

ENGINEERING

5



Goal: Continue to enhance pedestrian and bicyclist safety in all Capital Improvement Projects. Use best practices to improve and enhance ease of use and safety, ensuring routine accommodation of pedestrians and bicyclists.

In Glendale, as in other cities across the United States, the built environment is recognized as an obstacle to everyday walking and biking. The majority of streets in the City of Glendale are designed primarily for the movement of motor vehicles. The cost of prioritizing motor vehicles over Active Transportation (walking and biking for transportation) and transit is often poor air quality and public health problems. These include an increase in obesity and Type II diabetes, traffic congestion, and high rates of collisions that include injury or death. People often choose to drive instead of walk or bike because the other options are not considered viable or even possible. The Los Angeles County Department of Public Health's PLACE Program seeks to partner with communities through grants such as the one that helped fund this plan. Ensuring that changes to our built environment are implemented now and into the future will help make healthy, active choices like walking and biking become normal, everyday activities for Glendale residents and visitors.

5.1 - Policy: Maintain and update design standards that reduce vehicular speeds.

5.1a – Maintain and update traffic calming measures in the Glendale Traffic Calming Program.

Speed is a significant factor in many motor vehicle crashes and when it involves a bicyclist or pedestrian, the speed of the vehicle can mean the difference between the potential for injury or death. It is in the interest of all road users to keep speeds from getting too high on city streets, but pedestrians and cyclists are among the most vulnerable users that would benefit from slower traffic speeds. There are numerous street design options that can be implemented to keep speeds low, particularly in residential areas. Street designs that help to prevent high speeds are an important tool that can be incorporated into accepted street cross sections for the City. Because they are self-regulating, they aid the Glendale Police Department's enforcement efforts.

The City of Glendale Neighborhood Traffic Calming Program, developed by the Glendale Public Works Traffic and Transportation Division in 1996 and revised in 2004, already contains some of these measures. The program currently contains the following measures:

- Curb extensions (bumpouts or chokers)
- Diverters (full or partial)
- Painted edge lines
- Radar trailers
- Selective enforcement
- Speed humps and lumps
- Traffic circles
- Truck restrictions



Figure 5-1. Curb extension



Figure 5-2. Diverter in Berkeley, CA



Figure 5-3. Painted edge line



Figure 5-4. Radar Trailer



Figure 5-5. Speed bump



Figure 5-6. Traffic circle



Figure 5-7. Chicanes



Figure 5-8. Raised Crosswalk

It is recommended that the following measures be considered as part of an update of the City's Traffic Calming Program:

- Chicanes
- Crossing islands
- Medians
- Raised crosswalks
- Speed tables

The City Council adopted the City of Glendale Neighborhood Traffic Calming Program in November 1996 with the overall objective "to improve the livability of neighborhood streets by mitigating the impacts of vehicular traffic on predominantly residential neighborhoods." To reduce adverse traffic-related impacts, a variety of traffic control measures and roadway design features (traffic calming tools) were identified to discourage non-local traffic, reduce travel speeds, and minimize crash potential.

In November 2004, the City Council adopted an updated Traffic Calming Program. This updated program--which currently is in effect--includes the same overall objective but certain revisions were made to enhance the program's effectiveness and ease of implementation. The Traffic Calming Program is administered at the staff level by the Public Works Department - Traffic & Transportation Division. In considering residents' requests for traffic calming, the Traffic & Transportation Division interfaces with the affected residents as well as other city departments (primarily Engineering, Fire, and Police). The City's Transportation & Parking Commission (TPC) reviews all proposed traffic calming measures and devices.

Since its inception 14 years ago, the Program has resulted in the installation of traffic calming measures and devices throughout the city. The traffic calming measures and devices most commonly utilized to date in Glendale include:

- Speed Humps-Lumps. Approximately 120 speed humps-lumps have been installed on over 30 street segments.
- Traffic Circles. Two traffic circles have been installed.
- Painted Edge Lines. Painted edge lines have been installed on numerous streets to reduce the perceived width of the travel lanes.
- Speed Radar Message Signs. A total of 12 speed radar message signs have been permanently installed at six locations (each location equipped with one sign per direction of travel). In addition, five portable message signs are available for temporary deployment.

