

Park and the San Dimas dog park. Provision of a bike lane or wide parking lane would provide a key safety feature for cyclists. In areas where street parking is heavily utilized or inadequate space exists, sharrows could be painted to increase driver awareness of cyclists' right to use the roadway.

STATUS: *Potential to restripe in conjunction with future slurry or roadway sealing project.*

## **9. San Dimas Avenue**

**Class II bike lane on San Dimas Avenue from Via Verde to Foothill Blvd., with sharrows painted on areas w/ inadequate space for a lane. Bike Box on southbound San Dimas Avenue at Gladstone Street.**

This link provides regional mobility to surrounding cities, and also provides a link into the downtown area from the northern and southern sections of the City. As Foothill Boulevard is a major thoroughfare with name recognition in other cities, the San Dimas Avenue bikeway can serve bicycle commuters by providing a safer north-south passageway through the center of the City.

STATUS:

Class II Lane -Via Verde to Arrow Highway-**ACCOMPLISHED**

Signage along entire route- **ACCOMPLISHED**

Class II Lane Arrow Highway to Foothill Blvd- *Pending Funding*

Sharrows- *Pending Funding*

Bike Box- *Pending feasibility study and funding*

## **10. Valley Center**

**Class II bike lane on Valley Center from Badillo Street to Cypress Street**

This short stretch will connect to the bike lane on Cypress St that leads to the Sportsplex and planned Class I path at the terminus of Cypress Street to San Dimas Avenue. The Los Angeles County Master Plan includes a proposed bike lane on Valley Center north of Badillo Street and provision of a lane within City limits will further improve connectivity.

STATUS: Pending Funding

## **11. Via Verde**

**Class II bike lane from west of Puente at City limits to San Dimas Avenue.**

Adequate space exists for a Class II bike lane west of Puente Street to SD Ave. Via Verde provides linkage to Bonelli Park, downtown San Dimas and the Park-and-Ride lot. Equestrian trails are located on this roadway. In lieu of a Class II facility, a wide parking lane could be striped to provide safety for cyclists.

STATUS: Wide parking lane planned for striping on south side of Via Verde in conjunction with a future slurry project.

## **12. Gold Line**

### **Bicycle Parking at San Dimas Station and Class I bike path along Gold Line Metro ROW through City from Gladstone Ave to San Dimas Canyon.**

Significant planning and coordination was accomplished during early to mid-2000 on this regional effort for a Citrus Valley Bikeway to connect eastern San Gabriel Valley in Los Angeles with San Bernardino County Class I bike paths. Planning efforts between San Dimas, La Verne, Pomona and Claremont had worked out easement details with the rail authority, established preliminary plans, crossing details and as far as fencing and landscaping details. With the rail line now established for the future Gold Line extension, for the project to move forward it will take coordination and agreement with the Gold Line Authority. Research by Rails to Trails advocacy group has shown that bike paths established throughout California along rail line, both freight and passenger, right of ways are overwhelmingly successful and with proper planning and consideration for safety, are highly successful. Although the Gold Line extension does not include a bike path as part of their project, the Build alternative is being designed to the extent possible to allow future opportunities for bikeway improvements.

STATUS: *Parking: Coordination underway with Gold Line Authority for bicycle parking*

*Path: Requires agreement from Gold Line Authority to allow easement.*

## **6.4 Maintenance**

The absolute minimum step that can be taken in developing a bikeway is improved maintenance of streets often used by bicyclists. This applies to all roadways, regardless of designation.

Therefore, increased attention must be given to the right hand portion of the street. Measures must be taken to ensure that bikeways are smooth -- free of potholes, corrugations, and debris that might accumulate from any source. This would minimize tire damage, loss of control, and inconvenience, thereby minimizing safety hazards.

## **6.5 Signage**

Many regulatory roadway signs (such as speed limits and warning signs) apply to both motorists and bicyclists. State guidelines also require additional signs and pavement markings specific to cyclists and designated routes. These can be found in the Cal Trans design manual.

