Appendix B

Bicycle-Related Policies in Associated Planning Documents

- **Merced Vision 2030 General Plan**
- **2011 Regional Transportation Plan (RTP)**
- **2012 Climate Action Plan**
- **Martin Luther King Jr. Way Revitalization Plan**
- **South Merced Community Plan**

Merced Vision 2030 General Plan

Chapter 2 – Urban Expansion

Goal Area UE-1.1: Urban Expansion
Relevant goals:

- **A compact urban form**
- **Efficient urban expansion**

Policy UE-1.2: Foster compact and efficient development patterns to maintain a compact urban form.

"Through the promotion of compact urban form, the City of Merced can achieve several important environmental and community planning goals. Through the concentration of urban development within the City's SUDP/SOI, impacts on surrounding agricultural resource lands can be reduced and important prime soils preserved. Additionally, through compact urban development, efficient public transit systems can operate to protect the region's air quality and pedestrian and *bicycle* use is encouraged. Compact urban development also reduces public infrastructure development and maintenance costs to the City and its residents."

Policy UE-1.3: Control the annexation, timing, density, and location of new land uses within the City's urban expansion boundaries.

Implementing Action:

1.3.e The planning for land uses in newly developing areas should reflect a mix of land uses which will support a neighborhood, including a variety of residential densities and price ranges, neighborhood and convenience shopping facilities, job creation, and public facilities such as schools and parks.

The City will continue to promote the use of the mixed-use, pedestrian- and transit-friendly neighborhoods ("Urban Villages") in all new growth areas of the City as much as feasible.

Chapter 3- Land Use

3.4.4 RESIDENTIAL NEIGHBORHOOD GOALS, POLICIES, AND ACTIONS

Goal Area L-1: Residential & Neighborhood Development
Relevant goals:

- **Preservation and Enhancement of Existing Neighborhoods**

Policy L-1.9: Ensure connectivity between existing and planned urban areas.

Implementing Action:

1.9.a Ensure multiple points of access for all new development.

Maximizing access between new development and adjacent existing neighborhoods (or vacant land) promotes interaction between residents.

3.5.6 COMMERCIAL AND INDUSTRIAL GOALS, POLICIES, AND ACTIONS

Goal Area L-2: Economic & Business Development

Relevant goals:

- **Ready access to Commercial Centers and services throughout the City**
- **A distinguished Downtown**

Policy L-2.7: Locate and design new commercial developments to provide good access from adjacent neighborhoods and reduce congestion on major streets.

Implementing Action:

2.7.e Commercial developments shall be designed to encourage pedestrian, bicycle, and transit access.

Sidewalks, pedestrian accessways, *bike* racks and/or lockers, on-site transit stops, and transit shelters are among the design features that can be used in commercial areas to encourage alternative modes of access for their customers.

Policy L-2.8: Encourage a mixture of uses and activities that will maintain the vitality of the Downtown Area.

Implementing Actions:

2.8.c Ensure that the Downtown is connected to the rest of the City through improved bus service, better bicycle/pedestrian connections, and enhanced connections between Downtown and Merced College and the UC campus.

Attempts will be made to create unified store hours, recruit restaurants and apparel retailers, intensify the downtown promotion program, and cluster retail uses in a more compact area of downtown (generally bounded by 19th Street, O Street, the Southern Pacific railroad tracks, and Martin Luther King Jr. Way).

2.8.f Strengthen transportation systems to support Downtown's economic base

Creation of an internal Downtown transit system, improvements to the City transit system, and expansion of Downtown arterial street capacity would be sought.

2.8.i Create a superior ambiance and build a distinguished Downtown.

Efforts identified in the 2007 Downtown Strategy to achieve this goal include enhancing the pedestrian environment, enhancing lighting, increasing open space, creating gateway monuments, establishing a commercial recruitment program, addressing Downtown parking needs, encouraging outdoor dining, and creating a significant City Center anchor to complement the Mainplace Theater.

Policy L-2.10: Encourage Well-Planned Freeway-Oriented Developments

Implementing Action:

2.10.b Review and update the Zoning and Sign Ordinances as necessary to ensure quality freeway-oriented development.

In order to ensure that new freeway-oriented developments are built to high standards, the City should review and update the Zoning and Sign Ordinances as necessary to address architectural design, landscaping, pedestrian/*bicycle*/transit access, signage, etc., for such developments. Of particular note would be the possible use of "regional" freeway-oriented signs to consolidate signage for multiple parcels on one or two high-quality signs.

Goal Area L-3: Urban Growth and Design
Relevant goal:

- **Living environments which encourage people to use a variety of *transportation alternatives.***

Policy L-3.1: Create land use patterns that will encourage people to walk, *bicycle*, or use public transit for an increased number of their daily trips.

Implementing Actions:

3.1.a Encourage pedestrian or transit-friendly designs at suitable locations.

Most of the new growth areas in North and South Merced would be appropriate for pedestrian- and transit-friendly developments. Encourage the preparation of a specific or community plan for large scale new development which incorporates the goals and policies of the City's Urban Design Chapter.

3.1.b Work to preserve and enhance existing neighborhoods and commercial districts which have transit and pedestrian-friendly designs and protect them from development that is incompatible in design, scale, or use.

Pursue redevelopment projects to improve the image of pedestrian-friendly neighborhoods and shopping districts (pedestrian amenities, street trees, transit facilities, etc.). The City will need to make sure that existing pedestrian-friendly projects are not compromised by allowing developments within them or adjacent to them that do not fulfill the same principles.

3.1.f Work closely with school districts to help them choose school site locations that allow students to safely walk or bicycle from their homes.

When specific plans or subdivisions propose school sites for dedication, accept sites that emphasize the ability of students to safely walk or *bicycle* to school. Incorporate school sites into larger neighborhood activity centers where practical; this concept could include parks, day care facilities, and neighborhood commercial uses. Schools will be encouraged to locate adjacent to Village Core Residential Areas.

3.1.g Encourage regional shopping malls/centers at sites capable of support by a full range of transportation options.

Identify sites with access by freeway or major arterial and public transit. The site could be a regional transit hub and major pedestrian-oriented activity center to increase transit mode share.

Policy L-3.3: Promote site designs that encourage walking, *cycling*, and transit use.

Implementing Actions:

3.3.a Encourage project designs which increase the convenience, safety and comfort of people using transit, walking or cycling.

Review the City's Zoning Ordinance for possible amendment to include air quality design standards. Design standards must be general enough to apply under all but the most unusual circumstances to avoid the need for numerous zone variances and modifications. Some design measures like sidewalk widths and landscaping requirements are very appropriate for design standards. Design measures dealing with parking lot designs and building facades may be better left as guidelines because of site to site differences.

3.3.b Encourage all subdivision street and lot designs, commercial site plans, and multi-family site plans to improve access by transit, bicycle, and walking.

Review the City's development review procedures and modify, as appropriate, to include policies that accommodate access and internal circulation by alternative transportation modes. Develop design guidelines that illustrate preferred designs.

3.3.c Encourage all development projects proposed within 2,000 feet of an existing or planned light rail transit, commuter rail, express bus or transit corridor stop, to incorporate site design measures that improve accessibility to the transit system.

Analyze existing land use patterns and constraints around transit facilities to identify appropriate design measures

Policy L-3.5: Develop a Transit-Oriented Development Overlay Zone adjacent to the planned High Speed Rail Station in Downtown Merced

Implementing Actions:

3.5.a Develop a "Transit-Oriented Development" Overlay Zone for the area adjacent to the planned High Speed Rail Station in Downtown Merced.

The California High Speed Rail project will provide passenger service from Los Angeles to San Francisco at speeds which would rival air service. A proposed High Speed Rail Station is planned for Downtown Merced, which will serve as a major transition point between different legs of the High Speed Rail service--The Merced-Bakersfield segment, the Merced-San Jose segment, and the future Merced-Sacramento segment. Although the precise location has yet to be determined, several options are under consideration for this *multi-modal* transit facility.

Once the Station location is selected, the City will need to develop a "Transit-Oriented Development" overlay zone in order to take advantage of this opportunity to enhance and improve the Downtown area. Within this Overlay Zone, several concepts would need to be considered, including mixed-use development, increased residential and commercial densities, reduced parking requirements and managed parking strategies, an emphasis on pedestrian/*bicycle*/transit access, increased entertainment, retail, dining, hotels, research, and office facilities, and others. Some of the same principles and policies contained in the City's Urban Village model

(Chapter 6) may be utilized in the proposed "Transit-Oriented Development" overlay zone for the High Speed Rail Station, but a denser urban model would be needed to take advantage of the proposed ridership of the High Speed Rail.