These installations have consistently reduced travel speeds and, in so doing, reduced the potential for speed-related crashes.

It should be noted that as part of an ongoing City Safe Routes to School Program and updating the City's existing Bicycle Master Plan, pedestrian and bicycle safety measures have been developed to encourage bicycling and walking in the City. While updating the City Traffic Calming Program and the Bicycle Master Plan, the Traffic and Transportation Division will continue to pay special attention to the current state and federal plans, technical publications,

and other current trends in developing these plans.

The Safe & Healthy Streets Plan recommends incorporating all traffic calming measures into a revision of the Circulation Element of the General Plan.

Detailed information about Traffic Calming measures is available through the Federal Highway Administration. Additionally, Transportation Alternatives' publication "Streets for People" is a good potential reference for these kinds of measures as is the "Street Design Manual" for the New York City Department of Transportation, 2009 edition.

For more information, go to: www.fhwa.dot.gov, www.transalt.org, or www.nyc.gov/dot

5.2 - Policy: Incorporate best practices in pedestrian and bicycle facility design.

5.2a – Strive to implement detailed pedestrian and bicyclist design guidelines, derived from FHWA pedestrian and bicyclist safety guidelines, that exceed minimum state and federal standards, and to be incorporated into the Bikeway Master Plan, Safe Routes to School Plan, and other pedestrian or bicyclist related documents.

Minimum requirements for the design and implementation of pedestrian and bicyclist facilities are set forth in the Federal Manual on Uniform Traffic Control Devices (MUTCD), the California MUTCD, and the Caltrans Highway Design Manual. While these documents provide the important minimum requirements, there is still room for additional guidelines to better clarify the design and implementation of pedestrian and bicyclist facilities in Glendale.

The FHWA's guide "How to Develop a Pedestrian Safety Action Plan" provides an excellent framework for establishing and codifying pedestrian guidelines that go beyond the minimum. The City of Glendale initiated work on a Pedestrian Safety Action Plan (PSAP) in May of 2009 as part of a grant-funded collaboration with the California Office of Traffic Safety, the FHWA, and the California Department of Public Health. The workshop was attended by City employees and other individuals interested in enhancing pedestrian safety. Representatives from engineering, planning, landscape architecture, education, and law enforcement attended. The workshop was conducted over three days. Day One concentrated on

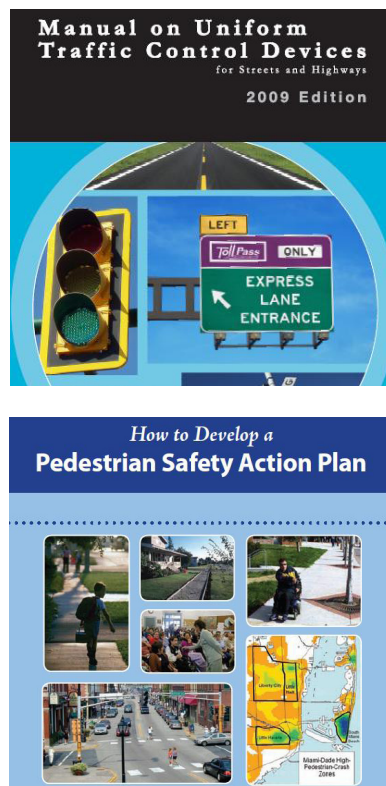


Figure 5-9. Useful manuals for bike and pedestrian facilities

generic engineering, education, and enforcement solutions to reduce, if not eliminate, certain pedestrian crashes. Days Two and Three of the workshop employed a “template” developed by the FHWA in which specific methodologies/practices could be used to address specific pedestrian-related issues and concerns in Glendale.

Various components of the PSAP have been implemented by the Traffic & Transportation Division. These include high visibility crosswalks, offset cross walks, stop bar setbacks on major arterials, yield to pedestrian signs, and raised crosswalks as part of the Safe Routes to Schools program. PSAP policy issues are also under consideration by the Traffic & Transportation Division.

