

Environmental Review #11-15, Appendix D, Policy Alignment Document.

Contents

C.1 Overview of Policy Arrangement

C.2 Urban Design (Vision and Urban Design)

- C.2.1 Goal and Policy Outline
- C.2.2 Transit-Ready Development/Urban Villages
- C.2.3 Overall Community Appearance

C.3 Transportation and Circulation (Mobility)

- C.3.1 Goal and Policy Outline
- C.3.2 Streets and Roads
- C.3.3 Bicycles, Pedestrians, and Public Transit

C.4 Open Space, Conservation and Recreation

- C.4.1 Goal and Policy Outline
- C.4.2 Open Space for the Preservation of Natural Resources
- C.4.3 Open Space for Outdoor Recreation
- C.4.4 Open Space for Public Health and Safety
- C.4.5 Conservation of Resources

C.5 Land Use (Community Character)

- C.5.1 Goal and Policy Outline
- C.5.2 Residential & Neighborhood Design
- C.5.3 Economic and Business Development
- C.5.4 Urban Growth and Design

C.6 Urban Expansion

- C.6.1 Goal and Policy Outline
- C.6.2 Preservation of Agriculturally Significant Areas
- C.6.3 A Compact Urban Form and Efficient Urban Expansion
- C.6.4 Joint Planning Efforts
- C.6.5 Timing, Density, and Location of New Growth
- C.6.6 Rural Residential Centers

C.7 Public Services and Facilities

- C.7.1 Goal and Policy Outline
- C.7.2 Public Facilities and Services
- C.7.3 Police and Fire Protection
- C.7.4 Water and Wastewater

- C.7.5 Storm-Drainage and Flood Control
- C.7.6 Schools
- C.7.7 Telecommunications

C.8 Sustainable Development

- C.8.1 Goal and Policy Outline
- C.8.2 Air Quality and Climate Change
- C.8.3 Cultural Resources
- C.8.4 Energy Resources

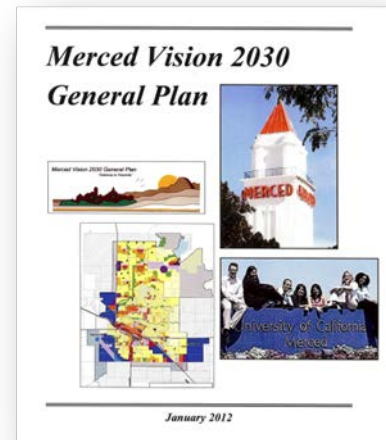
C.1 Overview of Policy Arrangement

To assure that the *Bellevue Community Plan* (BCP) was crafted in a manner consistent with the *Merced Vision 2030 General Plan*, this Policy Alignment Document lists General Plan policies and implementing actions that guided the crafting of the *Bellevue Community Plan*, and form a foundation upon which new policies were written to apply specifically to the BCP.

Use of the *Merced Vision 2030 General Plan* goals and policies in this manner assures that the BCP is consistent with the City's General Plan.

Policies are arranged similar to the chapters of the general and community plans, and include:

- Urban Design
- Transportation and Circulation (Mobility)
- Open Space, Recreation and Conservation
- Land Use (Community Character)
- Urban Expansion
- Public Facilities and Services
- Sustainable Development



C.2 Urban Design

C.2.1 General Plan Goal and Policy Guidance

GP Goal Area UD-1: Transit-Ready Development/Urban Villages

- The Focus of New Development will be Mixed-use, Pedestrian and Transit-Friendly Communities
- Develop Design Principles for New Communities (especially near UC Merced) to Encourage Job-Generating Uses

GP Goal Area UD-2: Overall Community Appearance

- Establish Gateway Design Standards
- Require all New Utility Lines to be Placed Underground

C.2.2 Transit Ready Development or Urban Villages

Urban Design Policy UD-1.1

*The fundamental building block of the Plan is the Village, a compact, mixed-use district that will accommodate projected growth, maintain Merced's present quality of life and help ensure its continued economic vitality. Villages achieve these goals by encouraging pedestrian and transit travel, and by minimizing single-use, low density developments that generate traffic congestion, air pollution, a scarcity of affordable housing, monotonous landscapes and poor utilization of environmental and land resources. The City of Merced has established the "Urban Village" model (also known as "Transit Ready Development") as the basic design concept governing urban form in new growth areas. Its principles should be applied as much as feasible in new growth areas throughout the Merced urban area. For these reasons, the **Urban Design Policy UD-1.1** of the Merced Vision 2030 General Plan spotlights the need to **Apply Transit-Ready Development or Urban Village Design Principles to New Development in the City's New Growth Areas.***

The Focus of New Development will be Mixed-use, Pedestrian and Transit-Friendly Communities

Implementing Action UD-1.1.a of the *Merced Vision 2030 General Plan* states, “**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.

BCP Policy: UD-1.1: Orient buildings to address the street.

Creating a physical environment that encourages pedestrian and transit travel is more than simply providing a sidewalk. Actual use is based on the design of adjacent uses and proximity to a variety of uses. Positioning buildings next to the street and sidewalk (addressing) creates a pleasing environment for the pedestrian where they can enjoy proximity to building entrances, window displays, architectural interest, and other people. This context attracts pedestrians and provides a worthwhile return of the City’s investment to construct and occupy space within a public right-of-way.

Develop Design Principles for New Communities (especially near UC Merced) to Encourage Job-Generating Uses

Implementing Action UD-1.1.h of the *Merced Vision 2030 General Plan* states, “**Develop special ‘Urban Village’ design principles to encourage more job-generating uses within the Urban Villages.**” Special “Urban Village” designs should be developed to provide for increased opportunities for job-based land uses attracted by a university climate in some Urban Villages, especially in the northwestern area of the City, while still maintaining the basic concept of mixed-use, pedestrian and transit oriented communities. These “Urban Villages” may differ from others in the Community in the mixture of business park, research and development (also supported by Implementing Action UD-1.1.f), office, public/cultural uses, and retail uses within the Village Core areas instead of the retail/office/public facilities focus of other Villages which are more residential in nature.

BCP Policy UD-1.2: Seek to provide incubator-spaces for small businesses.

Through zoning, site design planning and economic development tools , seek to provide spaces throughout the planning area, but notably within the Mandeville Corridor, that offer office, retail and small-scale manufacturing incubator-sites for entrepreneurs who are attracted to a university setting.

BCP Policy UD-1.3: Strive to meet the commercial services of not only students, but the local community as well.

Serving a diversified market guarantees services and related activities year-round, not just during the academic schedule. A variety of retail outlets should be present in the BCP to reflect the interests of a diverse population.

BCP Policy UD-1.4: Seek to attract and retain entrepreneurs and UCM graduates.

Some of the most important meetings are spontaneous. Spontaneous meetings occur when paths intersect while traveling from one place to another or standing in line for coffee or lunch. Chance interactions have the qualities of being informative, creative, and social in an important way that reinforces relationships. The Bellevue Corridor should be a place that enables such interactions, such as:

Housing: To encourage the flow of ideas, the BCP should not only have places to meet, but a population to fill such space. The population in the BCP will include: 1) researchers expanding on current and new research and development; 2) students and graduates; 3) young families seeking new business or research opportunities; 4) those wanting to embrace a lifestyle of creativity with the incorporation of thoughts inspired by surrounding people; 5) entrepreneurs who wish to be part of an innovative community; and, 6) small business owners in an innovative community (restaurants, coffee shops, boutiques, apparel stores).

Events and Activities: Support and encourage farmers-markets for local farmers and shoppers, live music to showcase local talent, or other events available to community residents, hosted by local businesses throughout the BCP.

Pedestrian-Related Street Components: Develop streetscapes with ample amenities such as landscaping, shade trees, generous sidewalks, street furniture, signage, lighting, and art to promote pedestrian movement, community attractiveness, and informal meeting spaces. Done right, pedestrian-related street components can spark street-level interaction and maximize the potential for informal contact of the average person in a given public space at any given time.

Scale: To assure frequent interactions, ensure that pedestrian-scale design exists throughout the plan area, but particularly in highly populated areas. At the individual space level, indoor and outdoor spaces will be intimate and active enough to encourage people to meet or stop to engage when they encounter one another.

C.2.3 Overall Community Appearance

Urban Design Policy UD-2.2

*Over the years, the City of Merced has developed a unique physical character and civic flavor. The City's compact form, tree shaded streets, well kept neighborhoods and extensive open space areas have contributed to its charm and attractiveness. To preserve and enhance this positive community appearance, the City has traditionally committed to a policy of civic improvement and beautification. For these reasons, the **Urban Design Policy UD-2.2** of the Merced Vision 2030 General Plan spotlights the need to **Maintain and Enhance the Unique Community Appearance of Merced.***

BCP Policy UD-2.1: Development of private and public lands will seek to maintain existing topographical features.

The hilly terrain in the planning area is unique to the City of Merced and should be maintained. The vista and swale topography provide opportunities for open space corridors, curving roadways, and distinct place-making opportunities whether on public or private lands. Removal of large amounts of soil should be avoided; rather the development should fit the character of the land.

Establish Gateway Design Standards

Implementing Action UD-2.2.a of the *Merced Vision 2030 General Plan* states, “**Encourage joint City and County cooperation in establishing land use and development standards along all major gateways to the City.**” Working in cooperation with the County, the City shall propose development standards for these city entrances and outline a strategy for implementation.

BCP Policy UD-2.2: Working in cooperation with the County, the City shall propose development standards for Bellevue Road and Lake Road.