Policy L-3.6: Require community plans for large new development areas within the City's SUDP/SOI prior to development.

Implementing Actions:

3.6.a Require the development of Community Plans for large-scale new developments within the City's SUDP/SOI prior to development.

As envisioned in this plan, a "Community Plan" may or may not conform with the requirements of Government Code Section 65450 for "Specific Plans.". The Community Plans proposed are intended to recognize specific projects that have undergone significant developer-driven planning efforts but need to fit in with the Merced Vision 2030 goals and objectives. These projects will undergo additional detailed planning and environmental review when formally proposed to the City for development.

The Land Use Diagram proposes the establishment of five new Community Plan areas (Figure 3.9). These areas are as follows:

1) The University Community Plan (*Section 3.7.3*);
2) The Bellevue Corridor Community Plan (*Section 3.7.4*);
3) South Thornton (or "Five Bridges") Community Plan (*Section 3.7.5*);
4) South Mission Community Plan (*Section 3.7.6*).
5) Yosemite Lakes Community Plan (*Section 3.7.7*)

In the above sections, each of these Community Plan areas will be described along with issues associated with the future development of these Community Plans. An illustrative plan of each of these Community Plan areas has been included in Section 3.10, Appendix. These illustrative plans are not adopted plans and are only included to inform the public of preliminary land use concepts under consideration in each of the Plan areas.

3.6.b Make use of guiding principles in developing Community Plans.

Community Plan Guiding Principles

The following guiding principles should be used in developing these community plans:

4) Community Plan areas need connectivity with existing and planned urban areas. This includes *all modes of transportation*, including vehicles, *bicycles*, public transit, etc.

Chapter 4—Transportation and Circulation

Goal Area T-1: Streets and Roads
Relevant goals:

- **An integrated road system that is safe and efficient for motorized and non-motorized uses**
- **A circulation system that is accessible, convenient and flexible**
- **A circulation system that minimizes adverse impacts upon the community**
- **A comprehensive system of "Complete Streets" which addresses *all modes of transportation***

Policy T-1.1: Design streets consistent with circulation function, affected land uses, and *all modes of transportation.*

Implementing Actions:

1.1.a Implement the General Plan Circulation Plan (Figure 4.1) as development occurs.

The City will implement the General Plan Circulation Plan as development occurs in new growth areas and in developed areas, as feasible. This may be accomplished through the dedication of needed right-of-way or transportation easements, the construction of roadway improvements, and/or the collection of fees, consistent with the impacts of new development.

1.1.b Whenever feasible, implement a system of arterials and higher order streets in new growth areas based upon the adopted concept of arterials/expressways and ensuring the development of "complete streets" which address all modes of transportation.

The adopted concept of arterials/expressways is designed to carefully separate streets by circulation function, and locate land uses consistent with these functions (Figure 4.1). Arterials and higher order streets will carry the higher-speed traffic to adjacent commercial, industrial and other major destinations.

Collectors and local streets will be designed for local, neighborhood traffic that is either traveling towards a neighborhood destination or is exiting the area. It is important to try to apply these same principles to the extent possible in planning partially developed areas that have incomplete road networks. All streets should be designed as "Complete Streets" which address all modes of motorized and non-motorized transportation, including vehicles, transit, pedestrians, and *bicycles.*

Policy T-1.2: Coordinate circulation and transportation planning with pertinent regional, State and Federal agencies.

Implementing Actions:

1.2.f Continue to work with federal, state, and regional agencies and stakeholders to expand opportunities for multi-modal transportation.

The City shall continue to seek funding for projects which complete transportation networks, utilize multiple modes of transportation, and provide, enhance, or sustain

amenities for non-motorized transportation, such as tree shading for *trails* and *bikeways*. Examples of available funding include, but would not be limited to, Measure C funds for Transit-Oriented Development, Caltrans grants for "walkable, livable, and sustainable communities," and other incentives found to be appropriate. As part of this overall strategy, the City shall support high-speed rail and shall guide siting of a station in Downtown Merced to be integrated into a *multi-modal* transportation network.

Policy T-1.4: Promote traffic safety for *all modes of transportation*.

Implementing Actions:

1.4.c Promote increased traffic safety with special attention to hazards which could cause personal injury.

Continue to maintain existing practices related to safety such as: maintain adopted sight-line requirements for signs, fences, etc. (line of uninterrupted vision along which a vehicle operator can see traffic, *bicycles* or pedestrians approaching from an intersecting street) at designated street intersections and driveways; continue to monitor street intersections to identify unusual levels of traffic accidents; etc. Evaluate ways to increase the effectiveness of traffic safety efforts.

1.4.e Continue as feasible to mitigate or reduce safety hazards, and program improvements to congested intersections before they become significant problems. It is important to implement improvements as feasible. It is also important to recognize that it is often more cost effective to avoid creating significant traffic conflicts than it is to attempt to reduce or mitigate them once they have become problems. The City should continue to review development applications to mitigate prospective concerns as they are identified.

Policy T-1.5: Minimize unnecessary travel demand on major streets and promote energy conservation.

Implementing Actions:

1.5.b Avoid whenever feasible neighborhood street system designs that make it more convenient for a local resident to use an arterial street to reach an in-neighborhood destination than to remain on the local street system.

Often local street circulation patterns, whether intended or not, include barriers to the local driver who seeks to go to certain nearby destinations. The result is often that the driver is forced to go onto the major street system in order to reach a destination adjacent to the local neighborhood. This usually means that a *bicycle* rider or pedestrian would have been forced into the same inconvenient, out-of-the way trip, which is often the reason such trips are only made by automobile. Where cul-de-sacs are proposed, consideration should be given to providing walk-through (or "open-end") cul-de-sacs to minimize walking distances to nearby destinations.

<u>Policy T-1.6</u>: Minimize adverse impacts on the environment from existing and proposed road systems.

***I**mplementing Actions:*

1.6.b Make a strong commitment to increase the number of people per vehicle so that the existing street system is utilized to its fullest.

Continue to support MCAG and City efforts to encourage and promote carpooling and *other alternatives* to single occupancy vehicles. Consider the use of HOV lanes if and when they become feasible to use in Merced.

1.6.c Consider ways to encourage employers to reduce impacts upon the existing street system.

Examples could include encouraging large employers to promote carpooling and other *transportation alternatives* within their work force, as well as encouraging, if feasible, staggered working hours.

1.6.f Ensure to the extent feasible that pedestrian, bicycle, and automobile connections are maintained in existing neighborhoods affected by transportation and other development projects.

When new transportation or development projects, such as a highway interchange or separated-grade crossing, are proposed, sometimes it is necessary to minimize access from adjacent streets or land uses. To the extent feasible, existing connections for *all modes of transportation* should be maintained unless safety issues take precedence.

<u>Policy T-1.7</u>: Minimize street system impacts on residential neighborhoods and other sensitive land uses.

Implementing Actions:

1.7.c Continue to implement the City's Neighborhood Traffic Calming Guidelines to address traffic impacts on residential streets.

In 2008, the City adopted Neighborhood Traffic Calming (NTC) Guidelines. These NTC guidelines were created to assist existing neighborhoods concerned about the traffic passing through their neighborhood, to assist the developer looking for guidelines to reduce the impact of a new project to existing and newly established areas, and lastly to help reduce potentially problematic speeds on the streets of the City of Merced. The guidelines seek to balance the desires of neighborhood residents with the needs of overall City circulation and public safety access.

<u>Goals of the NTC include</u>:
1) Promote safe and pleasant conditions for residents, motorists, pedestrians, and *bicyclists* on neighborhood streets;
2) Enable social interaction among neighborhood residents;
3) Control the amount of traffic that uses neighborhood streets and limit vehicle speeds to levels stipulated by the General Plan Circulation Element;
4) Preserve and enhance pedestrian and *bicycle* access to neighborhoods;

5) Provide a process that will equitably address request for action by neighborhood residents with needs of all users of City Streets;
6) An integrated road system that is safe and efficient; and,
7) A comprehensive system of safe and convenient pedestrian ways.

Policy T-1.8: Use a minimum peak hour Level of Service (LOS) "D" as a design objective for all new streets in new growth areas and for most existing City streets except under special circumstances.

Implementing Actions:

1.8.d Promote Transportation System Management (TSM) strategies in areas where LOS standards fall below the minimum.