Destination signs should be consistent with the character of San Dimas and comply with the City's sign ordinance.

***The following community features would benefit from a bicycle sign program and should be considered for identification:***

- Parks
- Frontier Village
- San Dimas Swim and Racquet Club
- Puddingstone Reservoir/Bonelli Park
- Civic Center/Library
- Walnut Canyon
- San Dimas Canyon
- Schools

**6.6 Support Facilities**

It is important to note and understand the location of support facilities for bicyclists. The availability of drinking water, restrooms, secure bicycle parking, restaurants, bicycle shops, rest areas, etc. may improve the convenience of and increase bicycle travel.

Many of the public facilities in San Dimas (such as parks, the Civic Center, and the old Train Depot) offer drinking water and/or restrooms. Support services are also available at commercial establishments or at the bicyclist's destination. Other facilities such as showers, changing rooms, and secure bicycle lockers are important to bicycle commuters, but there are currently no public facilities providing these features. Large employers are encouraged to install showers and lockers at the workplace. This practice has been shown to promote bicycle commuting and minimize automobile travel in accordance with Air Quality Management District recommendations.

Most of the roadways proposed for designation are located along major thoroughfares which offer a variety of support services. These include restaurants and service stations where drinking water and restrooms are available. Businesses along bikeways are encouraged to allow bicyclists

to use their facilities.

### **6.7 Bicycle Parking**

The California 2010 Green Building Standards Code (CALGREEN) requires all new buildings to be more energy efficient and environmentally responsible. For bicycles, the standards require short-term bicycle parking if a project is anticipated to generate visitor traffic. Section 5.106.4.1 specifically requires “permanently anchored bicycle racks within 100 feet of the visitors’ entrance, readily visible to passers-by, for 5% of visitor motorized vehicle parking capacity, with a minimum of one two-bike rack.” For buildings with over 10-tenant-occupants, Section 5.106.4.2 requires “secure” bike parking such as covered, lockable enclosures with permanently anchored racks for bicycles, lockable bicycle rooms with permanently anchored racks, or lockable, permanently anchored bicycle lockers.

The San Dimas Municipal Code (18.156.060) establishes the minimum bicycle parking requirements for all non-residential areas and was amended by Ordinance 1199 consistent with the 2010 CALGREEN.

#### ***Large employers are encouraged to provide long-term bicycle parking or storage facilities.***

This is one of the key factors in promoting bicycle commuting. Employers may use this as quantifiable trip reduction mitigation as required by AQMD.

#### ***Provide bicycle lockers at the Bonita Avenue Park and Ride.***

Bicycle lockers can complement the goals of carpools and other High Occupancy Vehicle programs which focus on automobile miles traveled. Commuters have the option of riding a bicycle to the Park and Ride lot without contributing to air pollution by driving there.

#### ***Citywide Short-term Bike Parking Standard***

Provision of additional short term bicycle parking throughout the city would benefit commuting cyclists and encourage biking as a viable means of transportation. The city shall continue to work with property owners and management companies to implement parking both in public areas and on private property with consideration to ADA accessibility.

Once exact locations are identified, staff will work with property owners on installation and will seek funding to implement parking city-wide.

### **6.8 Safety Education Programs**



**SAFETY EDUCATION PROGRAM**

Bicycle safety events and booths have been included in various City events such as Family Festival. However, the City does not currently have a formalized bicycle safety education program for either youths or adults.

**BICYCLE SAFETY AND ENFORCEMENT**

The San Dimas branch of the LA County Sheriff's Department conducts Bicycle Rodeos at schools and public events. This teaches children proper bicycle operation and maintenance. Additionally, there are bicycle safety brochures available in City Hall. Although these programs are aimed at younger riders, adults may benefit from safety education. Programs should emphasize how to become vehicular cyclists as well as use of helmets, lights and reflectors, and other safety equipment.