Both Lake Road and Bellevue Road and adjacent environs should be constructed as important gateway roads. Development standards should include a unique roadway cross-section, appropriate siting and aesthetic architecture of adjacent buildings and required yard areas, a complementary street furniture zone (where appropriate), and landscaping both within and along the rights-of-way. The character of these streets should be unique and attractive, and be as much a gateway to UC Merced as a gateway to the City of Merced. Landscaping shall be included within these rights-of-way to create a Boulevard appearance.

Require all New Utility Lines to be Placed Underground

Implementing Action UD-2.2.e of the *Merced Vision 2030 General Plan* states, “**Expand the City's programs for undergrounding utility lines and require all new utility lines to be placed underground.**” Working closely with PG&E and other utility companies, the City shall continue its efforts to place existing overhead electrical and communication lines underground. All new utility lines shall be placed underground.

C.3 Transportation and Circulation (Mobility)

C.3.1 General Plan Goal and Policy Guidance

GP Goal Area T-1: Streets and Roads

- Implement the City's Street Functional Circulation Plan
- Seek and Evaluate Collector Street Design Options
- Protect Right-of Way for Future Users
- Work with the County and Caltrans to Implement Area Expressways
- Adhere to Street Spacing Standards to Provide Smooth Traffic Flow
- Provide Multiple Streets to Local Destinations
- Promote Transportation System Management Strategies

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

- Avoid Negative Impacts to Function of Transit Corridors
- Plan for a Transit Corridor to UC Merced
- Promote Land Use Patterns and Site Designs that Support use of Public Transit
- Provide Convenient Access to Transit
- Take a Long Range View of How Land and Site Planning can possibly Affect Future Public Transit Options
- Avoid Designs that Require Transit Passengers to Cross Major Streets
- Coordinate Bike Planning and Construction with UCM and Merced County

C.3.2 Streets and Roads

Transportation Policy T- 1.1

*It is extremely important to coordinate circulation and land use planning. Street systems are intended to move motor vehicles but streets also are expected to provide access to nearby land uses. Smaller streets called upon to carry heavy traffic to major activity centers can create large circulation problems. Large streets carrying heavy traffic through residential or other sensitive land use areas can create significant conflicts. For these reasons, **Transportation Policy T- 1.1** of the *Merced Vision 2030 General Plan* spotlights the need to **Design Streets Consistent with Circulation Function, Affected Land Uses, and All Modes of Transportation**. Implementing actions include:*

Implement the City's Street Functional Circulation Plan

Implementing Action T-1.1.b of the *Merced Vision 2030 General Plan* states, “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. All streets should be designed as “Complete Streets” which address all modes of motorized and non-motorized transportation, including vehicles, transit, pedestrians, and bicycles.

BCP Policy M-1.1: Pursue the completion of the City's arterial grid network.

All proposed arterial streets within and adjacent to the BCP are essential roadways that need to be completed. Bellevue Road to serve as an urban arterial in the loop road system; Gardner Road south of Bellevue Road to connect the BCP, UCP and UCM with the Merced Community; Campus Parkway as part of the urban fabric to the east; and Cardella Road and Yosemite Avenue providing important east-west oriented linkages knitting the long-term growth areas of the City of Merced.

BCP Policy M-1.2: Examine the possibility to reduce the number of lanes on Gardner Road, Bellevue Road and Golf Road.

Inclusion of a broad range of transportation-related factors, such as the addition of side roads along both sides of Bellevue Road for local traffic may result in a finding that would support fewer through travel lanes on plan area arterial roadways. Complete a traffic impact analysis that considers the function of all transportation modes, land use patterns and both collector and arterial street designs to examine the potential to reduce the number of through lanes from 6 to 4 on Bellevue Road, from 4 to 3 on Gardner Road (between Bellevue Road and Foothill Drive), and from 4 to 2 on Golf Road (north of Bellevue Road).

Seek and Evaluate Collector Street Design Options

Implementing Action T-1.1.d of the *Merced Vision 2030 General Plan* states, “**Design and build residential collector streets that balance as effectively as possible competing needs to be safe and efficient.**” The community needs to continue to seek and evaluate design options and other ways that might help to reconcile the competing functions of residential collector streets (to be safe for local neighborhood residents while being reasonably efficient traffic carriers). The City also needs to distinguish collector streets (“Major Collectors”) that, because of certain characteristics, are likely as time passes to experience increasing traffic pressures and impacts on adjacent residential settings.

BCP Policy M-1.3: Update the City’s Standard Designs to incorporate the special cross-sections for collector roads within the BCP.

The BCP includes several special collector-street cross-sections that were designed to reconcile the competing functions of streets, and include: Lake Road, Figure 21 & Figure 22; Mandeville Lane, Figure 19); Hatch Road, Figure 17; and Paulson Road/Hillcrest Avenue, Figure 16.

BCP Policy M-1.4: In consideration of existing Rural Residential neighborhoods, the use of design features such as traffic calming and street off-set designs should be utilized to minimize traffic impacts.

While urbanization along Bellevue Road will be attractive, functional and bring new services to the plan area, existing rural residential neighborhoods (for example, near Hillcrest Road and Farmland Avenue) will experience an increase in traffic on narrow roads without bike lanes or sidewalks, and with limited on-street parking. While connecting urbanized neighborhoods to existing neighborhoods makes sense at a macro level, the implementation of how this is accomplished needs to be considered. The policy guides future projects to include features that minimize traffic impacts that may occur as a result of urbanization near existing neighborhoods.

Transportation Policy T-1.2

Traffic-related problems including significant concerns over air quality in the Great Central Valley have helped to forge requirements for more and more inter-governmental cooperation and planning, often tied to prospective State and Federal funding. The City needs to remain active in these efforts, while also periodically reviewing its position within these procedures. For these reasons, **Transportation Policy T-1.2** of the *Merced Vision 2030 General Plan* spotlights the need to **Coordinate Circulation and Transportation Planning with Pertinent Regional, State and Federal Agencies**. Implementing actions include:

Protect Right-of Way for Future Users

Implementing Action T-1.2.c of the *Merced Vision 2030 General Plan* states, **“Identify a hierarchy pattern of major streets within the City’s General Plan and Sphere of Influence areas, and work with the County of Merced and Caltrans to retain unimpeded future rights-of-way to accommodate the current general plan period and projected future growth.”** It is extremely important that prospective right-of-ways (ROW’s) be protected from permanent development whenever feasible, not only within the City and in its immediate growth areas but also in areas projected for longer term growth. This will benefit both City and County, in terms of reduced costs as well as potential efficiencies to be gained from sufficient roadways.

BCP Policy M-1.5: Work with Merced County to identify future right-of-way locations for plan area arterial and collector streets and intersections.

Collaboration between the City and County to define arterial street locations within the BCP should occur soon after its adoption to avoid development within these important community rights-of-way. The location of these roadways should be designed flexibly to avoid or minimize impacts to existing uses while (1) assuring adequate width will be provided in the long-term; and (2) minimizing impacts to natural resources such as topography, sensitive habitats and water features. Of particular note are the alignments of Bellevue Road, Gardner Road, Foothill Avenue, Hatch Road, and the intersections involving (a) Bellevue Road, Campus Parkway and Lake Road; and (b) Bellevue Road with Paulson/Hillcrest (extended).

Work with the County and Caltrans to Implement Area Expressways

Implementing Action T-1.2.d of the *Merced Vision 2030 General Plan* states, “Continue to work with the County and Caltrans to implement the Campus Parkway and the Merced-Atwater Expressway projects as high priorities to serve the northern growth area.”

Bellevue Road will become an important link with the expressways planned to the west and east. Planning for the Campus Parkway corridor began in the late 1990’s when the concept of an “Eastern Beltway” to serve the City’s northern growth area was conceived. With the location of the UC Merced campus in the Lake Yosemite area, the concept evolved into the Campus Parkway. The Atwater-Merced Expressway (AME) will provide a more cost-effective access to SR-99 and provide additional north-south roadway capacity within the Atwater and Merced, Castle Airport Development Center and the United States Penitentiary located in unincorporated portions of northern Merced County. Via its connection with Bellevue Road, the AME will connect east to the University of California at Merced.

BCP Policy M-1.6: Develop Bellevue Road to enhance the value of adjacent properties in an urban setting, while secondarily also serving as a route for regional traffic as a link in the City’s Loop Road System.

While Bellevue Road is a link in the regional loop road, and will accommodate regional traffic, it is foremost an urban arterial with important land uses that will face it. Bellevue Road is also a gateway to and from UC Merced.

BCP Policy M-1.7: Explore the use of Traffic Circles and Roundabouts.

Fully examine the value of placing roundabouts along the BCP’s various roadways, considering such factors as infrastructure and operating costs, and compatibility with transit services, and pedestrian and bicycle movements.

Transportation Policy T-1.3

Every intersecting street, as well as every curb cut, that allows vehicles to interrupt the traffic flow, either by slowing down to exit or by entering the road, affects both the speed and number of peak-hour vehicles the roadway can accommodate. For these reasons, **Transportation Policy T-1.3** of the *Merced Vision 2030 General Plan* spotlights the need to **Design Major Roads to Maximize Efficiency and Accessibility**. Implementing actions include:

BCP Policy M-1.8: Include side roads in the design of Bellevue Road.

Use of a side access road adjacent to Bellevue Road brings several benefits, including: allows buildings to face or address a street, creating a more visually pleasing setting and gateway environment, as compared to sound walls or loading docks; creates a space for other modes of mobility (transit, bike lanes, sidewalks) to access buildings; provides for on-street parking; could reduce the number of through travel lanes on adjacent arterial roadways; and maximizes access to uses without substantial slowing of through traffic on Bellevue Road. Additionally, side roads create a setting that provides more site design options for adjacent buildings, allows for very different land uses to locate on opposite sides of the road; and for building sites, overtime, to change. Note: When used in combination, the side roads and through travel lanes will total six lanes.