Traffic signal timing or coordination, additional lanes at intersections, transit service enhancements, parking management and traffic management are all examples of transportation system management strategies which can be expected to be used in the future. Ridesharing programs, preferential treatment for High Occupancy Vehicles (HOV's), Park-and-Ride lots, one-way streets, the provision of *bicycle* facilities, and the promotion of variable work hours and telecommuting are also strategies which will be promoted by the City of Merced.

Goal Area T-2: Bicycles, Pedestrians, and Public Transit
Relevant goals:

- **An efficient and comprehensive public transit system**
- **A comprehensive system of safe and convenient *bicycle routes* (within the community and throughout the urban area)**
- **A comprehensive system of safe and convenient pedestrian facilities**
- **A comprehensive system of "Complete Streets" addressing *all modes of transportation***

Policy T-2.1: Provide for and maintain a major transitway along "M" Street and possibly along the Bellevue Road/Merced-Atwater Expressway and Campus Parkway corridors.

Implementing Actions:

2.1.d Cooperate with Merced County and other interested agencies outside the City to maintain a viable option for a Bellevue Road Transitway to provide regional public transit access to the University of California (UC) campus.

The Bellevue Road Transitway Corridor concept needs to be considered as part of any cooperative planning process for the future University of California (UC) campus and its environs. This may also include further evaluation to confirm viability of this concept for providing public transit access to the UC. The Bellevue Corridor and other important corridors should be designed using the "Complete Streets" concept, which emphasizes use of all forms of transportation on streets, including automobiles, pedestrians, *bicycles*, and public transit.

2.1.f Work cooperatively with Merced County and other interested agencies to review and evaluate development proposals in the vicinity of Bellevue Road that might conflict with the prospective Bellevue Transitway.

Bellevue Road is designated as both an "Arterial" and a "Transitway" on this General Plan's Circulation Map. It will be important to obtain full regional cooperation to protect the future right-of-way (ROW) for this corridor, and to mitigate prospective impacts from any development projects upon these potential functions of this major roadway. The City/County Revenue Sharing Agreement could be one method of coordinating *bicycle* facility planning between the City, the County, and UC Merced.

Policy T-2.2: Support and enhance the use of public transit.

Implementing Actions:

2.2.f Plan for multi-modal *transfer sites that incorporate auto parking areas,* bike *parking, transit, pedestrian and* bicycle *paths, and park and ride pick-up points.* Identify locations where transportation systems converge and designate such areas as potential multimodal transfer sites. One such location could be the future Downtown High Speed Rail Station, where bike-friendly routes to the station and short/long term bike parking facilities could be incorporated into the station design to assist bicycle commuting.

2.2.g Encourage park and ride lots at suitable locations serving long distance and local commuters.

4) Allowing developers to reach agreements with auto-oriented shopping center owners to use commercial parking lots as park and ride lots and multi-modal transfer sites.

Policy T-2.4: Encourage the use of bicycles.

Implementing Actions:

2.4.a Encourage area employers to promote bicycle use through incentive programs or other means.

For example, a number of governmental agencies are concentrated in the central portion of the City, which could lend itself to the use by the City and other large employers of successful methods for increasing bicycle ridership.

2.4.b Continue to support whenever feasible local efforts to promote cycling.

In recent years, private promotion has brought a series of special cycling races/events to the Merced area. The City should also pursue partnerships with local cycling advocacy groups, such as the Merced Bike Coalition and the UC Cycling Alliance, and local bike shops in efforts to promote cycling in Merced. These events have been worthwhile public relations for both the Merced area and for cycling, and have helped to promote public awareness of the potential for bicycle riding in this area.

2.4.c Seek to involve a cross-section of actual bicycle users in bicycle planning efforts and transportation-related bicycle activities through the City's Bicycle Advisory Commission.

In 2009, the City formed a new Bicycle Advisory Commission to serve as an advisory body to the City Council advising the City on matters relating to improving conditions

for bicyclists, promoting bicycling as a means of transportation with the associated benefits of improved air quality, and improving safety conditions for bicyclists. The Commission reviews capital improvement projects relating to bicycles, reviews changes and updates to the City's Bicycle Master Plan, General Plan, and the Municipal Code as they relate to bicycling, and promotes bicycling and assist in bicycle awareness and education. The Commission is made up of 7 voting members who must be City residents and 2 non-voting members who may be County residents and the Commission meets every even numbered month. Bicycle users are a valuable resource for bicycle-related planning efforts. It is important to remember that there are very different bicycle populations. There are recreational bicycle users, those who commute to work, and also the "semi-professional riders" who are intense cyclists. There may be large differences of opinion between these groups regarding various bicycle topics, and therefore, the Bicycle Advisory Commission should be made up of citizens representing all types of cyclists in order to obtain a reasonable array of information and usable advice.

Policy T-2.5: Provide convenient bicycle support facilities to encourage bicycle use.

Implementing Actions:

2.5.a Develop guidelines for public and private development relating to the design and location of bicycle parking facilities for both residential and non-residential uses and consider a bike parking ordinance.

It is not good enough to provide parking facilities merely for automobiles. If a bicycle rider is forced to park a bicycle in an inconvenient area, subject to bad weather, or walk just as far in inclement weather as someone using a car, the incentive is greatly reduced for the average rider. Bicycle parking needs to be protected, needs to be more convenient than that provided for cars, etc. There have to be special advantages granted to those willing to ride, to make bicycling a realistic option. The City should consider the adoption of a bike parking ordinance. Bicycle parking guidelines from the Association of Pedestrian and Bicycle Professionals (APBP) should be considered as a resource for developing such a bike parking ordinance. The City should also encourage employers to provide end-of-trip facilities, such as bike lockers, bike rooms, and shower facilities, to encourage bicycle commuting.

2.5.b Design criteria in the construction of all bicycle trails, lanes and routes (Class I, II, and III bikeways) should conform to the State of California "Planning and Design Criteria for Bikeways in California;" Class I bikeways should have grade separation with all major streets where possible.

The off-road bicycle/pedestrian trail system in the Merced region, financed in part by State and Federal funding, meets the construction standards required in order to obtain this assistance. Experience over many years with the existing standards has indicated a high level of public acceptance and satisfaction as well.

2.5.c Encourage The Bus system to continue to provide bicycle racks on buses.

Although the City does not operate the Bus system so it cannot mandate such, the City should encourage the transit provider to continue to provide bicycle racks on buses, which has proven to be an effective tool for promoting bicycle and transit use.

<u>Policy T-2.6</u>: Maintain and expand the community's existing bicycle circulation system.

Implementing Actions:

2.6.a Continue to coordinate implementation and planning of the Merced Bicycle Master Plan with the County of Merced and the University of California.

The City and County have a tradition of working together on off-road bicycle/pedestrian trails, as evidenced by the existing regional trail system tying together Merced and a significant portion of the greater urban area, including Lake Yosemite. Given Merced's flat terrain, there is potential for bicycle commuting to be a significant travel mode for the UC campus. A UC study suggested that bicycle usage is significant at all UC campuses for student commutes up to 5 miles, about the distance from Merced to the campus. Coordinating bicycle planning with the University is, therefore, critical, and should be incorporated into the development of the University's Long Range Development Plan, the University Community Plan, the Regional Bike Plan, and Merced Bicycle Plan. The City should update the Bicycle Master Plan, an implementing action of the General Plan, every four years to remain eligible for state funding. The South Merced Community Plan, as an implementing action of the General Plan, also includes various bicycle-related improvements, which should be incorporated into the Bicycle Master Plan for implementation. Through the South Merced Community Plan and the Bicycle Master Plan, the City will focus on adding and improving bicycle facilities in South Merced for recreation and commuting.

2.6.b Pursue all available revenue sources for implementing the City's Bicycle Master Plan.

The City has been very successful over many years in obtaining monies that have helped to put the existing bicycle/pedestrian trail system in place. These efforts should continue.

2.6.c Vigorously pursue and use state and federal funds earmarked for bicycle and transit improvements.

The City will work with Merced County Transit and others to seek funding for transit improvements and the City will seek grants to fund needed bicycle improvements throughout the City.

<u>Policy T-2.9</u>: Ensure that new development provides the facilities and programs that improve the effectiveness of Transportation Control Measures and Congestion Management Programs.

Implementing Actions:

2.9.b Work with employers and developers to provide employees and residents with attractive, affordable transportation alternatives.