Look to Live Markings

As part of an ongoing “Look to Live” public safety campaign, the City has recently installed pavement markings at the foot of the crosswalks with the word “LOOK” in three languages (English, Armenian and Spanish) with an arrow pointing to the direction of on-coming traffic at the intersection of Glendale Avenue and Broadway. The purpose of the marking is to remind pedestrians to look for oncoming traffic before crossing. More “LOOK” markings will be installed at other intersections with heavy pedestrian activity as part of the campaign aimed to enhance pedestrian safety.



Figure 5-10. ‘Look to Live’ markings placed at Glendale and Broadway

Zebra Crosswalks with Advanced STOP Lines or Yield Lines

The City has been installing high visibility zebra crosswalk markings with advanced STOP/yield lines in the vicinity of school areas and at crosswalks that are not controlled by STOP signs or traffic signals. The purpose is to increase the visibility of the crosswalks and to remind drivers to be alert as they approach the crossings. Locations include the Wilson Avenue and Chevy Chase Drive intersection and on Colorado Street at Jackson Street.



Figure 5-11. Zebra stripe crosswalk with yield line on Colorado St.

Pedestrian Activated In-roadway Warning Lights and Flashing Beacons

Since July of 2000, the City has been installing pedestrian activated in-roadway warning light systems and flashing yellow beacons at controlled crosswalks. The purpose of the two devices is to alert drivers that pedestrians are in the crosswalks and remind them to yield the right of way. Currently, there are 30 in-roadway warning light systems and 2 flashing yellow beacons in the City. Locations include North Brand Boulevard mid-block crosswalks, Glendale Avenue at Elk Avenue, Chestnut Street, Raleigh Street, Palmer Avenue, Eulalia Street, and Laurel Street in front of the Glendale Memorial Hospital.

Examples of detailed bicycle guidelines that exceed minimum standards include the Chicago Bike Lane Design Guide, San Francisco Bicycle Plan Update: Supplemental Design Guidelines, and the design guidelines section of the Los Angeles Bike Plan Update.

To download the FHWA documents for a Pedestrian Safety Action Plan, go to:

http://safety.fhwa.dot.gov/ped_bike/ped_focus/ or
<http://www.walkinginfo.org/training/pbic/cpsap.cfm>

5.2b – Continue with implementation of mobility standards that encourage walking, biking, and transit use.

In addition to adopting pedestrian and bicyclist guidelines that exceed minimum state and federal standards, the City of Glendale should continue with implementation of mobility standards that are beneficial to pedestrians, bicyclists and transit users. Such mobility standards (many of which have already been incorporated in Capital Improvement Projects in the City) include, but are not limited to:

- Automatic pedestrian signals at high pedestrian volume locations.
- Benches and shade/shelters at all bus stops
- Detection for bicyclists at all actuated signals¹
- Pedestrian signal timing that exceeds minimum requirements
- Planting of street trees with all resurfacing/reconstruction road projects
- Street furniture for pedestrians
- Bike racks for bicyclists
- Pedestrian and bicycle way-finding signage

The City will include these mobility standards in the Bikeway Master Plan, the Circulation Element, and a Complete Streets Plan.

¹ Caltrans Policy Directive 09-06, CA MUTCD



Figure 5-16. Bench and shade structure at Brand Blvd. bus stop



Figure 5-17. Bicycle detection sign at Maple and Central



Figure 5-12. Street trees on Rock Glen St.



Figure 5-13. Street Furniture



Figure 5-14. Bike racks



Figure 5-15. Way-finding signage

5.2c – Continue expanding the City’s bicycle parking facilities. Include installation of secure parking facilities for downtown or the Glendale Transportation Center.

If bicyclists are to be expected to substitute bike trips for car trips, bicycle parking must be within easy reach of nearly any public or commercial destination city-wide. The proper type and placement of bike parking facilities is equally as important since many cyclists will not park their bikes using sub-standard or poorly placed bike parking facilities. Cyclists who cannot be sure there will be a good place to lock his or her bike at a destination may be less likely to travel by bike. This decision not to ride is also reinforced by a ticket, bike removal, or a verbal warning when a cyclist locks to signs, parking meters, or hand-rails whenever bike parking is not present.