Adhere to Street Spacing Standards to Provide Smooth Traffic Flow

Implementing Action T-1.3.a of the *Merced Vision 2030 General Plan* states, “**Adhere, to the greatest possible extent, to the standards adopted for spacing streets that intersect arterials and higher order roadways as outlined in Table 4.2.**” The locations at which streets intersect a major roadway, and the spacing or distance between such intersecting streets, are important factors affecting how well the major road fulfills its traffic carrying responsibility. The growth of traffic over time, along with accompanying disruptions such as increasing numbers of vehicle accidents, can significantly affect the efficiency of intersections.

BCP Policy M-1.9: Synchronize the traffic signals along Bellevue Road.

Heavy traffic loads, including through traffic are anticipated on Bellevue Road. To facilitate good vehicular flow and to avoid congestion at intersections, the traffic signals along Bellevue Road should be synchronized.

Transportation Policy T- 1.5

*Traditional circulation patterns often tend to make it inconvenient for a driver to make a neighborhood or other local trip without getting onto a major street. It is important to have a circulation system that provides the flexibility to allow neighborhood and other trips on local roads, while encouraging non-local trips to use the major road system. For these reasons, **Transportation Policy T- 1.5** of the *Merced Vision 2030 General Plan* spotlights the need to **Minimize Unnecessary Travel Demand on Major Streets and Promote Energy Conservation**. Implementing actions include:*

Provide Multiple Streets to Local Destinations

Implementing Action T-1.5.a of the *Merced Vision 2030 General Plan* states, “**Encourage design of local and collector streets within Villages/Neighborhoods to provide multiple, reasonably direct routes to local neighborhood destinations.**” It is important to build flexibility into neighborhood circulation for reaching local destinations. At the same time, it is important to provide the opportunity for a local driver to reach the nearest major (arterial) road directly and quickly, if the destination is more distant.

BCP Policy M-1.10: Seek to implement an interconnected street grid.

An interconnected street pattern is foundational to the achievement of many goals of the BCP, including: 1) development of a successful transit system; 2) enabling functional sites for transit priority projects; 3) increased travel by pedestrians and bicyclists; 4) formation of an innovation hub and associated population; and 5) attracting research and development offices. Figure 11 of the BCP, an important illustrative diagram, should be utilized in the design of future development projects.

Promote Transportation System Management Strategies

Implementing Action T-1.8.d of the *Merced Vision 2030 General Plan* states, “**Promote Transportation System Management (TSM) strategies in areas where (Level of Service) 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.

BCP Policy M-1.11_: Where possible, allow and encourage parking structures especially within or near *Transit Priority Projects* and in the *Mixed-use Transit-Oriented Development* and *Research and Development Park* place types.

In response to the market, the BCP allows for off-street structured parking facilities in the short-term and to transition to these facilities as population within the BCP increases. Alternatively, a study of their benefits, costs and funding mechanisms is suggested to inform the City concerning public support for parking structures to supplement market demand.

C.3.3 Bikes, Pedestrians and Public Transit

Transportation Policy T-2.1

*The City is fortunate to have a central corridor, containing many of the major land use destinations within the urban area, aligned in general proximity to the length of M Street. These destinations would be convenient to a primary transit route on this roadway, and additional urban area destinations would be convenient to secondary or connecting routes on roads perpendicular to M Street. In addition, Bellevue Road/the Merced-Atwater Expressway and the Campus Parkway could provide connections to the M Street transitway, as well as a potential for future connections to regional facilities. For these reasons, **Transportation Policy T-2.1** of the *Merced Vision 2030 General Plan* spotlights the need to **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 include:*

Avoid Negative Impacts to Function of Transit Corridors

Implementing Action T-2.1.c of the *Merced Vision 2030 General Plan* states, “**Continue to review land use decisions in the vicinity of M Street and Bellevue Road to avoid creating or increasing conflicts with the proposed future major commercial and office park sites at the major transfer point between designated transitway corridors.**” The prospective intersection of Bellevue Road and the future M Street (extended) is also the intersection of two transitway corridors designated on the Circulation Plan. The M Street Transitway is projected to run the entire north-south length of the City, while the prospective Bellevue Road/Merced-Atwater Expressway Transitway would tie the M Street Transitway eastward towards the University of California (UC) campus (and possibly westward to the potential regional job center at Castle Airport).

Implementing Action T-2.1.f of the *Merced Vision 2030 General Plan* states, “**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.

Plan for a Transit Corridor to UC Merced

Implementing Action T-2.1.d of the *Merced Vision 2030 General Plan* states, “**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. 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.

BCP Policy M-2.1: Establish Mandeville Lane as the extension of the City’s M Street Transit Corridor to UC Merced.

During the BCP planning process, there were extensive discussions about the placement of the transit corridor, either on Bellevue Road or Mandeville Lane. For many reasons described in the BCP, Mandeville Lane was selected as the appropriate roadway to develop the transit corridor. The Mandeville Lane

Transit Corridor provides for multiple options to connect to or extend it as needed.

Transportation Policy T-2.2

Continue to cooperate with MCAG and other interested administrations and agencies to develop ways and seek methods for making public transit more successful in the Merced area. For these reasons, **Transportation Policy T-2.2** of the *Merced Vision 2030 General Plan* spotlights the need to **Support and Enhance the Use of Public Transit**. Implementing actions include:

Promote Land Use Patterns and Site Designs that Support use of Public Transit

Implementing Action T-2.2a of the *Merced Vision 2030 General Plan* states, “**Promote land development patterns and site design criteria that support and enhance the use of public transit.**” As Merced grows and as other factors change, it is more than likely that the use of public transit will increase. It is important for the City, with Merced County Transit, to carefully evaluate how it can most effectively plan for this expanded demand before it happens.

Provide Convenient Access to Transit

Implementing Action T-2.2c of the *Merced Vision 2030 General Plan* states, “**Whenever feasible, avoid creating barriers that prevent convenient access to current or prospective public transit routes.**” It is important for residents to be able to reach the closest public transit route as directly and easily as possible. The more difficult it is for riders to reach a transit route, because of unnecessary or ill-conceived barriers, the more difficult it will be for public transit to serve the population effectively.

BCP Policy M-2.2: Seek to develop an interconnected street grid on both sides of Mandeville Lane.

The interconnected roadway grid is an essential foundational component of the urban fabric to support a successful transit system. A street network with a clear block structure and relatively closely spaced cross streets, whether curved, straight or otherwise, and having slower traffic than roads built to accommodate through-traffic, enables high-levels of access to transit and nearby uses and neighborhoods.

Transportation Policy T-2.3

*Cost effective, efficient public transportation is important in any effort to provide a level of service necessary to attract increasing public ridership. For these reasons, **Transportation Policy T-2.3** of the *Merced Vision 2030 General Plan* spotlights the need to **Support a Safe and Effective Public Transit System**. Implementing actions include:*

Take a Long Range View of How Land and Site Planning can possibly Affect Future Public Transit Options

Implementing Action T-2.3a of the *Merced Vision 2030 General Plan* states, **"Include public transportation access in the review process for major public and private development projects, as well as all significant land use design proposals considered by the City."** In view of the urban area's growth potential, including future additions to the University of California (UC) which will no doubt add to the demand for public transit, it is important for public transportation management to take a long range view of how land and site planning can possibly affect future public transit options. The City will work with Merced County Transit on this endeavor.

Avoid Designs that Require Transit Passengers to Cross Major Streets

Implementing Action T-2.3c of the *Merced Vision 2030 General Plan* states, **"Avoid whenever possible public transportation transfer points that force passengers to cross major vehicle routes on foot."**

Transportation Policy T-2.6

*The City of Merced and Merced County have cooperated to develop an impressive regional bicycle system in the Merced/Lake Yosemite area. This has helped to place this area in a position to attract major cycling events. The bicycle system is also an important community and regional recreational asset. In addition, location of the University of California (UC) in proximity to Lake Yosemite will make an attractive and usable regional system much more useful and valuable. For these reasons, **Transportation Policy T-2.6** of the *Merced Vision 2030 General Plan* spotlights the need to **Maintain and Expand the Community's Existing Bicycle Circulation System**. Implementing actions include:*

Coordinate Bike Planning and Construction with UCM and Merced County

Implementing Action T-2.6a of the *Merced Vision 2030 General Plan* states, “**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. 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.

BCP Policy M-2.3: Update the City’s Bicycle Transportation Plan by incorporating the bikeway facilities planned in the BCP.

Figure 25 depicts the bike lanes, paths, and sharrows planned in the BCP. Placing these in the City’s official bike plan will maximize the community’s awareness of how bikeways will connect with UC Merced and to County areas outside the City’s Sphere of Influence.

BCP Policy M-2.4: Identify a suitable location for a bicycle boulevard.

As the community plan develops and traffic patterns are formed, monitor circulation patterns and take steps to install a bicycle boulevard in the area bounded by Bellevue Road, Foothill Avenue, G Street and UC Merced.