Encourage new development to provide on-site facilities that encourage employees to use alternative transportation modes as air quality and transportation mitigation measures. Some examples include:

- Showers and lockers provided in office buildings
- Safe and secure bicycle parking areas
- On-site employee cafeterias and eating areas
- Convenient access to transit waiting areas from offices

The City may provide reduced parking requirements as an incentive for projects to incorporate measures proven to reduce employee commute trips or customer trips. Some methods developers/employers may use to encourage trip reduction and increased Average Vehicle Ridership include:

- Rideshare matching, transit subsidies, vanpool subsidies, flexible work schedules, compressed work weeks, telecommuting, shuttle services, parking management, and guaranteed rides home.
- Encouraging employers to provide preferential or subsidized parking for ride-sharing vehicles and low emission vehicles.
- Providing land use patterns and site designs that increase commuters' ability to walk, bicycle, or use transit to get to work.

2.9.d Complete the City's network of bicycle and pedestrian transportation routes and allow for new forms of non-motorized transportation.

The City should complete its network of on-street (bicycle lanes) and off-street bicycle routes and add sidewalks in areas where they do not currently exist. Examples of non-motorized transportation include "neighborhood electric vehicles" and others.

Goal Area T-3: Air and Rail Services
Relevant goal:

- **Air and rail systems that provide safe and convenient service to the community.**

Policy T-3.5 RAIL: Support enhanced railroad passenger service and high speed rail service for Merced.

Implementing Action:

3.5.c Plan the area around new commuter, passenger, and mainline rail stations to provide convenient and safe pedestrian and bicycle access and connections to the transit system.

Just as the City's Downtown Transpo Center is a primary transfer station for public transit and private bus services, the area around any high speed rail station or other commuter rail system should accommodate all modes of public and private transit. The City will continue to work with the High Speed Rail Authority and Amtrak to create and expand such facilities.

4.7 ISSUES REQUIRING FURTHER STUDY

4.7.3 Non-Motorized Transportation Plan

Merced, Atwater, and the County have developed an extensive off-road pedestrian/bicycle trail system. Much of this system has been planned and constructed along several creeks flowing through portions of the Merced region.

Because the creeks are located primarily in the City's northern portion, off-street trails are concentrated here. To create an attractive and usable extension to this system into other community areas will be a particular challenge because of the lack of natural waterways. Rights-of-ways for irrigation canals provide one opportunity.

Special care needs to be taken to obtain workable segments for such a system from any major future projects. Neighborhood garden sites could offer a way to involve the public in creating an attractive setting. A key to this will be developing a plan that, as a minimum, identifies what resources might be available for such an off-street system throughout the community. When this plan is updated, a pedestrian component should be added to create a non-motorized transportation plan.

The financing plan for circulation improvements should also include a funding mechanism for non-motorized transportation improvements.

Chapter 5—Public Services and Facilities

Goal Area P-5: Storm Drainage and Flood Control

Relevant goal:

- **An adequate storm drainage collection and disposal system in Merced.**

Policy P-5.2: Integrate drainage facilities with bike paths, sidewalks, recreation facilities, agricultural activities, groundwater recharge, and landscaping.

Implementing Actions:

5.2.a Provide drainage channels in transportation or canal easement areas to the extent feasible.

Reflect the planned regional street and open-space network to the degree possible when locating new future drainage facilities.

5.2.b Storm water facilities shall be designed and constructed in accordance with the standards in the Parks and Open Space Master Plan and the Storm Water Master Plan.

The City's Parks and Open Space Master Plan and Storm Water Master Plan include design criteria and standards for joint use facilities. Design criteria include the use of rounded or sculpted edges, natural materials, and abundant landscaping.

Goal Area P-7: Schools

Relevant goal:

- **Excellent cooperative relationships between the city, the school districts, and the development community.**

<u>Policy P-7.1</u>: Cooperate with Merced area school districts to provide elementary, intermediate and high school sites that are centrally located to the populations they serve and adequate to serve community growth.

Implementing Actions:

7.1.d. In general, schools should be located within residential neighborhoods near parks, bikeways*, and other open space amenities. Schools should not be located within industrial areas. In urban village areas, schools should be located adjacent to Village Core Residential (higher density) areas.*

Schools should be sited near open space areas such as parks and bikeways in order to promote joint use of facilities and good bicycle and pedestrian access. In urban villages, schools should be located adjacent to the "Village Core Residential" areas where densities are higher.

7.1.e. The City and the School Districts will work together toward circulation and transportation systems within the City that provide for the movement of students from homes to schools, including considerations for pedestrian, bicycle*, and overall safe routes to school.*

The City and the School Districts will work together to establish safe and convenient systems of public transportation and circulation linked to residential neighborhoods, business centers, parks, schools, and other public facilities which encourage walking or bicycling as an alternative to driving. Overall designs for access/egress to schools should include student/passenger drop-off and pick-up areas whenever possible.

7.1.h. Elementary school sites should be encouraged to locate on collector streets near but not directly on arterials.

New elementary school sites should not result in the creation of hazards for City residents or students. The City will assist by providing data as required by the school districts so the districts can ensure that safe, adequate access is provided to school sites. This will best be served by locating schools on collector streets where access is good but lower traffic speeds lead to a safer environment for students walking to school. At the same time, schools should be located near arterials but not on them, so that bus transportation to the school will not unnecessarily disrupt residential neighborhoods. Off-street passenger loading and unloading areas should be encouraged. Good pedestrian and bicycle access is also an important factor to be considered. Future school sites should have as many sides fronting on streets as possible.

Chapter 6--Urban Design

Goal Area UD-1: Transit Ready Development or Urban Villages
Relevant goals:

- **An integrated urban form**
- **Transit-ready community design**
- **Pedestrian- and bicycle-compatible neighborhoods**

Policy UD-1.1: Apply transit-ready development or Urban Village design principles to new development in the City's new growth areas.

Implementing Actions:

1.1.a The focus of new development will be the "Urban Village," which are mixed-use, pedestrian- and transit-friendly communities within a one-square mile area.

Villages should include a mixture of parks, shops, a variety of housing types, and civic uses. Villages combine these uses within a convenient distance, making it easier for residents and employees to travel by transit, bicycle or foot as well as by car. Village sites should be located on or near planned transit segments and provide a physical environment that encourages pedestrian and transit travel.

1.1.b Each village shall have a mixed-use "Core Commercial" area located immediately adjacent to Village Core Residential neighborhoods.

1.1.c "Village Core Residential Areas" (part of the "Inner Villages") shall include residences that are within a convenient walking distance from Core Commercial areas and transit stops, and are built at densities high enough to help support them.

1.1.d Each Village will have an "Outer Village" adjacent to it which includes lands no further than one mile from the Core Commercial area.

Site plans for the "Outer Village" street network must provide multiple direct street and bicycle connections to the center without use of an arterial street. Outer Villages may have lower density housing, public schools, community parks, limited areas of office uses, and park-and-ride lots.

1.1.e The location of parks, plazas, and trails *should be coordinated to distribute a variety of* recreation *opportunities throughout the area.*

The Urban Village area should contain a network of open space including community parks, neighborhood parks, village parks, village greens, plazas and an interconnected "greenway" trail system. Bicycle and pedestrian trails should be created along major creeks, high-voltage power lines, transitways, and along the abandoned Yosemite Valley Railroad (YVRR) railroad bed in North Merced to provide easy access to parks and schools that should be located along them.

<u>Policy UD-1.2</u>: Distribute and design Urban Villages to promote convenient vehicular, pedestrian, and transit access.

Implementing Actions:

1.2.a Villages should be located to maximize access to their Core Commercial areas from their adjacent neighborhoods without relying on arterials.

1.2.d The Village street system should provide multiple and parallel routes between the Core Commercial area and the rest of the Village. In no case shall trips which could be internal to a square mile bound by arterials be forced onto an arterial.

The collector street pattern should be simple and memorable. Winding roads, dead end streets and cul-de-sacs that cut off direct access to Village Centers should be discouraged in Village Core Residential Areas, but may be appropriate in some Outer Village areas. Streets should converge near common destinations that contribute to an area's unique identity, such as transit stops, Core Commercial areas, schools and parks.

The street system should allow autos, bikes, and pedestrians to travel on small local streets to any location in the Village. At no time should an arterial street be the only preferable route to and from the Inner Village and its Outer Village.

1.2.f Collector and local streets should connect the Inner and Outer Village to Core Commercial areas, schools, and community parks without the use of arterials.