As part of the implementation of the existing Bikeway Master Plan, and in response to the increasing demand for bike racks, the Public Works Traffic & Transportation Division has been installing bike racks at various locations in the City. The existing bike racks were installed based on staff field checks, suggestions from the PLACE Grant Coordinator, and also based on the requests of businesses in the City. In an effort to accommodate the increasing demand for bicycle facilities, as well as to promote cycling, the Public Works Traffic and Transportation Division is working to create citywide homogeneous, cost-effective, low-maintenance, and aesthetically pleasing bicycle racks.

When trying to determine the quantity of bike parking spaces to be installed, there are a number of methods that can be utilized. The City could install bike parking as a percentage of car parking spaces in commercial areas, as a function of the number of employees at a location, as a function of the square footage of a particular business location, or it can strive to install bike parking so that at least 1 or 2 racks are installed on each city block that fronts commercial or public destinations. Another possible calculation is to install one bike rack each 100 feet of arterial or collector roadway that has commercial or public property frontage. These guidelines will be considered in updating the Bikeway Master Plan. Examples of various formulas that can be used for calculating the number of bike parking spaces and the proper types and placement of bike parking facilities can be found in the Association of Pedestrian and Bicycle Professionals "Bicycle Parking Guidelines" 2nd Edition, the Seattle Bike Master Plan – Chapter 4, the San Francisco Bicycle Plan – Chapter 2, and from the Pedestrian and Bicycle Information Center website.

Secure bicycle parking facilities are growing in number and, compared to bike racks, provide a better option for long-term bicycle parking. Bike Station establishes and partners in the operation of secure bicycle parking facilities in multiple cities across the United States, including Long Beach, Seattle, and Washington D.C. In most cases, secure facilities are placed near transit hubs or destination-rich areas where there is a high concentration of commercial or public destinations as well as employment centers. Bike Station type facilities often include 24-hour access for members, attendee-optional parking areas that may include a bike repair



Figure 5-18. Bike racks at Glendale City Hall, back entrance



Figure 5-19. Secure bicycle parking facilities provide long-term parking.

facility/mechanic, a changing/shower facility, and retail space for basic supplies such as tubes, tires and snack foods/drinks. A secure facility may or may not include bikes intended for shared use. This plan recommends that a secure bike parking facility be established in the City of Glendale.

For more bike parking information, go to:

<http://www.apbp.org/>

<http://www.cityofseattle.net/transportation/bikemaster.htm>

<http://www.sfmta.com/cms/bproj/bikeplan.htm>

<http://www.bicyclinginfo.org/>

<http://www.bikestation.org/>

5.2d - Establish and encourage bicycle sharing facilities.

Bike sharing facilities can prove to be useful in locations of high density where people might need to travel short distances and the City wishes to discourage motor vehicle use for such trips. The best known example of a successful bike sharing program is the Velib bicycle sharing system in Paris, France. Similar programs have been launched in Washington DC, Denver Colorado, Chicago, and Minneapolis, with more facilities being considered in cities across the United States.



Figure 5-20. Bike sharing facility with bikes and payment/check-out kiosk

Successful programs include multiple docking stations for shared bikes that can be borrowed and tracked using the bicyclist's credit card. Typically, trips under a certain amount of time are free and charges are assessed in increments after the initial free period. Revenue is usually generated through advertising space attached to the docking stations.

Bike sharing facilities could also be established for Glendale City Staff. The City of Long Beach maintains a small fleet of bicycles for City Staff to use for short trips near City Hall, free of charge.

Bike sharing facilities could also prove to be useful in conjunction with secure parking facilities at transit centers such as the Glendale Transportation Center where Metrolink commuters could start their trip with a short ride to the station or finish their trip with a ride to his/her place of employment.

5.2e - Incorporate pedestrian and bicyclist project review into all capital improvement projects. Continue referring to the Bikeway Master Plan and FHWA Pedestrian Safety Guidelines for all Capital Improvement projects.