C.4 Open Space, Recreation and Conservation

C.4.1 General Plan Goal and Policy Guidance

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

- Identify Sensitive Habitat
- Avoid Sensitive Habitats unless otherwise Mitigated
- Implement the United States Fish and Wildlife Service (USFWS) Memorandum of Understanding
- Create Open Space Corridors along Creeks and Other Appropriate Areas
- Support more Natural Flood Control Methods
- Preserve Scenic Corridors in the Bellevue Community Plan Area
- Apply Scenic Corridor Design Guidelines to Lake Road and Bellevue Road
- Plant Street Trees in New Developments

GP Goal Area OS-3: Open Space for Outdoor Recreation

- Acquire Park Sites in Advance of Development
- Implement the 2004 Parks and Open Space Master Plan
- Apply Park Location Criteria
- Develop Bikeways and Trails along Open Space Stream Corridors
- Site Bikeways along Canal Easements
- Connect Bikeways within Greenways Connecting Parks and Schools
- Link the City Bikeway System to the Lake Road bike path.
- Explore Provision of Unpaved Trails in Rural Residential Areas
- Design Bike Paths with Crime Prevention in Mind
- Plan for Community Parks
- Identify Additional Space and Facility Needs of Lake Yosemite Regional Park

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

- Preserve Open Space Areas Which Are Necessary to Maintaining Public Health and Safety

GP Goal Area OS-5: Conservation of Resources

- Implement the City's Water Regulations
- Implement the City's Water Efficient Landscape Ordinance

- Lead Water Conservation Efforts
- Encourage Public Water Conservation Efforts



C.4.2 Open Space for the Preservation of Natural Resources

Open Space, Conservation and Recreation Policy OS-1.1

*The Merced SUDP/SOI is known to contain potential habitat for several sensitive wildlife species. Much of this potential habitat is located along riparian corridors of the community's creek system in vernal pools found in the northern part of the City's SUDP/SOI area, and on some agricultural lands throughout the planning area. As a matter of law, the City is required to review development proposals that threaten to impact known sensitive species. As a matter of policy, the City is committed to integrating potential wildlife habitat into the regional park and recreation system to enhance community awareness of the region's wildlife resources and to provide shelter for native plant and animal life of the area. For these reasons, the **Open Space, Conservation & Recreation Policy OS-1.1** of the Merced Vision 2030 General Plan spotlights the need to **"Identify and Preserve Wildlife Habitats Which Support Rare, Endangered, or Threatened Species."***

Identify Sensitive Habitat

Implementing Action OS-1.1.a of the Merced Vision 2030 General Plan states, **"Identify, and recognize as significant wetlands and critical habitat areas which meet the appropriate legal definition under Federal and State law."** Development applications will be reviewed to determine if potential wetland habitats exist on-site, and wetland delineation may be required in accordance with current U.S. Army Corps of Engineers guidelines. "Wetlands" containing sensitive plant and/or animal species should be protected according to law. Vernal pool preserves may be incorporated into other open space preserves (i.e. parks and trails) that would not be directly impacted by urban development.

Avoid Sensitive Habitats Unless otherwise Mitigated

Implementing Action OS-1.1.b of the Merced Vision 2030 General Plan states, **"Urban development should occur away from identified sensitive species critical habitats areas unless specific provisions to ensure adequate protection and monitoring exist."** When, as a result of specific site studies, it is determined that "potential" habitats actually contain sensitive or endangered species, development rules, policies and standards should be applied to assure that further degradation of these species does not occur. These policies should emphasize "avoidance" as a desirable mitigation alternative.

BCP Policy OS-1.1: Utilize the BCP Open Space Map as both a guiding framework and an adjustable dynamic planning tool.

The *BCP Open Space Map*, which emphasizes avoidance of sensitive habitats, may be adjusted upon annexation if supported by biological studies, and comments by state and federal resource agencies, and if alternative mitigation supported by them, and is implemented by the property owner. The *BCP Open Space Map* includes potential long-term habitat and riparian areas, and shifts essential land uses such as research and development parks and land uses within one-quarter mile of Mandeville away from these areas. While this approach avoids the potential loss of these significant uses due to a state or federal requirement to scale-back development, the BCP allows development to occur within the open space corridor in the event that no mitigation or alternative mitigation is applied. Pending final determinations about the extent of actual habitat area needs, the map may be amended by either increasing, decreasing or relocating the amounts of open-space lands, and meeting minimum land amount requirements by the City.

Link Habitat Areas with Open Space Corridors

Implementing Action OS-1.1.d of the *Merced Vision 2030 General Plan* states, “**Design parks and open space corridors to provide linkages between potential habitat areas.**” It is important to develop linkages between open space areas to facilitate wildlife movement between designated habitat areas. This can be accomplished by connecting the east-west trending urban stream corridors with a north-south corridor provided by power lines, railroad rights-of-way and the regional irrigation canal network. Whenever possible, park open space areas should be connected to one or more of these designated open space corridors.

Implement the USFWS Memorandum of Understanding

Implementing Action OS-1.1.g of the *Merced Vision 2030 General Plan* states, “**Implement the Memorandum of Understanding (MOU) between the City of Merced and the U.S. Fish and Wildlife Service (USFWS), dated June 16, 2008, regarding the processing of development applications to ensure compliance with the Federal Endangered Species Act relating to Projects to be Served by the Wastewater Treatment Plant Water Quality Upgrade and Expansion Project.**” The MOU also outlines the procedures and comment period for notifying the U.S.F.W.S. of qualifying development projects and requires that applications for development projects shall

demonstrate compliance with the Endangered Species Act (ESA) as a pre-condition to having their application scheduled for public hearing.

BCP Policy OS-1.2: Encourage property owners to collaborate their planning and habitat protection and conservation responsibilities.

A collaborative approach to planning and habitat protection and conservation can allow for greater flexibility in locating development in the BCP area. Regardless of the method, steps to involve review of development proposals by resource agencies should occur early in process.

Open Space, Conservation and Recreation Policy OS-1.2

*The urban creek system of Merced provides an important open space element within the City and provides important wildlife habitat. This creek system is also an integral part of the City's drainage system. The City is committed to a policy of preserving and protecting these important open space resources and assuring their continued viability as open space and drainage corridors. For these reasons, the **Open Space, Conservation & Recreation Policy OS-1.2** of the Merced Vision 2030 General Plan spotlights the need to "**Preserve and Enhance Creeks in Their Natural State Throughout the Planning Area.**"*

Create Open Space Corridors along Creeks and Other Appropriate Areas

Implementing Action OS-1.2.a of the Merced Vision 2030 General Plan states, "**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. 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.

BCP Policy OS-1.3: Encourage the formation of continuous open-space corridors.

Open-space corridors, whether developed, natural or a combination of both, should be formed with multiple use pathways within or immediately adjacent to these areas. The *BCP Open Space Map* includes two potential continuous open-space corridors that will offer habitat and bikeway connections to Lake Yosemite and UC Merced. The “*Tower Lateral Bikeway*” corridor located north and generally parallel to Bellevue Road connects to Lake Yosemite. The “*Cottonwood Creek Tributary Bikeway*” corridor located south of Bellevue Road connects to UC Merced. Work with the Merced Irrigation District to create approaches to permit the Tower Lateral to continue to flow along the surface and not be undergrounded.

Dedicate Creek Open Space Easements for Public Access

Implementing Action OS-1.2.b of the *Merced Vision 2030 General Plan* states, “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.

BCP Policy OS-1.4: Plan for the construction and use of an off-street bike path within an open space corridor along the tributary to Cottonwood Creek (The “*Cottonwood Creek Tributary Bikeway*”).

The “*Cottonwood Creek Tributary Bikeway*” is located within the area bounded by Cardella Road, Lake Road, Bellevue Road and Gardner Road extended. Options for the actual location of the pathway, as well as the size and extent of the open space drainage corridor, will need to be explored as part of a master drainage study by the property owner prior to or as part of any future plans. The size and extent may also be affected by actions to conserve any proximate sensitive lands.

Support more Natural Flood Control Methods

Implementing Action OS-1.2.c of the *Merced Vision 2030 General Plan* states, “Encourage alternatives to concrete channeling of existing creeks and streams as part of any flood control project and support more natural flood control methods.” Stream improvement plans must attempt to strike a compromise between drainage needs and open space needs on a case by case basis.

Open Space, Conservation and Recreation Policy OS-1.3

Historically, the City of Merced has developed along routes and corridors which have come to be part of the City’s identity. The City has designated many of these scenic routes for special development review regulation in the past. This practice has served the City well and will be continued into the future. For these reasons, the **Open Space, Conservation & Recreation Policy OS-1.3** of the *Merced Vision 2030 General Plan* spotlights the need to “**Promote the Protection and Enhancement of Designated Scenic Routes.**”

Preserve Scenic Corridors in the Bellevue Community Plan Area

Implementing Action OS-1.3.b of the *Merced Vision 2030 General Plan* states, “**Preserve the designated Scenic Corridors.**” The Scenic Corridors are as follows:

- Lake Road from Yosemite Avenue to Lake Yosemite.
- Bellevue Road from Lake Road to G Street.

Note: The General Plan lists many scenic corridors. Scenic corridors located within the Bellevue Community Plan area are listed above.

BCP Policy OS-1.5: Seek to maintain the rural character of Lake Road, and shift community and regional traffic to the Campus Parkway in the long-term.

The City’s General Plan lists Lake Road as a scenic corridor. Its current design features include a two-lane road, natural drainages, a separate off-street multi-use pathway and street trees; these should be maintained and enhanced. Generally, improvements to reduce vehicular traffic congestion or to increase vehicular traffic capacity should not be made unless it is consistent with and enhances the current design features described above. Sub-standard traffic level of service may occur in order to satisfy this policy.