In general, Collectors should be designed to carry moderate levels of local traffic smoothly, in a way that is compatible with bicycle and foot traffic. A network of collectors should provide alternative paths to destinations within the Village for neighborhood residents. The collector network should not provide a speedy through-route alternative to arterials. "T" intersections and "dog leg" alignments could be used to reduce through traffic and reduce speeds. The precise alignment of collectors will be determined as individual projects are designed.

Collectors should contain bikeways. Driveway cuts should be minimized and alley access to rear garages is encouraged to minimize potential conflicts among autos and bicyclists, and for the convenience of residents along collectors. Collectors and some local streets should be aligned along the edge of parks and open space to enhance the aesthetic character of the streets and sidewalks.

1.2.g The pedestrian and bicycle *system must provide clear and direct access to the Core Commercial area and the transit stop.*

Although the street and sidewalk system will accommodate many destinations within Villages, the primary destination will be the Commercial Core and transit stop. Direct paths to the transit stop should be lined with activities and be shaded. The configuration of parking, shopping and pedestrian routes should reinforce access to transit. A feeling of safety for pedestrians and bicyclists can be provided through the use of park strips between the curb and the sidewalk or bike path which provide separation from auto traffic.

MERCED URBAN DESIGN GUIDELINES
(excerpts pertaining to* bicycle *transportation and connectivity)

STREET DESIGN
Arterial Crossings:

Crosswalks across arterials should be provided at all signalized intersections. Undercrossings designed for pedestrians and bicyclists *should be provided at specified locations, where* greenways *cross arterials.*

Explanation: Crosswalks and underpasses should be provided for easy and safe pedestrian and bicycle movement across arterials. As part of the City-wide trail network, undercrossings should be provided where "greenways" and bikepaths cross arterials and in some cases, collectors, where feasible. Additional crossings should be provided at Core Commercial areas and signalized intersections.

Pedestrian Routes:

Primary pedestrian routes should be located along or visible from streets. Routes through parking lots or at the rear of residential developments should be avoided. Bordering primary pedestrian routes and bikeways *with rear yards and fences should be avoided. Where primary pedestrian routes cross arterials, undercrossings or signalized intersections should be provided.*

Explanation: Too often pedestrian paths have been separated from streets, giving a confusing message to pedestrians and creating safety concerns due to reduced visibility. Where possible, the primary pedestrian path system should coincide with the street system. Diagonal short cuts through parks, plazas and greens are an exception and should be encouraged. Paths through parking lots and away from streets should be used only where large setbacks from the street are permitted. Alternate routes around parks should be provided for night use.

Safe pedestrian crossings across arterials, and in some cases collectors, should be provided where major pedestrian movement is anticipated, such as along greenways and across from Core Commercial areas. Undercrossings or signalized intersections should be provided in these locations.

Bike Parking:

Bicycle parking *facilities should be provided throughout Core Commercial areas, in office developments, and at transit stops, schools, parks, and other special destinations.*

Explanation: Bike racks or other bike storage facilities should be provided at various shopping, employment, transit and recreational destinations in Villages. Bike parking may be shared between uses, but should be centrally located, easily accessible to building entries, protected from weather extremes, and visible from streets or parking lots.

Policy UD-1.5: Design and develop public and quasi-public buildings and uses utilizing Transit-Ready Development or Urban Village principles.

Implementing Action:

1.5.b School sites should be selected by their respective districts in a way that provides opportunities to use pedestrian trails *and* bicycle routes *to and from school and minimizes the need for students to cross arterial streets.*

Schools should also be designed to communicate their civic importance and located on or near a "greenway" bicycle and pedestrian trail to provide safe and convenient access to school. Elementary schools should be distributed so few students have to cross arterials. Junior high school and senior high schools should be distributed to minimize the need for busing. High school sites should be selected by their respective Districts so they can be served by transit.

Chapter 7—Open Space, Conservation, & Recreation

Goal Area OS-1: Open Space for the Preservation of Natural Resources
Relevant goal:

- **Maintenance of Merced's biological resources**

Policy OS-1.2: Preserve and enhance creeks in their natural state throughout the planning area.

Implementing Actions:

1.2.a Designate major creeks, streams, woodlands, and other appropriate areas in the City's SUDP/SOI as Open Space corridors.

Major creeks, riparian habitat, significant woodlands, and other sensitive environmental features should be conserved as open space amenities, when feasible. Significant stands of trees and knolls should also be preserved. Fencing and piping of creeks should be avoided. Open Merced Irrigation District channels should not be considered as Open Space corridors, but where MID canals have been undergrounded, MID is open to working with the City on establishing open space corridors (with limited landscaping).

Channelization of non-MID improvements should be naturalized. Whenever possible, in keeping with City standards and CEQA required mitigation measures, major creeks, riparian habitat, significant woodlands and other environmental features should be incorporated into the design of development.

1.2.b Continue to acquire a minimum 50-foot dedication from the centerline (or 25 feet from the crown, whichever is greater) of all creeks within the planning area in order to maintain these open space areas as natural riparian preserves and recreation *areas.*

Public access should be permitted, while important natural features and sensitive habitats are preserved. Corridor width shall be dictated by site specific circumstances of the creek, however, at least the established minimum setback shall be maintained as Open Space.

***Goal Area OS-3: Open Space for Outdoor* Recreation**
Relevant goals:

- **High-Quality recreational open space**
- **Adequate public recreation facilities**
- **Comprehensive urban trail and bike path system**

Policy OS-3.1: Provide high-quality park and open space facilities to serve the needs of a growing population.

Implementing Actions:

3.1.a Continue efforts to acquire new park sites within future growth areas in advance of development to meet the recreation *open space needs of an expanding population.*

Overall, a total of five (5) acres of parkland should be provided per 1,000 residents in the City, of which 1.5 acres should be in community park and 3.5 acres should be in various forms of neighborhood parks, including village greens, school parks and other neighborhood parks. "Greenway" trails should provide bicycle and pedestrian access throughout the City and its growth areas.

3.1.b Consider density bonuses for development proposals which offer extra park land dedications where needed.

Density bonuses on new development should be linked to park land needs for the area and exclude areas which must be set aside as wildlife preserves or left undeveloped for other environmental concerns. Land dedication for planned trails and bikeways are appropriate, but areas used for drainage facilities to serve a development would not be considered for parkland except those areas to be improved for park and open space use by the developer.

3.1.c Continue to implement the City's 2004 Parks and Open Space Master Plan and any subsequent updates.

The City's Parks and Open Space Master Plan (2004) provides specific system design and implementation standards for the development of the City's park system. This plan serves as a basis for requiring development recreation dedications as well as a guide for public facilities expenditures in the parks and recreation category. The 2004 Master Plan provides a road map for the acquisition and maintenance of the City's park and open space resources. The implementation measures and design and development policies contained within the Master Plan should be followed. This plan requires periodic update and will need to be revised to reflect the City's proposed SUDP/SOI and the parks and open space opportunities and needs resulting from development.

3.1.d Continue to encourage joint use agreements between the City and local school districts to combine the design and use of park and school facilities when feasible.

This policy supports and complements other joint use facility policies of the Public Facilities chapter of this General Plan. A 5- to 10-acre neighborhood park should be associated with each elementary and junior high school. These schools and school parks should be centrally located, placed at the edge of a Village or neighborhood

center and along *greenways* when possible. By designing both facilities at the same time, the functionality can be significantly improved.

3.1.e Use the City's Park Dedication Ordinance to develop the City's park system.

A strong effort should be made to use the following criteria to locate parks (a,c,d, and g omitted for irrelevancy):

b) Parks should be located adjacent to schools as much as feasible.

e) Park sites should be located so as to incorporate naturally-occurring open space features, such as significant stands of trees, riparian and wildlife habitat, scenic vistas, and creeks and drainage canals.

f) Park sites should be located adjacent to *bikeway* facilities.

h) Parks should have access to nearby subdivision and *greenways* by means of cul-de-sacs, access easements, etc.

Policy OS-3.2: Maintain and expand the City's *bikeway* and *trail* system.

Implementing Actions:

3.2.a Utilize the urban stream system in the planning and design of bikeways and trails.

It is the City's policy to acquire a minimum 50-foot dedication from the centerline (or 25 feet from the crown, whichever is greater) of all creeks within the planning area in order to maintain these open space areas as natural riparian preserves and *recreation* areas. Development of *bikeways* and *trails* in these open space areas can enhance the open space value of the urban stream system provided that the *trails* do not unnecessarily interfere with other open space goals and policies.

3.2.b Make use of creekside areas, utility line easements, abandoned railroad rights-of-way, and canal easements for bikeway purposes.