Approaching a capital improvement project from the perspective of a bicyclist or pedestrian can help City Staff to enhance implementation of pedestrian and bicyclist improvements included in such projects. As part of routine site visits for capital projects, walking or biking the location of capital improvement projects is the best way to conduct a project review which seeks to understand what impediments exist and improvements that are needed for bicyclists and pedestrians. It's easy to miss obstacles or small hazards if site reviews don't include biking or walking the project area. Hazardous storm grates may only become apparent while riding a bicycle and the positioning of utility poles on sidewalks may only be recognized as obstacles while walking. Therefore, this plan recommends walking and/or biking the project location as part of project site reviews that could include pedestrian and bicyclist improvements. These reviews would be conducted by City Staff with the help of the Pedestrian and Bicyclist Technical Advisory Team and (once funded) the Pedestrian and Bicyclist Coordinator. Examples of pedestrian and bicyclist project reviews (often called walk-ability and bike-ability checklists) can be obtained from the Pedestrian and Bicycle Information Center and the Federal Highway Administration Pedestrian Road Safety Audit program.



Figure 5-21. Capital improvement projects should include regular review for pedestrian and bicycle improvements.

Whenever the City engages in a capital improvement project, staff should continue to review the Bikeway Master Plan (BMP) and FHWA pedestrian safety guidelines to see if the project site is designated for bicycle facilities or what pedestrian safety measures could be implemented. If designated, the project should incorporate the facilities defined in the BMP or measures recommended by the FHWA. For example, as part of street improvements already planned by the City of Glendale, bike lanes were added to Glenoaks Blvd. in 2008 per the Bikeway Master Plan. Also, "sharrows" have been installed on six streets, most of which were designated as potential Class III routes in the BMP, as part of several different improvement projects. It's worth noting that Glendale has become a leading community in Los Angeles County in terms of sharrow installation.

For more information about walk-ability or bike-ability checklists, go to:
<http://www.bicyclinginfo.org/>
http://safety.fhwa.dot.gov/ped_bike/tools_solve/ped_rsa/

5.2f - Pursue inexpensive and experimental pilot projects for pedestrians and bicyclists that can be made permanent whenever a pilot project is successful or dropped when it is not.

New York City has recently been leading the way in trying new, innovative facilities for pedestrians and bicyclists. While safety is always the primary goal with these projects, their Transportation Commissioner, Janette Sadik-Khan, has stressed the importance of trying pilot projects that are quick, easy and inexpensive to implement. Many of Commissioner Sadik-Khan's projects have been documented in magazine articles and online at sites such as StreetFilms.org and StreetsBlog.org. If the project works, her department then seeks to make them permanent. If they don't work, they drop the project and move on to another idea. The point is to encourage City Staff to try new ideas for making the City more pedestrian and bicycle friendly.

It's understood that experimental projects fall outside the accepted standards as described in documents such as the California Manual on Uniform Traffic Control Devices which city engineers use. The implementation of experimental projects would be conducted with permission from entities such as California Traffic Control Devices Committee or the Federal Highway Administration through the Request to Experiment (RTE) process. Once an experimental project is approved, important features are included such as liability protection. Peer review, monitoring and reporting are normally part of the RTE process. The "green-stripe sharrow" in Long Beach's Belmont Shore neighborhood is a good local example of a Request to Experiment.



Figure 5-22. Protected bike lane, Long Beach, CA



Figure 5-23. Bicycle box, Portland, OR

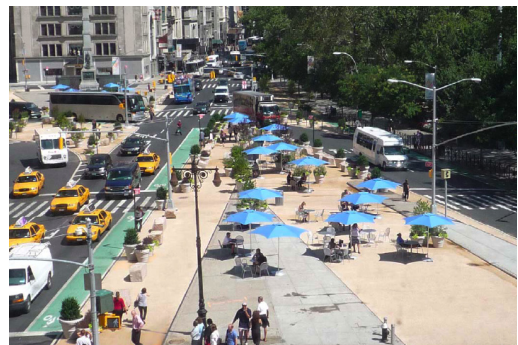


Figure 5-24. Pedestrian plaza, New York City



Figure 5-25. Green stripe sharrow lane, Long Beach, CA

Potential projects for the City of Glendale could include:

- Protected bike lanes on arterial roads.
- Bicycle Boxes at intersections with turning hazards
- Pedestrian plazas at large intersections or intersections with unused areas
- Green stripe sharrow lanes for popular business districts

5.3 - Policy: Adopt a Complete Streets Policy and design standards in accordance with the California Complete Streets Act of 2008 so that transportation improvements in the City of Glendale will accommodate all users.