Apply Scenic Corridor Design Guidelines to Lake Road and Bellevue Road

Implementing Action OS-1.3.c of the *Merced Vision 2030 General Plan* states, “**Utilize established guidelines for the review of projects proposed within a designated Scenic Corridor.**” The following guidelines apply to the review of applications for development in vicinity of a designated Scenic Corridor:

- a) Utility lines should be placed underground whenever feasible.
- b) Signing should be carefully controlled to insure that it does not detract from the scenic beauty of the corridor. Specific guidelines for signing along these corridors should be established.
- c) Limit the intrusion of future land uses which may detract from the scenic quality of the corridor.
- d) Unsightly mechanical and utility structures shall be screened from view by use of planting, grading, and fencing.
- e) Heights and setbacks of buildings should be regulated to avoid obstructing important scenic views.
- f) Every effort should be made to preserve and properly maintain existing stands of trees and other plant materials of outstanding value.
- g) Structures on private and public properties visible from the corridor should be maintained in good condition (free of trash, weeds, etc.).
- h) Architectural and landscape design should result in an attractive appearance and a harmonious relationship with the surrounding environment.

BCP Policy OS-1.6: Encourage designs within the Bellevue Community Plan area that enhances the view of UC Merced from Lake Road and the multi-purpose path

The natural elevation of the northern portion of Lake Road and accompanying bike path provide a unique opportunity to maintain and enhance the ability to view areas east of these facilities. The future design of roadways, landscaping, public access points and buildings within the BCP plan area should consider and include features that maintain and enhance the ability to view lands east of the BCP.

Open Space, Conservation and Recreation Policy OS-1.4

Early in the development of Merced, trees were planted to provide shelter from wind and summer heat. As a result, the City has a large number of mature trees along its streets, in public places and in private yards and has been designated a “Tree City USA” for over 30 years. The City’s urban forest provides valuable wildlife habitat and creates an

attractive atmosphere for residents and visitors alike. Additionally, the City's trees have substantially reduced summer heat and glare around paved areas, thereby helping the City maintain a cooler summer average temperature and reduce energy usage. In continuing this tradition, the City of Merced has established policies and programs to protect, maintain and expand its urban forests. For these reasons, the **Open Space, Conservation & Recreation Policy OS-1.4** of the Merced Vision 2030 General Plan spotlights the need to **"Improve and Expand the City's Urban Forest."**

BCP Policy OS-1.7: Coordinate Urban Forestry Projects with other community goals.

It is possible to advance many community goals through urban forest projects. Whether the goal is to improve energy efficiency, to enhance aesthetics, to encourage walking or bike riding, to enhance property values or to prepare for increased temperatures, trees are the common solution. Urban forestry projects in the City currently include street and parking lot trees. Explore opportunities, supported by community, to expand and enhance the function of trees in the Bellevue Community Plan.

Plant Street Trees in New Developments

Implementing Action OS-1.4.b of the Merced Vision 2030 General Plan states, **"Continue to require new development to plant street trees approximately 40 feet apart, at a maximum, along City streets."** Tree planting policies have been established by the City for new development projects. These practices are to be continued.

C.4.3 Open Space for Outdoor Recreation

Open Space, Conservation and Recreation Policy OS-3.1

The City of Merced has benefited from the foresight of early leaders in the City's development with respect to parks and open space. The City's growth has historically incorporated its natural open space resources along Bear Creek and other lesser drainage courses into an overall open space network which has become a major source of civic pride. The City is committed to continuing this high standard of park and open space development in the expansion areas of the existing City. For these reasons, the **Urban Expansion Policy OS-3.1** of the Merced Vision 2030 General Plan spotlights the

need to ***“Provide High-Quality Park and Open Space Facilities to Serve the Needs of a Growing Population.”***

Acquire Park Sites in Advance of Development

Implementing Action OS-3.1.a of the *Merced Vision 2030 General Plan* states, **“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.

Implement the 2004 Parks and Open Space Master Plan

Implementing Action OS-3.1.c of the *Merced Vision 2030 General Plan* states, **“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. 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.

Apply Park Location Criteria

Implementing Action OS-3.1.e of the *Merced Vision 2030 General Plan* states, **“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) No household should have to walk more than approximately one-half to three-quarters of a mile to a park site.
- b) Parks should be located adjacent to schools as much as feasible.
- c) Provide visual, pedestrian and vehicular access to all parks by requiring them to front on public streets on as many sides as possible and not be surrounded by privately owned property. Adequate parking facilities should be provided where needed.
- d) Neighborhood park sites should front on at least one side on a collector street with the remaining sides on local streets. Community or Regional parks may front on arterials.

- 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.
- g) Park sites should be located near higher-density residential areas as much as possible.
- h) Parks should have access to nearby subdivision and greenways by means of cul-de-sacs, access easements, etc.

Open Space, Conservation and Recreation Policy OS-3.2

*Merced's bikeway and urban trail system has become a model for the region and an important element of the character of Merced. The system's use of the natural open space resources of the community has benefited the public and helped to preserve important open space lands in addition to providing recreation and all transportation to residents. Bikeways and urban trails are an important element of the greenway system and provide linkages between other elements of the park system, public transportation, and residential and commercial areas throughout the City. The City is committed to building upon this system and expanding it into the growth areas within the resource constraints of the City. The 2004 Park and Open Space Master Plan provides a detailed needs assessment, along with policies and design standards for the acquisition, development and maintenance of new park and recreation facilities. The City's Bicycle Master Plan also addresses bikeway and trail systems. For these reasons, the **Open Space, Conservation & Recreation Policy OS-3.2** of the Merced Vision 2030 General Plan spotlights the need to "**Maintain and Expand the City's Bikeway and Trail System.**"*

Develop Bikeways and Trails along Open Space Stream Corridors

Implementing Action OS-3.2.a of the Merced Vision 2030 General Plan states, "**Utilize the urban stream system in the planning and design of bikeways and trails.**" 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.

BCP Policy OS-2.1: Plan for and construct the "*Cottonwood Creek Tributary Bikeway.*"

A tributary to Cottonwood Creek extends from UC Merced to Cottonwood Creek (located south of Cardella Road) through the BCP planning area. Prior to any subdivision along either side of this watercourse, a plan that describes the

location and design of how this Class I Bike Path will cross or extend under streets between UC Merced and Cottonwood Creek needs to be developed.

Site Bikeways along Canal Easements

Implementing Action OS-3.2.b of the *Merced Vision 2030 General Plan* states, “**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.

BCP Policy OS-2.2: Plan for and construct the “*Tower Lateral Multipurpose Pathway.*”

The Tower Lateral is an existing canal that extends from Lake Yosemite to G Street. Prior to any subdivision along either side of this canal, a plan that describes the location and design of how this Pathway will cross or extend under streets between Lake Yosemite and G Street needs to be developed.

Connect Bikeways within Greenways Connecting Parks and Schools

Implementing Action OS-3.2.c of the *Merced Vision 2030 General Plan* states, “**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.

Link the City Bikeway System to the Lake Road bike path.

Implementing Action OS-3.2.d of the *Merced Vision 2030 General Plan* states, “**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.

Explore Provision of Unpaved Trails in Rural Residential Areas

Implementing Action OS-3.2.g of the *Merced Vision 2030 General Plan* states, “**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.

Design Bike Paths with Crime Prevention in Mind

Implementing Action OS-3.2.h of the *Merced Vision 2030 General Plan* states, “**Bike path designs should reflect security and other needs of the surrounding community.**” 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.

Open Space, Conservation and Recreation Policy OS-3.4

Throughout the City, a system of park and open space facilities should exist which include neighborhood parks, community parks, and greenways. This park system should be developed to serve all age, social, and economic groups in every geographic area of the City. Refer to the City’s 2004 Park and Open Space Master Plan for design and development policies for new parks. For these reasons, the **Open Space, Conservation & Recreation Policy OS-3.4** of the *Merced Vision 2030 General Plan* spotlights the need to “**Develop a Diverse and Integrated System of Park Facilities throughout Merced.**”

Plan for Community Parks

Implementing Action OS-3.4.a of the *Merced Vision 2030 General Plan* states, “**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, and 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.

BCP Policy OS-2.3: Seek to develop Community Park CP-43 in the BCP.

Consistent with the *2004 Park and Open Space Master Plan*, CP-43 should be located on arterial or collector streets, be highly visible from adjoining streets, and should be a minimum of 20-acres in size, with the optimum being about 30-acres. Provided active recreation facilities can be provided, the community park may be sited alongside any natural open-space lands in this area.

Identify Additional Space and Facility Needs of Lake Yosemite Regional Park

Implementing Action OS-3.4.d of the *Merced Vision 2030 General Plan* states, “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.” Lake Yosemite will likely become more heavily used by City residents as Merced grows and the U.C. Merced campus expands and grows. 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. Consideration should be given to providing expanded public access and additional roadway entrances into the Lake Yosemite Regional Park.

BCP Policy OS-2.4: Consider the utility and designation of the land immediately south and west of Lake Yosemite (between the earthen dam and Golf Road) for public park use.

This consideration could occur as part of the next update to the City’s Recreation and Parks Master Plan, or as a separate action. This site is currently designated as Park and Open Space/Recreation on the City’s Land Use Map. The site is proximate to Lake Yosemite Regional Park and has limited development potential. Significant City park resources will be located south of Bellevue Road closer to the highest population density on the BCP, however. Justification for public use and availability of funding need to be further explored prior to any expansion of the City’s planned recreation and parks open-space system.

C.4.4 Open Space for Public Health and Safety

Preserve Open Space Areas Which Are Necessary to Maintaining Public Health and Safety

Areas within the City which may represent a substantial risk to public health and safety have historically been designated for open space uses which may permit limited public or private use but generally reduce potential exposure of the public to potential health hazards. The City is committed to continuing to protect public health, where practical, by limiting the potential for public exposure through the sound application of open space practices and policies. For these reasons, the **Open Space, Conservation & Recreation Policy OS-4.1** of the *Merced Vision 2030 General Plan* spotlights the need to “**Preserve Open Space Areas Which Are Necessary to Maintaining Public Health and Safety.**”

BCP Policy OS-3.1: Maintain the current Open Space/Parks-Recreation Land Use Designation that is located south and west of Lake Yosemite (between the earthen dam and Golf Road). Consider expanding the area as appropriate.