These areas are generally set aside as open space areas, and their use for *bikeway* and *trail* systems would enhance the public value of open space in addition to providing an important amenity to neighborhood residents.

3.2.c Provide links between parks, schools, and open space areas via the bikeway system.

The *bikeway* system can also be part of a greenway linking parks, schools, and other important open space areas.

3.2.d Provide a link between the City and County bikeway systems by establishing a connector to the Lake Road Bikeway Corridor out to Lake Yosemite.

This area will become an important *bikeway* link to the new U.C. Campus area and its surrounding development. Plans may be integrated with future development of the Campus Parkway and linear open space plans along drainage courses and irrigation canals.

3.2.e Develop an off-street bikeway and trail system in South Merced.

As part of the South Merced Community Plan process, an inventory of potential off-street routes was reviewed by neighborhood groups. A system was developed to link existing and planned future park areas and provide links to other open space and

school areas as well as being integrated into the rest of the City's *bikeway* system (see Figure 4.9), and this plan's Policy T-2.4.b. The City should explore using existing drainage facility easements to accommodate such a system. The planned system should be implemented within the resource constraints of the City.

3.2.f Expand the existing bikeway system to all new growth areas as development occurs.

As part of the development review process, *bikeway* dedications should be required, when appropriate, as a condition of permit approval.

3.2.g Explore the possibility of providing unpaved trails for equestrian and mountain bike use as part of the overall trail system.

These types of *trail* systems may be appropriate along the eastern fringe of the City where lower density Rural Residential development permits the keeping of horses and other livestock on large lots.

3.2.h Bike path designs should reflect security and other needs of the surrounding community.

When locating *bike paths* and *trails*, the design should be sensitive to the need for privacy and security of neighboring residents. If feasible, *bikeways* should be designed with multiple access points from surrounding neighborhoods so there is sufficient visibility from public roadways to facilitate surveillance by residents and police patrols. Where feasible, *bike paths* should be designed so that at least one side is open to a public street. Situations where *bike paths* are located along the back sides of homes with limited visibility should be avoided as much as possible. Open fencing along *bike paths* should be considered, especially adjacent to multi-family developments.

Policy OS-3.4: Develop a diverse and integrated system of park facilities throughout Merced.

Implementing Actions:

3.4.a Community parks should be distributed throughout the City.

There should be at least 1.5 acres of community park provided per 1,000 residents. Community parks are usually 15 acres in size or greater. Community parks are major *recreation* facilities and contain many ball fields, play lots, picnic opportunities and other facilities. They must be located along a greenway and should be at the junction of two *greenways* when possible. Greenways, streets and landscaping should be used to minimize and buffer residences from the noise and nighttime lighting associated with ball fields. Development of the Community Park at the northwest corner of Tyler and Mission in South Merced as described in the City's Park and Open Space Master Plan, should be a top priority.

3.4.c Greenways should be designed to connect various park sites, schools and other public places with paths exclusively for pedestrians and bicyclists.

Greenways weave through the residential neighborhoods connecting larger public uses (schools, open space, commercial uses, etc.) and provide many points of

physical and visual access to the park sites. Some *greenways* may also act as mini-parks because of play and exercise equipment placed along the paths. *Greenways* act as valuable greenbelts of open space through a neighborhood. *Greenways* should be designed in association with *bike paths*, *trails*, and pedestrian ways to follow creeks, canals, power line easements, etc.

Greenway design should emphasize access. Access has a major effect on whether a greenway is used. If a greenway is hidden, tucked away in a neighborhood, enclosed by high fences, and/or unmaintained, the public may avoid using them and they may become unsafe.

3.4.d In cooperation with Merced County and the Merced Irrigation District, evaluate the Lake Yosemite regional park to identify how it might adequately meet the needs of the City of Merced and the new growth areas in the region including the U.C. Merced campus.

Regional parks can serve many cities and are sometimes used as resting stops for travelers. Often their focal points are lakes, rivers or other natural resources. Typically, they are provided by counties and the state. Because of their distance from a city, their accessibility is generally limited to those who can drive there. Lake Yosemite Park is a regional park located in the northern expansion area of the City and operated by the County of Merced. Lake Yosemite Park is of special interest to Merced because of its water *recreation* opportunities and open space qualities in addition to the fact that it is within *bicycle* commute range for many residents.

Lake Yosemite will likely become more heavily used by City residents as Merced grows and the U.C. Merced campus expands and grows. As the City expands to the north and public transportation becomes more available in the area, Lake Yosemite Park will become even more accessible to local residents. As a result, additional space and facilities may be required to accommodate future growth. Some of the area around the park contains potential wildlife habitat which limits development options for land owners. The City and County might cooperate in developing a wildlife mitigation banking program for this area which would allow landowners to transfer development rights to other lands upon dedicating habitat and potential park land for public use. Consideration should be given to providing expanded public access and additional roadway entrances into the Lake Yosemite Regional Park.

Goal Area OS-4: Open Space for Public Health and Safety
Relevant goal:

- **A safe environment for Merced's citizens**

Policy OS-4.1: Preserve open space areas which are necessary to maintaining public health and safety.

Implementing Action:

4.1.b Utilize areas along railroad rights-of-way and under high-voltage power transmission lines as open space.
These areas could be used as *greenways* and open space areas which would provide scenic buffers from potential health hazards in addition to providing visual (and noise in the case of railroads) buffers to surrounding areas. These areas could also be developed with storm water retention basins, groundwater recharge basin or used as part of the municipal water or other utility systems where the risk of public exposure to health hazards could be minimized.

Chapter 8--Sustainable Development

Goal Area SD-1: Air Quality and Climate Change
Relevant goal:

- **Effective and efficient transportation infrastructure**

Policy SD-1.2: Coordinate local air quality programs with regional programs and those of neighboring jurisdictions.

Implementing Actions:

1.2.a Work with neighboring jurisdictions and affected agencies to address cross-jurisdictional and regional transportation and air quality issues. The City can create an environment that allows and encourages staff members to keep up with activities in neighboring jurisdictions and regional agencies. This may be accomplished by sending representatives to appropriate meetings, by contacting counterparts in other agencies when developing programs, and most important, by active participation in regional program planning.

The Planning Department, as required by law, maintains internal procedures to ensure that all affected jurisdictions and agencies are notified of development proposals. When another agency notifies the City of a pending project, air quality related issues, such as the following, should be examined:

2. Effects on the viability of transit and pedestrian-oriented developments in the area (i.e., approval of a low density development on the same transit corridor as a transit-oriented development could reduce the ability of the transit provider to provide reasonable headways);

3. Failure of the other jurisdiction to require the construction of a segment of a *bikeway* planned in the regional *bikeway* plan; and/or,

1.2.e In cooperation with the San Joaquin Valley Air Pollution Control District, examine potential sources of revenue to pay for air quality improvement measures.

The City may elect to participate in nexus studies to demonstrate the need for and benefit of revenue collected to combat air pollution, when such revenue could be used for implementing the following air quality-oriented programs:

3. Development of alternative modes of transportation such as *bike lanes/paths* and *trails*.

Policy SD-1.3: Integrate land use planning, transportation planning, and air quality planning for the most efficient use of public resources and for a healthier environment.

Implementing Actions:

1.3.a The City of Merced will consider air quality when planning the land uses and transportation systems to accommodate the expected growth in this community.

Develop coordinated land use and transportation plans to meet federal, state, and local air quality requirements. Ensure that land uses proposed in general plan updates and general plan amendments are supported by a *multi-modal* (auto, transit, *bicycling*, pedestrian, etc.) transportation system and that the land uses themselves support the development of the transportation system.

1.3.b Transportation improvement should be consistent with the air quality goals and policies of the General Plan.

Analyze project submittals for consistency. Examples of inconsistent projects are a road widening project that does not consider transit, *bicycling*, and pedestrian needs along the route or an intersection signalization project that does not involve the installation of signal actuators that can be activated by *bicyclists* or pedestrians.

1.3.e The City of Merced will work with Caltrans and MCAG, the Regional Transportation Planning Agency, to minimize the air quality, and mobility impacts of large scale transportation projects on existing neighborhoods.

Use existing rail right of ways where feasible. Provide safe pedestrian and *bicycle* connections between neighborhoods and shopping areas when they become separated by new rail or freeway projects.

Policy SD-1.4: Educate the public on the impact of individual transportation, lifestyle, and land use decisions on air quality.

Implementing Action:

1.4.a Work to improve the public's understanding of the land use, transportation, and air quality link.