**The City should continue to encourage bicycle safety programs which will target a broad range of cyclists.**

**6.9 Construction and Design**

The construction and design of all bikeways must adhere to Cal Trans Highway Design Manual, Chapter 1000. Bikeways proposed in this Master Plan have been carefully selected, but actual construction may not be entirely feasible based on existing conditions or unforeseen circumstances. Consequently, the Public Works Department (following standard review procedures) will be given flexibility and final determination of the type and appropriateness of bikeways. The following Tables and Figures outline Class II bikeway design for the City.

**TABLE 9**

<b>Bike Amenity Specifications</b>	
<b>Minimum Widths</b>	Adjacent Parking                      5 feet No Parking                                      4 feet Combination Parking Lane    11-12 feet
<b>Striping</b>	6 inches outside solid white stripe (adjacent to vehicle traffic) 4 inches inside solid white stripe
<b>Signage</b>	R81 Bike Lane Sign *start of all bike lanes *far side of all arterial crossings *major change of direction *minimum 1 sign every ½ mile R28 No Parking Sign *where parking is prohibited adjacent to bike lane

	R4-11 Bicycle May Use Full Lane (when approved in CA MUTCD) and where appropriate
<b>Pavement Markings</b>	Bike Lane and directional arrow at far side of each intersection Sharrows in select locations if approved by CA MUTCD or done as approved experimental project Green Bike Lane Striping Bike Box (as approved experiment or if approved by CA MUTCD)
<b>Dashed Lines</b>	200 feet on approaches to intersection
<b>Bicycle Signal Actuation</b>	 <p>MUTCD R-10-22</p>

Sources: Cal Trans Highway Design Manual, Chapter 1000, Manual on Uniform Traffic Control Devices

The minimum specifications for Class III bicycle routes are not included in this document, since widths are dependent on numerous factors. These factors include traffic volume, average motorist speeds, sight distance, and parking conditions. However, the most important consideration is to allow safe travel for both motorist and bicyclists. In general, a minimum width of 14 feet for the traffic lane adjacent to curb is sufficient to accommodate both the motorist and bicyclist, along with appropriate signage to warn motorists to be aware of cyclists on the roadway.

When design requirements, as outlined in the Manual of Uniform Traffic Control Devices (MUTCD) and in the Cal Trans Highway Design Manual, will not allow construction of proposed Class II bike lanes, bicycle routes (Class III) should be provided instead. Class III bikeways should provide the following items when feasible:

- Curb driving lanes at least 14' wide (no parking) or 21' wide (parking allowed)
- Warning signs to motorists
- Directional signs to bicyclists
- Adequate pavement conditions and maintenance

**6.10 Bike Rack Installation**

- **Visibility:** Cyclists should easily spot short-term parking when they arrive from the street. A highly visible location discourages theft and vandalism. Avoid locations “off on the side,” “around the corner,” or in unsupervised parking structures or garages.



- **Avoid conflict with pedestrians:** Locate racks so that parked bicycles do not block a pedestrian path. Select a bike rack that is of sufficient height to be visible, with no protruding bars that could trip or injure cyclists or pedestrians.
- **Avoid conflict with motor vehicles:** Separate bicycle parking and auto parking and road areas with space and a physical barrier. This prevents motor vehicles from damaging parked bicycles and keeps some thieves at a distance (Many professional bike thieves use vans or similar vehicles to hide their activities and make a get-away). The closer bicycle parking is to automobile parking, alleys, roads, etc., the better the opportunity for a bike thief.
- **Access:** The parking area should be convenient to building entrances and street access, but away from normal pedestrian and auto traffic. Avoid locations that require bicycles to travel over stairs. Access should be near a ramp used by people in wheelchairs to allow for ease of riding to the bike parking, but not interfere with or impede disabled access.
- **Security:** Surveillance is essential to reduce theft and vandalism. For security, locate parking within view of passers-by, retail activity, or office windows.
- **Lighting:** Bicycle parking areas should be well lit for theft protection, personal security and accident prevention.
- **Weather Protection:** Whenever possible protect bicycle parking areas from weather using existing architecture.