Proposals from property owners of land located adjacent to the site to expand the Open Space/Parks-Recreation Land Use Designation onto their properties will be considered. There may be interest by these property owners to transfer any density rights to another property within the BCP.

C.4.5 Conservation of Resources

Promote Water Conservation throughout the Planning Area

Water is a finite resource in the Central San Joaquin Valley and is an essential ingredient to the region’s continued agricultural production capacity as well as a vital element in the continued growth of the Merced Metropolitan Area. The City, in conjunction with the Merced Irrigation District, has studied the long-term needs for water and concluded that water conservation must be part of any successful long term water development strategy. The City is committed to continue its water conservation efforts and expand on those efforts where necessary. For these reasons, the **Open Space, Conservation & Recreation Policy OS-5.1** of the *Merced Vision 2030 General Plan* spotlights the need to “**Promote Water Conservation throughout the Planning Area.**” To this end, the following implementation actions are listed in the General Plan:

Implement City's Water Regulations

Implementing Action OS-5.1.a of the *Merced Vision 2030 General Plan* states, “**Continue implementation and enforcement of the City's Water Shortage Regulations (MMC 15.42.010-100).**” The City’s emergency water shortage regulations have been in effect for many years to ensure an adequate water supply into the future

Implement City's Water Efficient Landscape Ordinance

Implementing Action OS-5.1.b of the *Merced Vision 2030 General Plan* states, “**Continue implementation of the Water Efficient Landscaping and Irrigation Ordinance (MMC 17.60.010-070) and subsequent updates.**” Promote the conservation of water and the preservation of water quality by requiring drought tolerant plant material in landscaping and the retention of existing natural vegetation on new development projects. The City will also consider alternatives to turf and other water-intensive landscaping, including artificial turf.

City Leadership in Water Conservation

Implementing Action OS-5.1.c of the *Merced Vision 2030 General Plan* states, “**Provide leadership in conserving urban water resources.**” City buildings and facilities should be equipped with water saving devices whenever practical. Municipal parks and playgrounds should employ water conservation techniques such as mulching, drip irrigation and other appropriate technologies.

BCP Policy OS-4.1: All new City facilities in the BCP plan area should be designed, equipped and operated to conserve water at a higher level than current practice.

Led by the City’s Public Works Department, in coordination with the Development Services Department, Recreation and Parks Department, and others as appropriate, a comprehensive action plan to implement this policy should be developed. As an initial step, the targeted level of water conservation should be set by the City Council. The action plan would include all City facilities, including but not limited to all park types, public rights-of-way, and City owned or leased buildings. The City should involve local industry representatives, other public agencies, local schools, colleges and universities, and the general public in the development of the action plan. Existing guidelines and codes related to water use, for example, the list of appropriate street trees, should be considered

and updated to emphasize the need to conserve water. This work could be funded and supported through grants and local partnerships.

Encourage Public Water Conservation Efforts

Implementing Action OS-5.1.d of the *Merced Vision 2030 General Plan* states, “**Encourage public water conservation efforts.**” Through established public information systems in the community, the City should promote water conservation by providing information on water savings from low-flow fixtures and the value of insulating hot water lines in water recirculating systems. Other conservation techniques can be addressed such as the use of non-potable water for landscape irrigation purposes (water re-use, MID water, etc.).

C.5 Land Use (Community Character)

C.5.1 General Plan Goal and Policy Guidance

GP Goal Area L-1: Residential & Neighborhood Design

- Promote Mixed Use Development
- Encourage High Density Housing
- Designate Areas for Multi-family Development

GP Goal Area L-2: Economic and Business Development

- Annex Job-Based Sites and Develop Plans to Provide Infrastructure
- Appropriately Space Neighborhood Commercial Sites
- Unique Circumstances for Locating Commercial at Arterial Street Corners
- Create Commercial Nodes / Update Code to Implement the City's Urban Design Principles
- Provide Circulation-Related Connections between Downtown and UC Merced
- Plan for Research and Development Parks
- Zone for Research and Development Parks

GP Goal Area L-3: Urban Growth and Design

- Encourage Pedestrian and Transit-Friendly Designs
- Plan for High and Medium-Density Housing near Transit Hubs and Commercial Centers
- Encourage a Mix of Land Uses
- Encourage Construction of Transit, Bicycling and Walking Features in Future Developments
- Permit Transit-Friendly Projects
- Require Community Plans Prior to Large Scale Development
- Utilize Community Plan Guiding Principles

C.5.2 Residential & Neighborhood Design

Land Use Policy L-1.1

*The long term economic vitality of the City is enhanced by maintaining housing opportunities that accommodate a diversely skilled labor force. At the same time, residential development must have adequate and appropriate services which are accessible. The balance between job growth, housing opportunity and services not only supports stable economic growth in Merced, it also reduces vehicle trips for work commutes and service, and enhances the overall quality of life for Merced residents. For these reasons, the **Land Use Policy L-1.1** of the Merced Vision 2030 General Plan spotlights the need to “**Promote Balanced Development Which Provides Jobs, Services and Housing.**”*

Promote Mixed Use Development

Implementing Action L-1.1.a of the Merced Vision 2030 General Plan states, “**Promote mixed use development combining compatible employment, service and residential elements.**” Mixed use development plans would typically be proposed in the new growth areas of Merced in accordance with the Urban Villages development standards. The City should continue reviewing its zoning and development codes in the established areas of the City to determine if policies and programs could be proposed which would facilitate the location of appropriate employment centers and services, including knowledge-based research and development and green industries.

BCP Policy CC-1.1: Follow Table 9 as a guide to prepare and assess future zoning regulations, master plans, or specific plans within the BCP.

Table 9 describes the range and intensities of land uses that may or may not occur within the character or bubble areas of the BCP, as presented in the BCP Land Use Map. The BCP provides for a wide range of land uses to occur within the character areas, and is based heavily on successful implementation of the form of the urban fabric discussed in the Urban Design Chapter. If this urban form is provided, the flexible nature of permissible land uses can be offered.

Land Use Policy L-1.2

With a diverse population of ages, races, incomes, and lifestyles, Merced's housing stock must reflect that diversity as well. For these reasons, the **Land Use Policy L-1.2** of the *Merced Vision 2030 General Plan* spotlights the need to "**Encourage a Diversity of Building Types, Ownership, Prices, Designs, and Site Plans for Residential Areas throughout The City.**"

Encourage High Density Housing

Implementing Action L-1.2.a of the *Merced Vision 2030 General Plan* states, "**Encourage higher-density residential developments within walking distance (approx. 1/4 mile) of commercial centers.**" The Urban Villages Concept calls for higher-density residential developments within walking distance of village commercial cores. A wide range of densities, including small-lot single-family, townhouses, and apartments, can be allowed in these "Village Core Residential" areas to achieve an overall average density of at least 10 units per acre. This residential development will help ensure greater support for transit and the economic viability of the commercial uses. These principles should be applied to most of the City's new growth areas and financial incentives explored for promoting their use.

BCP Policy CC-1.2: Encourage and support the development of *Transit Priority Projects* within the Mandeville Transit Corridor.

The Mandeville Transit Corridor, bounded by Bellevue Road, Foothill Road, G Street and Lake Road, should include high-density residential, research and development, and retail land uses within a transportation fabric that emphasizes a pedestrian-scale streetscape. This structure is intended to support a functional transit service, and to create opportunities for qualified transit priority projects.

BCP Policy CC-1.3: Seek to create compatible developments adjacent to existing Rural Residential neighborhoods.

When designing new neighborhoods adjacent to existing rural residential neighborhoods, the new development should incorporate compatibility strategies to minimize impacts on existing neighborhoods, such as: 1) when backing up to existing lots, use similar rear-setbacks, minimum lot area and height standards as the existing neighborhood; (2) when fronting new lots across

a street from existing lots, use similar front setbacks, lot width, height standards and road standards as the existing neighborhood.

Land Use Policy L-1.7

*Multi-family developments are crucial to meeting the housing needs of Merced's growing population. They need to be located in appropriate areas where services are readily available to serve the needs of residents in an efficient manner. For these reasons, the **Land Use Policy L-1.7** of the Merced Vision 2030 General Plan spotlights the need to "**Encourage the Location of Multi-Family Developments on Sites With Good Access to Transportation, Shopping, Employment Centers, and Services.**"*

Designate Areas for Multi-family Development

Implementing Action L-1.7.a of the Merced Vision 2030 General Plan states, "**Designate areas adjoining arterial streets, major transportation routes and commercial areas for multi-family development.**" Through the general plan process, sufficient areas for multi-family residential development should be designated. Locations appropriate for such development include areas adjoining arterial streets, major transportation routes, and commercial areas.

BCP Policy CC-1.4: Encourage multi-family development to occur within ¼ mile of the Mandeville Transit Corridor.

Multifamily housing is emphasized to occur in the Multi-Family Neighborhood Character Area. Moderate amounts may occur in the Mixed Use TOD Character Area, and the Flexible Mixed Use Neighborhood Character Area. Refer to Table 1 (BCP Character Area Descriptions and Regulatory Framework) for details of relative amounts anticipated to occur throughout the BCP planning area.

BCP Policy CC-1.5: Provide opportunities for the development of housing types to meet the special needs of students and others attracted to a University environment.

Housing types related to the needs of a university may include co-housing, higher density units, group quarters, etc. This may include areas set aside for the

development of experimental or housing prototypes provided they are compatible with adjacent uses.