The City should support the SJVUAPCD efforts to educate developers and the public on the benefits of pedestrian and transit friendly development and should participate in local programs that can reduce vehicle trips and miles traveled.

Policy SD-1.5: Provide public facilities and operations which can serve as a model for the private sector in implementation of air quality programs.

Implementing Action:

1.5.a Continue to support, encourage, and implement to the extent feasible innovative employer-based trip reduction programs for their employees.

Ensure that employment contracts negotiated with employee unions are flexible and allow workers to participate in programs that reduce commute trips, such as staggered work hours, incentives for using public transit, car pools, etc.

Policy SD-1.7: Develop and implement a Climate Action Plan for the City.

Implementing Actions:

1.7.c As part of the development of the Climate Action Plan and in the spirit of AB 32, The Global Warming Solutions Act of 2006, a variety of suggested measures from the California Climate Action Team Strategies and the Department of Justice Attorney General will be considered and evaluated by the City for possible future implementation.

The following measures shall be considered, although some of the items below have already been implemented by the City:

- Require new development to implement the following design features, where feasible *(note: excerpted for relevancy)*:
- Promote pedestrian, *bicycle* and transit modes of travel through informational programs and provision of amenities such as transit shelters, secure *bicycle* parking and attractive pedestrian pathways.
- Encourage mixed-use and high-density development to reduce vehicle trips, promote alternatives to vehicle travel and promote efficient delivery of services and goods.

Policy SD-1.8: Implement policies in other General Plan chapters to address air quality and greenhouse gas emissions reduction goals

Implementing Actions:

1.8.a Continue implementation of land use, transportation, urban expansion, urban design, open space, and public facilities General Plan policies that address air quality goals.

Many of these policies are presented in the Sustainable Development Chapter, but many of these policies are spread throughout the General Plan in the Urban Expansion, Land Use, Transportation, Public Facilities & Services, Urban Design, Open Space, and other chapters. Below is a list of topics addressed along with the General Plan policies found elsewhere in this document that relate to *both bicycles* and air quality goals:

Sustainable Development-Air Quality Policies:

- **Coordination with Air District (Policy SD-1.2)**

Urban Expansion Policies:

- **Establishment of urban limit lines (Policies UE-1.2 and UE-1.3)**
- **Encouragement of Compact and In-fill Development (Policies UE-1.2; Land Use L-2.8)**

Land Use Policies

- **Encouragement of Mixed-use Development (Policy L-2.7)**
- **Increased residential densities (Policy L-3.1)**
- **Encouragement of Transit-Oriented Development or the City's Village Concept (Policies L-3.1; Transportation T-1.5; Urban Design UD-1.1, UD-1.2, and UD-1.5)**
- **Pedestrian-oriented or pedestrian-friendly developments (Policies L-2.7, L-3.1, and L-3.3)**

Transportation Policies:

- **Dedicated transit corridors or "Transitways" (Policies T-2.1, T-2.2)**
- **An interconnected street system (Policies Land Use L-2.7 and L-3.3: Transportation T-1.2)**
- **Trip reduction measures (Transportation T-2.9, Sustainable Development SD-1.5)**
- **Encouragement of *bicycles* as a transportation option (Land Use L-3.3; Transportation T-2.4, T-2.5, T-2.6; Public Facilities P-5.2; Open Space OS-3.2)**
- **Development of *multi-modal* (all forms of transportation) developments, including highway-oriented developments (Policies Land Use L-2.10; Transportation T-1.5 and T-3.5 RAIL)**
- **Congestion management programs (Policies T-2.9)**

1.8.b Continue implementation of land use, transportation, urban expansion, urban design, open space, and public facilities General Plan policies that address greenhouse gas emissions reduction goals.

Many of these policies are presented in the Sustainable Development Chapter, but many of these policies are spread throughout the General Plan in the Urban Expansion, Land Use, Transportation, Public Facilities & Services, Urban Design, Open Space, and other chapters. Below is a list of topics addressed along with the General Plan policies found elsewhere in this document that relate to *both bicycles* and greenhouse gas emission reduction goals:

Urban Expansion Policies:

- **Establishment of urban limit lines (Policies UE-1.2, & UE-1.3)**
- **Encouragement of Compact and In-fill Development (Policies UE-1.2; Land Use L-2.8)**

Land Use Policies:

- **Encouragement of Mixed-use Development (Policy L-2.7)**
- **Increased residential densities (Policies L-3.1)**
- **Encouragement of Transit-Oriented Development or the City's Village Concept (Policies L-3.1; Transportation T-1.5; Urban Design UD-1.1, UD 1.2, and UD-1.5)**
- **Pedestrian-oriented or pedestrian-friendly developments (Policies L-2.7, L-3.1, L-3.3)**

Transportation Policies:

- **Dedicated transit corridors or "Transitways" and emphasis on public transit (Policies T-2.1 and T-2.2)**
- **An interconnected street system (Policies Land Use L-2.7 and L-3.3: Transportation T-1.2)**
- **Trip reduction measures (Transportation T-2.9)**
- **Encouragement of *bicycles* as a transportation option (Land Use L-3.3; Transportation T-2.4, T-2.5, T-2.6; Public Facilities P-5.2; Open Space OS-3.2)**

Goal Area SD-4: Healthy Communities

Relevant goals:

- **Healthy lives for community residents**
- **A healthy environment for all residents**

Policy SD-4.1: Create a healthy built environment.

Implementing Actions:

4.1.a Promote compact, mixed use, and transit-oriented development.

Through the City's Village Concept, which calls for the development of compact, mixed-use, pedestrian- and transit-friendly developments, the City can help to build a healthier community. Policies relating to the Village Concept can be found in the Land Use, Transportation, and Urban Design Elements.

4.1.b Plan neighborhoods with safe and attractive places for recreational exercise.

The City's Open Space Element (Chapter 7) has policies that promote neighborhood parks and *bikeways*. The Transportation Element (Chapter 4) has policies that promote the expansion of walking and biking facilities throughout the City.

4.1.c Create a balanced transportation system that provides for all modes of transportation.

The City's Transportation Element (Chapter 4) contains policies that promote a balanced transportation system that provides for *all modes of transportation*, including motorized vehicles, *bicycles*, transit, pedestrians, and air and rail transit.

Policy SD-4.2: Encourage increased physical activity of residents and healthier food choices.

Implementing Action:

4.2.a Increase biking and walking through street design.

By designing "complete streets" that accommodate *all modes of transportation*, as required in the policies in the Transportation Element (Chapter 4), residents will have access to safe and convenient biking and walking facilities. The City's policy of planting of trees along streets between the curb and the sidewalk help create a feeling of safety for pedestrians and handicap-accessibility is emphasized. *Bike* lanes are provided along most streets.

2011 Regional Transportation Plan (RTP)

The 2011 Regional Transportation Plan (RTP) for the Merced County region was adopted by the Merced County Association of Governments (MCAG) Board on July 15, 2010.
The 2011 RTP specifies the projects and programs necessary over a 20-25 year period to maintain, manage, and improve the region's transportation systems. The RTP addresses all relevant transportation modes for Merced County. Among those addressed is bicycle transportation.

Vision Section: Themes and Goals

The 2011 RTP Vision addresses Themes and Goals that directly and indirectly pertain to bicycle transportation systems.

- Promote an efficient, regionally-linked system of bikeways.
- Coordinate future land use patterns and transportation systems (air, rail, transit, bike and pedestrian, roads) to foster economic prosperity, environmental protection and mitigation, trip reduction, and the creation of efficient, integrated mixed-use communities.
- Encourage land use and growth patterns that enhance the livability of our communities and maximizes the productivity of transportation investments.
- Favor transportation investments that protect the environment including improving air quality, promoting energy efficiency, and enhancing the quality of life.

Action Section: Bicycle Mode

Local governments are responsible for the planning and development of bikeways within their jurisdictions.

The City of Merced has the most extensive, jurisdictional bikeway system in Merced County. The City of Merced adopted a Bicycle Transportation Plan (BTP) in 2008. The goal of the City's BTP is to create and maintain an integrated system of bikeways, which provide safe and convenient travel for bicyclists. Additionally, the City will encourage area employers to promote bicycle use and to support local promotional efforts and events. The City also approved the Bicycle Advisory Commission (BAC), which involves bicycle users in the bicycle planning efforts and bicycle-related transportation activities.

The Regional Bikeway Plan was adopted by MCAG in 2008. The plan's intent is to connect to the bikeway systems of local communities and to major destinations throughout Merced County. The plan also calls for development, maintenance, safety, and bicycle education.