### **6.11 Removal of Automobile Parking**

Where parking is underutilized, parking may be eliminated or restricted to accommodate bike lanes.

This Master Plan recognizes that parking is vital in certain areas of the City, especially within the downtown. Bikeways on Bonita Avenue (between Cataract Avenue and San Dimas Avenue) and San Dimas Avenue (between Bonita Avenue and Fourth Street) will be downgraded to Class III bike routes so that parking will not be eliminated in these high vehicle traffic commercial areas.

## **7. IMPLEMENTATION and PHASING**

### **7.1 Implementation**

Project design and implementation will originate from the Community Development Department or the Public Works Department. Staff may facilitate implementation of particular elements of the Master Plan as part of larger projects or when funding is secured. The recommendations of this Master Plan should be considered when routine street improvement projects (i.e., re-striping, surfacing, widening) are scheduled for implementation. Additionally, planning for new public projects such as parks, public buildings, and roadways should include bicycle elements as appropriate.

***Bikeway street improvements must be reviewed by the Traffic Committee***

**7.2 Phasing**

Unforeseen circumstances such as funding, street improvement timing, and pace of development may affect bikeway development and improvement. Due to this fact, the phasing of proposed improvements will be determined by staff as resources become available.

Several improvements recommended in the City's original Bikeways Master Plan have been completed. All Class III Routes are designated with proper signage throughout the City. Class II Paths have been striped on Foothill Boulevard (with the exception of the San Dimas Wash bridge), San Dimas Avenue from Via Verde to Arrow Highway, Covina Blvd, Badillo Street, and portions of Puente Street. These improvements have met the basic needs of recreational and commuting cyclists.

**7.3 Implementation Costs**

Implementation costs typically include land acquisition fees and construction/engineering costs. All bikeways proposed in this Master Plan are within City owned right-of-way, and no acquisition fees will be incurred. Construction costs are limited to striping and signing materials and labor.

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. Past expenditures have been borne by the city and completed in conjunction with capital improvement projects. Future costs for the Foothill Bridge at San Dimas wash, funded by the Highway Bridge Rehabilitation and Replacement Program is estimated at approximately \$2 million dollars, while the Class I Canyon Vista Bike Trail is estimated at approximately \$800,000 and will require acquisition of grant funds. Improvements such as bike parking, lane striping, sharrows, and parking lanes will be accomplished through staff efforts at improving cyclist safety and acquisition of funding opportunities available.

**FUNDING SOURCES**

**FEDERAL**

**INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT (ISTEA)**—Funding to increase use of non-motorized modes and public and safety programs. Consideration for safe bicycle accommodations, prohibition of motorized vehicles on any trails, and bicycle projects must be principally for transportation

**SAFE, ACCOUNTABLE, FLEXIBLE, EFFICIENT TRANSPORTATION EQUITY ACT- A LEGACY FOR USERS (SAFETEA-LU)** Funding administered through Caltrans and Metro for transportation oriented projects emphasizing reduction of auto trips and providing inter-modal connections. Application is through Metro's Call for Projects.

**REGIONAL SURFACE TRANSPORTATION PROGRAM FUND (STP)**—A block grant fund for roads, bridges, transit capital, bicycle projects and facilities. The Transportation Enhancement Program (TE) provides a 10% set aside particularly for intermodal projects, which includes provision of facilities for bicyclists and preservation of abandoned railway corridors.

**HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)** – Projects that improve bicyclist and pedestrian safety are eligible for this funding program if the improvement can be proven to directly reduce documented accident data.

**NATIONAL HIGHWAY SYSTEMS FUNDS** -- Funding for bicycle and pedestrian facilities on land adjacent to any highway on the National Highway System. Facilities must be principally for transportation rather than recreation.  
Federal share of the project cost is 80% with 20% from State or local agencies.

**CONGESTION MITIGATION AND AIR QUALITY (CMAQ) IMPROVEMENT PROGRAM FUNDS** -- This is available for construction and non-construction projects (such as programs, services, etc.) Facilities must be principally for transportation rather than recreation. Federal share of the project is 80% with 20% from the State or local agencies.