C.5.3 Economic and Business Development

Land Use Policy L-2.2

*It is important to designate areas for new industrial, research & development, and technology development ahead of other uses due to the area and access needs of industry as well as the need to avoid planning for incompatible uses adjacent to industrial areas which might interfere with continued industrial operations. For these reasons, the **Land Use Policy L-2.2** of the *Merced Vision 2030 General Plan* spotlights the need to “**Locate New or Expanded Industrial Parks, Research & Development, Technology, and Business in Appropriate Areas.**”*

BCP Policy CC-2.1: Emphasize the key role of the BCP as a tool to identify and set-aside lands for future opportunities for research and development sites near UC Merced.

The designation of sites for future research and development land uses need to be highlighted in the community and fixed at specific locations but flexible to grow and shift. Fixed R&D sites are essential to both anchor the BCP and to reserve areas as other land uses develop around the R&D sites.

Annex Job-Based Sites and Develop Plans to Provide Infrastructure

Implementing Action L-2.2.d of the *Merced Vision 2030 General Plan* states, “**Develop an action program which outlines priorities for annexing new industrial and commercial areas and includes plans for providing services and infrastructure to these future industrial/commercial areas.**” With the advice of the Economic Development Advisory Committee and the Planning Commission, the City should establish an action program for annexing new industrial and commercial areas which would include plans for providing infrastructure. Since it takes time to bring industrial sites “on-line”, it is imperative that this be done in a timely manner. Special attention should be given to areas within the northeastern portion of the City as job centers for businesses seeking a location near UC Merced.

Land Use Policy L-2.6

*Residents of the City should have ready access to commercial services in close proximity to their homes for convenience and to eliminate the need for excessive automobile trips. Neighborhood centers with grocery, pharmacy, and other stores which serve the needs of surrounding residents should be distributed throughout the City to serve most residential areas. For these reasons, the **Land Use Policy L-2.6** of the *Merced Vision 2030 General Plan* spotlights the need to “**Provide Neighborhood Commercial Centers In Proportion to Residential Development in the City.**”*

Appropriately Space Neighborhood Commercial Sites

Implementing Action L-2.6.a of the *Merced Vision 2030 General Plan* states, “**Neighborhood commercial centers should be located approximately one mile apart along major arterial streets adjacent to residential areas throughout the City.**” A one-mile radius is the standard service area for neighborhood commercial centers. The Land Use Diagram attempts to meet this standard, but additional sites may need to be designated in the future.

BCP Policy CC-2.2: Emphasize commercial development within the plan’s Neighborhood Commercial centers.

The Plan’s neighborhood commercial centers within the Mandeville Corridor contribute significant value to the livability of the future community. The variety of land-uses provided in close proximity to housing and employment supports the function of the transit corridor, the complete-street infrastructure improvements and the level of pedestrian and bicycle travel.

Land Use Policy L-2.7

*Neighborhood, Regional, and Community Commercial areas throughout the City serve many adjacent neighborhoods. Their locations along major arterials also offer these commercial areas good visibility from passing motorists, which allows them to serve more than just their immediate neighbors. Sometimes, however, this leads to the reduced efficiency of these arterials if commercial driveways are allowed to proliferate in areas near major intersections. These problems can be minimized if commercial developments are located and designed carefully. For these reasons, the **Land Use***

Policy L-2.7 of the *Merced Vision 2030 General Plan* spotlights the need to “**Locate and Design New Commercial Developments to Provide Good Access from Adjacent Neighborhoods and Reduce Congestion on Major Streets.**”

Circumstances for Locating Commercial at Arterial Street Corners

Implementing Action L-2.7.a of the *Merced Vision 2030 General Plan* states, “**New retail commercial designations shall be located along arterials at their intersections with collector streets (at 1/4 mile or 1/2 mile locations) in new growth areas. These commercial areas should not be located at the intersections of two arterials, except under very unique circumstances.**” Commercial locations away from arterial street intersections, but still along arterials at collector street intersections, offer the combined benefits of high visibility and easier access for both drive-by traffic and for adjacent residential areas. Although the City believes that new commercial centers should not ideally be located at the corner of two arterials, the City will consider extremely limited exceptions for large-scale (minimum of 20 acres), high-quality projects which agree to abide by strict access and land use restrictions in proximity to the intersection (i.e. no freestanding pads with multiple curb cuts and no driveway cuts on arterials—only on internal streets), provide internal access and strong connectivity from the adjacent neighborhood, provide a mix of uses and residential densities throughout the project, provide good transit and pedestrian access, provide high-quality architecture, landscaping, site design, and signage, and provide significant public improvements.

BCP Policy CC-2.3: Consider the development of commercial center, appropriately-scaled to the adjacent neighborhood and consistent with the design parameters of General Plan Policy L-2.7.a, at the corner of G and Bellevue Road.

The design parameters are intended to minimize vehicular congestion, support a successful long-term commercial site, and to achieve general City goals and policies to provide clean air resources and mobility options.

Create Commercial Nodes

Implementing Action L-2.7.g of the *Merced Vision 2030 General Plan* states, “**Locate commercial nodes in new growth areas to avoid the aesthetic and circulation issues associated with “strip commercial” development through the implementation of the policies of the Urban Design Chapter (Chapter 6), particularly the Core Commercial principles.**” In order to ensure high-quality commercial developments and to avoid typical “strip commercial” development, the policies and guidelines in the Urban Design

chapter should be implemented for new developments. The City's Zoning Ordinance should be updated and revised to implement these principles.

Land Use Policy L-2.8

*In 2007, the Downtown Strategy Task Force (a 20-member group representing a broad range of community interests) was formed to develop a consensus on the proper direction for Downtown with the goal of maintaining Downtown as the City's center of cultural and civic activity, finance, and government. For these reasons, the **Land Use Policy L-2.8** of the Merced Vision 2030 General Plan spotlights the need to "**Encourage a Mixture of Uses and Activities That Will Maintain the Vitality of the Downtown Area.**"*

Provide Circulation-Related Connections between Downtown and UC Merced

Implementing Action L-2.8.c of the Merced Vision 2030 General Plan states, "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."

BCP Policy CC-2.4: Work to implement the mobility chapter of the plan, especially its bikeway and transit corridor features.

The BCP provides important bikeway and transit links between Downtown, Merced College and UC Merced. Mandeville Avenue is the extension of the main transit corridor to downtown. G Street and Gardner/Parsons are important roadway linkages. Bikeways will extend from Cottonwood Creek and the PG&E transmission line corridor. This integrated system will help to ensure Downtown is connected to the City as it expands toward UC Merced.

Land Use Policy L-2.9

With the location of the UC Merced Campus by Lake Yosemite, there is a need to designate future sites near the Campus for research and development parks. One of the economic benefits of having a major research university is the "spin-off" businesses that

develop from the research conducted by professors and students at the University. For these reasons, the **Land Use Policy L-2.9** of the *Merced Vision 2030 General Plan* spotlights the need to **“Identify Locations and Develop Standards for Campus-type Research and Development Parks.”**

Plan for Research and Development Parks

Implementing Action L-2.9.a of the *Merced Vision 2030 General Plan* states, **“Plan for job centers in the northeastern portion of the City capitalizing on the proximity to a research university, UC Merced.”** As part of the development of the northeastern area, research and development campuses should be encouraged. The size and precise location would need to be determined through a market/economic study. However, as with retail commercial uses, research and development parks should be focused at the ¼ or ½ mile transit nodes along the arterials to avoid traffic congestion at the intersection of two arterials. Business parks to accommodate research and development, technology, light industry, and business uses complimentary of the UC Merced Campus research could also be located on appropriately-designated properties along the Bellevue Corridor and other transportation corridors in the vicinity of the UC Merced Campus if the market exists for such uses.

BCP Policy CC-2.5: Focus a Research and Development center in the vicinity of Bellevue Road and Gardner Road, and allow it to expand with market demand.

Research and Development uses should be developed as an integrated campus connected by public spaces with an urban pedestrian-oriented scale. Surface parking lots may be permitted in the near-term, but the site should be designed to allow conversion to parking structures in the long-term. R&D uses should be supported by nearby compatible land uses to create a live, work, play environment, and may include varied uses including restaurants, retail, daycares and gyms in a dense urban setting that emphasizes mobility by transit, bikes and pedestrians.

Zone for Research and Development Parks

Implementing Action L-2.9.b of the *Merced Vision 2030 General Plan* states, **“Develop zoning and development standards for campus-type research and development parks.”** The City’s Zoning Ordinance does not currently contain zoning standards for

campus-type research and development parks. Such standards will need to define permitted and conditionally permitted uses, taking into account desired uses in such districts, which might include restaurants and hotels to serve the employees and clientele; setbacks, building heights, etc.

C.5.4 Urban Growth and Design

Land Use Policy L-3.1

*Existing land use patterns in some of the City of Merced, like many other urban areas in the San Joaquin Valley, are not conducive to walking, cycling, and transit use. Many office developments have low employment densities and are often isolated from commercial services, forcing people to drive to eat lunch or to complete errands. The most common single family lot size of 6,000 to 10,000 square feet leads to population densities too low to support frequent and direct transit service. The predominant suburban development patterns force all local trips for shopping, recreation, school, as well as commute trips onto the arterial street system. This leads to ever wider, more congested arterial streets which in turn discourage people from walking or cycling to even nearby destinations. For these reasons, the **Land Use Policy L-3.1** of the Merced Vision 2030 General Plan spotlights the need to “**Create Land Use Patterns That Will Encourage People to Walk, Bicycle, or Use Public Transit for an Increased Number of Their Daily Trips.**”*

BCP Policy CC-3.1: Create a mixed-use, transit ready corridor along Mandeville Lane.