A Complete Streets Policy is one that seeks to ensure that roads meet the needs of all users where appropriate and defines all users as motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, transit users, and commercial vehicles. This policy direction is in contrast to years of building roadways primarily to meet the needs of motor vehicle users. Instead, Complete Streets policies result in a balanced, multimodal transportation network that enables users to choose the mode of transportation that they wish rather than necessitating the use of the private motor vehicle. A Complete Streets Policy would include many of the policy recommendations in the Engineering chapter of this plan.

The California Complete Streets Act of 2008 states that all cities, starting in January 2011, shall adopt a complete streets policy whenever there is a substantive revision of the Circulation Element of the General Plan.

The National Complete Streets Coalition defines an ideal complete streets policy as containing the following elements:

- A vision for how and why the community wants to complete its streets
- Specifies that 'all users' includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is adoptable by all agencies to cover all roads.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Directs the use of the latest and best design standards while recognizing the need for flexibility in balancing user needs.
- Directs that complete streets solutions will complement the context of the community.
- Establishes performance standards with measurable outcomes.
- Includes specific next steps for implementation of the policy

The Safe & Healthy Streets Plan strongly encourages the creation and adoption of a Glendale Complete Streets Policy not only to meet state requirements, but to also cover multiple worthwhile goals. This includes the reduction of greenhouse gas emissions through increased trips on foot, by bicycle, or on transit; improving public health and reducing costs associated with inactivity that result in obesity, heart disease, and diabetes; and shifting short trips of 3 miles or less from motor vehicle trips to trips by bicycle, transit, or walking. In



Figure 5-26. Complete Street, Santa Monica Blvd. in West Hollywood, CA

December 2010, the California Governor’s Office of Planning and Research published “Update to the General Plan Guidelines: Complete Streets and the Circulation Element” to help California communities develop a Complete Streets Policy in accordance with the California Complete Streets Act.

The goals of a Complete Streets Policy also help to meet state requirements set forth by the California Global Warming Solutions Act of 2006 (AB32) and the California Sustainable Communities and Climate Protection Act (SB375). To address these state requirements, Glendale’s Community Development Department is currently developing the Greener Glendale Plan (a Sustainability and Climate Action Plan) which will include strategies and goals to encourage walking and biking.

To download the guidelines from the Governor’s Office of Planning and Research, go to:
http://opr.ca.gov/docs/Update_GP_Guidelines_Complete_Streets.pdf

For more information about Complete Streets and the National Complete Streets Coalition, go to: <http://www.completestreets.org/>

5.3a – Revise Circulation element to include Level of Service measurements for pedestrians, bicyclists and transit users. Update street classifications/typologies to include enhanced pedestrian and bicyclist accommodation.

In addition to updating the Circulation Element of City’s General Plan to include a Complete Streets Policy, this Plan recommends updating the Circulation Element to include Level of Service measurements that include pedestrians, bicyclists and transit users. Currently, Level of Service (LOS) is the rating of an intersection based entirely on the flow of motor vehicles. Pedestrians and bicyclists are not factored into the calculation. Cities that are aiming to better accommodate pedestrians and bicyclists are changing the way their LOS is calculated to include the movement of people who are walking or biking. Level of Service measurement is also mentioned in Chapter 6, policy 6.5.