**SCENIC BYWAYS** -- Project types must be the construction of bicycle and pedestrian facilities related to safe bicycle use along the highway. Planning, design and engineering are eligible costs.

**SURFACE TRANSPORTATION PROGRAM FUNDS** -- This includes the construction of bikeways and pedestrian facilities, non-construction projects, and storage facilities (such as bike racks on buses or bike lockers). Facilities must be principally for transportation rather than recreation. The "Transportation Enhancement Activities Programs" is for "over and above normal" transportation projects.

**STATE AND REGIONAL**

**BICYCLE TRANSPORTATION ACCOUNT** (through Cal Trans District 7) -- Funding is available for the design and construction of bikeways, bicycle parking, programs, and bicycles on transit. Local match is 10% and the application period is annually in December. Requires a bicycle plan that conforms to Streets and Highways Code 891.2 to qualify.

**SAFE ROUTES TO SCHOOL** – Funds to improve school commute routes by eliminating barriers to bicycle travel through rehabilitation, new projects, and traffic calming. Local match of 11.5% is required.

**COMMUNITY BASED TRANSPORTATION PLANNING (CBTP)** – Funds for local planning activities that encourage livable communities. Funding is provided by 80% Federal/State and 20% local match.

**OFFICE OF TRAFFIC SAFETY (OTS)** – Reduce motor vehicle fatalities and injuries through this national highway safety program. Bicycle safety programs should increase safety awareness and skills among pedestrians, bicyclists, and drivers and include education, enforcement and engineering components.

**ENVIRONMENTAL ENHANCEMENT AND MITIGATION FUNDS** -- Funds are distributed through the State Resource Agency for mitigation projects where bikeways may be components.

**AB 2766** – Clean Air funds generated by a surcharge on automobile registration are allocated by AQMD to cities or awarded through a competitive grant program for projects that improve air quality.

**LAND AND WATER CONSERVATION FUND** -- State Department of Parks and Recreation. Projects include the acquisition, planning, and the development of outdoor recreational facilities, especially in urban areas. Trails may be eligible. The program reimburses about \$2 million, annually with the application program occurring in December.

**LOCAL**

**METRO CALL FOR PROJECTS**—Programming of federal, state, and local revenues to regional significant projects through this competitive process. Bikeway projects may be eligible through Transportation Demand Management (TDM), Bikeway, and Regional Surface Transportation Improvements (RSTI) categories.

**PROP C 20% LOCAL RETURN**-- Generated from L.A. County's ½ cent sales tax for public transit, these funds are distributed directly to cities on a per capita basis. Funds can be used for bikeways and bike lanes.

**TRANSPORTATION DEVELOPMENT ACT (TDA)**—A Local Transportation Fund (LTF) that uses a ¼ cent state sales tax and allocates this to a County based on the amount of sales tax collected. Bicycle and pedestrian facilities are eligible for up to 2% of the total TDA funds available.

**NEW CONSTRUCTION**—Road widening and construction projects can provide new bikeways by ensuring an effective review process is in place to ensure new roads meet standards and guidelines of the Bicycle Master Plan. Impact fees and developer mitigation can also be tied to bicycle improvement projects, as well as including them in business improvement districts.

**MELLO ROOS**—A local assessment or benefit district can be used to fund bike paths, lanes, and routes.

**BICYCLE ORGANIZATIONS**

**Los Angeles County Metropolitan Transportation Authority** [www.metro.net](http://www.metro.net) or

**Bicycle Federation of America** 1506 21st St., NW, Suite 200 Washington DC 200036202/436-6622202/463-6625 fax. Internet: BIKEFED@aol.com

**League of American Bicyclists** 190 W. Ostend St, Suite 120 Baltimore, MD 21230-3755410/539-3399

**BikeLeague@aol.com**

**Scvelo.com**

**Calbike.org**

**Rails to Trails Conservancy:** [www.railstotrails.org](http://www.railstotrails.org)