downtown Metrolink Station to Palm Ave	122	13.0	36.9
	Verdugo Ave bike lanes from Clybourn Ave to Lake St (removes one lane in each direction and adds a center left turn lane)	72	7.7	21.8
	Pass Ave bike route extension from Chandler Blvd to Olive Ave	119	12.7	36.0
	First St bike lanes from Verdugo Ave to Magnolia Blvd	35	3.7	10.6
	Clark Ave bike route from Victory Blvd to Clybourn Ave	41	4.4	12.4
	California Ave bike route extension from Verdugo Ave to Riverside Dr	51	5.4	15.4
	Chandler Ave bike path extension from Mariposa St to the Downtown Metrolink Station	152	16.2	45.9
	Empire Ave bike route/lanes from Clybourn Ave to Interstate 5	36	3.8	10.9
	San Fernando Blvd bike lanes from Interstate 5 to Burbank Blvd	109	11.6	32.9
	LA River pedestrian/bike bridge from Johnny Carson Park to Griffith Park	199	21.3	60.1
Total		936	100.0	282.8