5.4 - Policy: Create land use policies that encourage biking and walking

According to the National Household Travel Survey of 2009, 43 percent of all driving trips are 3 miles or less, 85 percent of all biking trips are 3 miles or less, and 98 percent of all walking trips are 3 miles or less. These statistics provide a good argument for encouraging biking and walking for short trips. Additionally, the State Energy Resources Conservation and Development Commission has determined that transportation represents 41 percent of total greenhouse gas emissions in California. It follows that a reduction in motor vehicle use for short trips is not only possible, but that it will also help greatly to reduce the total greenhouse gas emissions in Glendale. The California Global Warming Solutions Act of 2006 (AB32) seeks to reduce statewide greenhouse gas emissions to 1990 levels by the year 2020. The California Sustainable Communities and Climate Protection Act (SB375) directs the California Air Resources Board to set regional targets for reducing greenhouse gas emissions through regional transportation planning, CEQA incentives to encourage projects that are consistent with a regional plan that achieves greenhouse gas emission reductions, and coordinating the regional housing needs allocation process with the regional transportation process. To help reduce greenhouse gas emissions and meet requirements set forth by AB32 and SB375, Glendale should create land-use policies that encourage biking and walking. Community Plans such as the North Glendale Community Plan should routinely consider pedestrian, bicyclist and transit issues as a part of the plan's development.

5.4a - Establish bicycle parking requirements for private development and redevelopment

To help ensure that bike parking is available at destinations such as businesses, office buildings, large residential complexes, and other activity centers, the City of Glendale should create bike parking requirements as part of new development or redevelopment projects. Such requirements have been implemented in cities like San Francisco, Santa Monica, and Pasadena. The requirements can be based upon property square footage, upon a minimum number of spaces per structure, regardless of square footage, or based on a percentage of car parking spaces for the property, and should include both short term and long term parking facilities that are in visible, safe, and readily accessible locations. In some cases, office buildings and large residential complexes forbid employees and residents from bringing bicycles into the office or condominium/townhouse while failing to provide for adequate bike parking. Such rules should be discouraged and if possible, prohibited in the City of Glendale.

Bicycle Parking Requirements should be developed by the City in partnership with the Glendale TMA and merchant groups such as the Glendale Chamber of Commerce and the Downtown Glendale Merchants Association. CALGreen Code has already set mandatory bicycle parking requirements for non-residential buildings, but it does not provide for bicycle parking measures for residential locations such as mid-rise or high-rise multi-family dwellings or mixed-used buildings. The CALGreen Code allows for stricter, more ambitious bicycle parking requirements for non-residential and multi-unit residential locations, which this plan recommends the City establish. The requirements should include the number of bicycle

parking spaces to be installed, but also the type and configuration of facilities (both long term and short term), and the proper location of bicycle parking.

As part of recommendations for revised Downtown Parking Standards, Nelson Nygaard, a consultant for the City's Community Development Department has included a recommendation for the City to adopt a bicycle parking ordinance. This is consistent with the recommendations of this plan which supports the implementation of Nelson Nygaard's recommendations.

Guidelines for bicycle parking requirements are available in the Association of Pedestrian and Bicycle Professionals publication "Bicycle Parking Guidelines" 2nd Edition and on the Pedestrian and Bicycle Information Center website.

For a copy of the CALGreen code, go to: <http://www.bsc.ca.gov/CALGreen/default.htm>

For more information about Nelson Nygaard's Downtown Parking recommendations, go to: <http://www.ci.glendale.ca.us/planning/mobilitystudyParkingManagement.asp>

For more information about bicycle parking guidelines, go to:
<http://www.apbp.org/>
<http://www.bicyclinginfo.org/engineering/parking.cfm>

5.4b - Support Smart Growth land-use policies.

Smart Growth land use policies that include mixed-use residential and commercial developments result in human scale cities with shorter distances to activity centers and common destinations. When combined with good pedestrian and bicyclist networks and facilities, the shorter travel distances that will result from these policies make walking and biking easier and more likely for residents. Part of Smart Growth principles, Transit Oriented Development, Form Based Code, and Overlay Districts that support and encourage walking and biking are all policies cited as beneficial by the Pedestrian and Bicycle Information Center. Therefore, the Safe & Healthy Streets plan strongly supports higher density, Smart Growth land-use policies for the City of Glendale. The City of Glendale Downtown Specific Plan and the Downtown Mobility Study already support this type of land-use.