MCAG makes efforts to promote walking and bicycling as viable commute alternatives. As the Transit Joint Powers Authority, "The Bus" offers bicycle racks on all its buses to accommodate its riders. MCAG encourages the local jurisdictions to pursue funding opportunities to implement local and regional bicycle plan projects. MCAG approves regional CMAQ monies to fund bicycle/pedestrian projects.

MCAG continues to encourage the local jurisdictions to incorporate sound bicycle and pedestrian planning in their General Plans, pursue "safe routes to school" fundings to improve pedestrian and bicycling safety near schools, and maintain existing bikeways and facilities. MCAG offers to assist local jurisdictions with their design, update, and implementation of local Bicycle Transportation Plans. MCAG works with local staff on the development of the Regional Bicycle Plan.

Funding Sources Section: Bicycle Mode

The State's Bicycle Transportation Account (BTA), the State's Safe Routes to School (SR2S) Program, the Federal Safe Routes to School (SRTS) Program, and the regional Federal Congestion Mitigation Air Quality (CMAQ) Program were identified as possible funding sources for bicycle projects.

- The Bicycle Transportation Account (BTA) has grown from $375,000 in 1999 to $7.2 million currently. BTA funds are competitive on a statewide basis. In order to apply, the local jurisdiction must have an adopted and certified Bicycle Transportation Plan within the past five years.
- The State's Safe Routes to School (SR2S) has made available over $24 million annually for projects.
- Even though the Federal Safe Routes to School (SRTS) continues to be funded this current federal fiscal year (FFY 2012/13), there is uncertainty about its continued funding in future years. The City of Merced has one current project awarded by the SRTS program.
- CMAQ funds are federal monies for air quality nonattainment areas to fund projects/programs that relieve congestion and improves air quality. CMAQ funds are regionally competitive, when funds are not entirely expended on transit and cost-effective projects/programs (i.e. diesel engine retrofits). It is up to MCAG to determine which eligible project(s) receives funding.

For the RTP period, it was anticipated that $1 million would be granted from the BTA and $5 million would be approved from the CMAQ Program for the region's bicycle projects.

For the past five cycles of BTA grants (http://www.dot.ca.gov/hq/LocalPrograms/bta/btaAprovedProject.htm), since the approval and certification of the 2008 Merced City Bicycle Transportation Plan (BTP), the City of Merced has been unsuccessful in winning awards from the statewide, annually-available $7.2 million pot.

Over the past few years, the City of Merced has benefited from the CMAQ Program, with close to $3.5 million approved by MCAG for the City's bicycle projects.

2012 Climate Action Plan

Bike-Related Policies:

STRATEGY: Dramatically Increase the amount of facilities that support bicycle transportation throughout the City.

ACTIONS FOR STRATEGY EM 1.3

EM 1.3.1: Utilize the urban stream system in the planning and design of bikeways and trails (General Plan Policy T-3.2, Implementing Action 3.2.a).

EM 1.3.2: Work with Merced County to establish connecting links to existing and planned inter-community bikeways. For example, provide a link between the City and County bikeway systems by establishing a connector to the Lake Road Bikeway Corridor out to Lake Yosemite (General Plan Policy T-3.2, Implementing Action 3.2.d).

EM 1.3.3: Develop an off-street bikeway and trail system in South Merced (General Plan Policy T-3.2, Implementing Action 3.2.e).

EM 1.3.4: Stripe 20 miles of bike lanes on existing City streets and 5 miles of Class I pathways by 2020.

EM 1.3.5: Implement the City of Merced Bike Plan, with particular focus on constructing safe, comfortable, continuous bike facilities that connect residential, workplace, commercial, school and recreation destinations.

EM 1.3.6: Update the *Bicycle Master Plan* to reflect the Climate Action Plan and to coordinate with Complete Streets and Safe Routes to School policies.

EM 1.3.7: Create an incentive-based program to encourage workplaces to provide destination amenities required by bicyclists, including: safe, secure, covered bicycle parking; and showers and lockers at workplaces.

EM 1.3.8: In addition to off-street Class I Bikeways and Class II Bike Lanes, explore designs and appropriate sites in Merced for bicycle use spaces to be located within street rights-of-way having limited exposure to vehicular traffic, such as sharrows, shared streets, and bike boulevards.

EM 1.3.9: Update the Official City Design Standards to be consistent with the Bicycle Master Plan, the *Merced Vision 2030 General Plan* and the *Climate Action Plan*, by inclusion of facilities such as: traffic signal sensors that detect bicycles, and signs beside and on the street that alert motor vehicle drivers to the presence and appropriateness of bicyclists on the street.

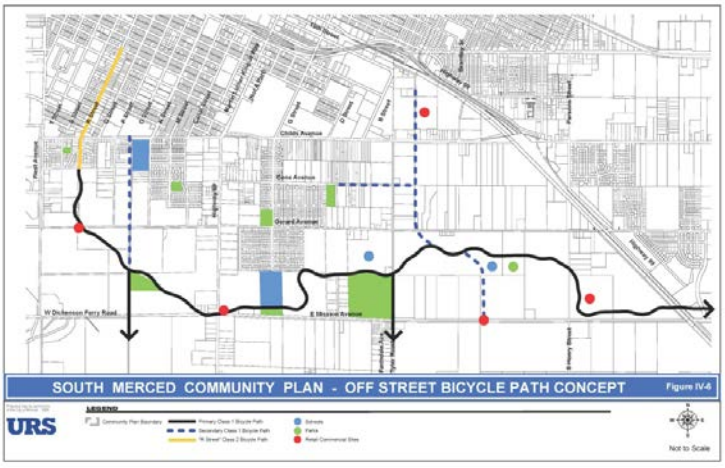
Martin Luther King Jr. Way Revitalization Plan

Action Item #5: Explore Design Options for Canal Street to be used as a Predominantly Pedestrian, Bicycle, and Transit Road.

Just as Martin Luther King Jr. Way provides for all transportation modes, but is utilized primarily by autos and trucks, this action item seeks to provide a transportation corridor in the Plan Area that emphasizes pedestrian and bicycle travel to northern and southern destinations. Anchored by one of the area's landmarks - McNamara Park, Canal Street with its relatively low-vehicle traffic and access under State Route 99 to Downtown, affords an opportunity that cannot be achieved on other plan area roadways. The intent of this action is for further analysis, public outreach and design options to be explored to answer whether or not the idea has merit, and if so, what ultimate design and travel options can be deployed.

South Merced Community Plan

Bike Related Policies:



Policy OS-1.1

Develop a Safe Pedestrian and Bicycle System with Routes Between Open Spaces, Schools, and Key Destinations in the Plan Area.

Implementing Actions:

1.1.a As development occurs, require construction of the Plan's primary and secondary Class I (off-street) bike/pedestrian path system. The primary route is distinguished from the secondary route by its width, additional open space, and preference to be located away from paralleling streets where possible. The secondary routes are narrower and located alongside collector roads. Figure IV-6 depicts a general alignment of the bike path. A more precise and specific alignment will be made at the Project-specific level, with the goal of limiting interfaces with vehicles at road crossings.

1.1.b The Class I bike/pedestrian path system between Henry Street and Tyler Avenue is envisioned to be a wide linear park whose primary feature is a storm-drain system with sinuous basins that simulate a natural water feature.

1.1.c As determined by City staff on a site-by-site basis, the width and design of the Class I bike/ pedestrian path system will vary throughout the Plan area depending upon adjacent land uses, use of stormwater basins, and traffic needs and impacts. An overall minimum width of 82-feet as depicted in Figure 6.1 of the *Merced Park and Open Space Master Plan* (page 6-50) should be assumed in the initial design of a project. Variations to this width are probable.

1.1.d Design arterial and collector street intersections and roadway segment cross-sections with wide medians and curb bulb-outs in order to:

(a) shorten the time a pedestrian or bicyclist is located in the travel lanes;
(b) create a safe-haven in the center median; and
(c) serve to calm traffic.

1.1.e In all situations, the Class I bike/pedestrian path system shall be designed and constructed to provide ample lighting and surveillance opportunities from adjacent land uses and streets. Where the pathway runs next to a cul-de-sac, broad vision-corridors (instead of narrow view sights between buildings and fences) shall be provided.

1.1.f As part of annexation proposals, conduct a study to determine where improvements are missing, then implement a program to install missing sidewalks, crosswalks, bike facilities, and lighting.