A carefully designed urban environment with appropriate paired land uses and circulation options can well serve a large population and associated commercial service market. The Mandeville Corridor is such a place. The synergy created by the paring of mixed-use with transit and other mobility options will help to attract research and development firms to the BCP.

Encourage Pedestrian and Transit-Friendly Designs

Implementing Action L-3.1.a of the Merced Vision 2030 General Plan states, “**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.

Plan for High and Medium-Density Housing near Transit Hubs and Commercial Centers

Implementing Action L-3.1.c of the *Merced Vision 2030 General Plan* states, “**Plan areas for higher density development within 1/4 mile of locations identified as transit hubs and commercial centers.**” Designate high-density land uses in areas planned for transit hubs and commercial centers.

Implementing Action L-3.1.d of the *Merced Vision 2030 General Plan* states, “**Encourage higher housing densities in areas served by the full range of urban services.**” Encourage high and medium-density housing at sites within walking distance of transit and neighborhood commercial services. Consider higher housing densities for areas around existing and planned transit hubs.

Encourage a Mix of Land Uses

Implementing Action L-3.1.e of the *Merced Vision 2030 General Plan* states, “**Encourage mixed-use developments that provide commercial services such as day care centers, restaurants, banks, and stores near employment centers.**” Establish mixed-use zone district standards. Tailor the allowed uses to those best suited for a pedestrian environment.

BCP Policy CC-3.2: Balance the ability to permit a range of land uses with the need to emphasize particular types in specific areas of the BCP.

While the BCP enables a variety of land uses to occur in the most of the Character Areas (see Table 1), this should not be interpreted as any use can go anywhere in any amount. The following tools have been crafted to explain the function of the character areas, and should be used to guide land use decisions in the BCP: 1) written narrative of Character Areas; 2) Table 9; and 3) the assumed land use amounts in the BCP traffic assessment.

BCP Policy CC-3.3: Seek to undertake a study or assessment of the likely future demographics to locate within the BCP in order to understand what they may

need or do concerning housing, services and jobs so that these demands may be met where possible within the BCP.

Given the proximity of the UC Merced campus to the BCP, future planning and permitting could benefit from understanding what people ages 17 to 28 may need and do. This population cohort may likely occupy a large portion of the housing in the area. Providing uses that meet these needs near housing may help to reduce traffic impacts that would otherwise exist should these uses be sited farther away from this demographic. Such study would also be valuable when making land use decisions that could negatively affect downtown Merced, and could also help to identify a unique district of uses that could exist next to UC Merced.

Land Use Policy L-3.3

*Most developments are designed to provide the most direct and convenient access by car at the exclusion of other modes of transportation. It is possible to design sites in ways that encourage less polluting transportation modes and still support access by motor vehicle. For these reasons, the **Land Use Policy L-3.3** of the Merced Vision 2030 General Plan spotlights the need to “**Promote Site Designs That Encourage Walking, Cycling, and Transit Use.**”*

Encourage Construction of Transit, Bicycling and Walking Features in Future Developments

Implementing Action L-3.3.b of the Merced Vision 2030 General Plan states, “**Encourage all subdivision street and lot designs, commercial site plans, and multi-family site plans to improve access by transit, bicycle, and walking.**” A few examples of design measures that could be recommended during design review include:

- Direct access to commercial centers from surrounding neighborhoods.
- Intra-development designs that incorporate integrated street patterns rather than designs which limit ingress and egress options to the development and restricts traffic to a limited number of arterials.
- Primary ground floor commercial building entrances should orient to plazas, parks, or pedestrian-oriented streets, not to interior blocks or parking lots as feasible.
- Promote the use of trees and plants in travelway landscaping and residences.

- Building facades should be varied and articulated to provide visual interest to pedestrians.
- Street trees should be placed in planter strips or tree wells. Tree species should be selected to create a unified image for the street and provide an effective canopy.
- Sidewalks should provide an unobstructed path. Larger sidewalk dimensions are desirable in commercial areas where pedestrian activity will be greatest.
- Encourage the use of front porches, bay window, and balconies which face onto the street to increase social interaction and provide heightened security for residential streets.
- Identify locations suitable for street furniture, and encourage its use.

BCP Policy CC-3.4: Implement the Pedestrian Plan as an essential component of the BCP's Circulation Plan.

The City's standard designs for roadways allow for pedestrian and bicycle use. Such use can be enhanced through a variety of other features, as noted in Implementing Action L-3.3.b, however. The BCP's use of an interconnected grid street, mainly occurring along the Mandeville Lane transit-corridor and the Mixed-Use TOD is one such feature. Figure 11 of the BCP depicts where other mobility-enhancing features are encouraged to occur.

Permit Transit-Friendly Projects

Implementing Action L-3.3.c of the *Merced Vision 2030 General Plan* states, “**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

Land Use Policy L-3.6

*The Community Plan process is envisioned as an important implementation tool in the Merced Vision 2030 General Plan for large-scale new developments. It is important to note, however, that it is intended to be a flexible tool that accomplishes a definite planning purpose yet does not unnecessarily frustrate the development process. For these reasons, the **Land Use Policy L-3.6** of the Merced Vision 2030 General Plan spotlights the need to “**Require Community Plans for Large New Development Areas within the City’s SUDP/SOI Prior to Development.**”*

Require Community Plans Prior to Large Scale Development

Implementing Action L-3.6.a of the Merced Vision 2030 General Plan states, “**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.

C.6 Urban Expansion

C.6.1 General Plan Goal and Policy Guidance

GP Goal Area UE-1: Urban Expansion/Preservation of Agriculturally Significant Areas

- In General, Develop Non-Prime Agricultural Lands before Prime Agricultural Lands
- Develop Key Employment and Circulation Corridors

GP Goal Area UE-2: Urban Expansion/A Compact Urban Form and Efficient Urban Expansion

- Limit Establishment and Growth of Rural Residential Centers
- Limit Expansion of City Utilities to only those areas within the Established Urban Boundary
- Promote High Density Residential Sites to Maintain a Compact Urban Form

GP Goal Area UE-3: Urban Expansion/Joint Planning Efforts

- Plan for Annexation of UC Merced
- Implement City's Position Regarding Development of the University Community Plan (UCP)

GP Goal Area UE-4: Urban Expansion/Timing, Density, and Location of New Growth

- New Development Should Occur next to Existing Urban Areas
- Encourage Phasing of New Development
- Plan for a Mixture of Land Uses
- Evaluate Annexation Proposals to Meet Specific Criteria

GP Goal Area UE-5: Urban Expansion/Rural Residential Centers

- Annex Suitable Rural Residential Areas
- Remove Unnecessary Obstacles to Annexation

C.6.2 Preservation of Agriculturally Significant Areas

Urban Expansion Policy UE-1.1

In General, Develop Non-Prime Agricultural Lands before Prime Agricultural Lands

Implementing Action 1.1.a of the *Merced Vision 2030 General Plan* states, **“Direct development away from significant concentrations of “Prime” agricultural soils and give priority to the conversion of non-prime agricultural land if reasonable alternatives exist.”** Urban expansion should be directed away from significant concentrations of “prime” soils and where agricultural use can still be realistically and economically sustained. Development within the City’s SUDP/SOI should be developed in such a manner as to minimize impacts on “prime” soils along the City’s urban fringe. It is recognized that it is not possible to avoid all “prime” soils. The UC Merced Campus and University Community are located on prime farmland to avoid sensitive wetlands habitat. Some areas that contain prime soils are adjacent to important circulation and employment corridors and will need to be developed for urban use in order to achieve critical City economic development and circulation goals. Accommodating growth in a compact form within the City’s growth area will decrease the pressure to develop outside urban areas where more prime soils and intensive agricultural operations now exist.

C.6.3 A Compact Urban Form & Efficient Urban Expansion

Urban Expansion Policy UE-1.2

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. For this reason, *Merced Vision 2030 General Plan* Urban Expansion Policy 1.2, states, **“Foster Compact and Efficient Development Patterns to Maintain a Compact Urban Form.”**

Limit Establishment and Growth of Rural Residential Centers

Implementing Action UE-1.2.b of the *Merced Vision 2030 General Plan* states, ***“Work with Merced County to ensure that existing unincorporated Rural Residential Centers in the Merced area are not expanded and no new Rural Residential Centers are established.”*** RRC’s are not efficient uses of land and have not proven to be ideal buffers between urban and agricultural uses. Existing RRC’s can remain but should not be enlarged and no new RRC’s should be established, in accordance with County (and City) General Plan policy and provisions of the existing City/County Property Tax Sharing Agreement adopted in 1997 (Section 2.3.4).

BCP Policy UE-1.1: In cooperation with Merced County, seek to designate undeveloped parcels within the RRC as “Urban Reserve,” a Merced County General Plan Land Use Designation.

Limit Expansion of City Utilities to only those areas within the Established Urban Boundary

Implementing Action UE-1.2.c of the *Merced Vision 2030 General Plan* states, ***“Continue to limit the expansion of City utilities to only those areas within the established urban boundary.”*** Proposals for urban development within the City’s SUDP/SOI shall be considered only after annexation has taken place. City utilities should not be extended outside of the City limits except in cases where public health and safety are threatened or a significant public interest (such as the UC campus) is served.

Promote High Density Residential Sites to Maintain a Compact Urban Form

Implementing Action UE-1.2.d of the *Merced Vision 2030 General Plan* states, ***“Promote higher residential densities within the Merced urban area.”*** To maintain a compact form, the highest densities should, in general, be directed toward central areas of the City. Higher densities along the urban fringes may occur in Community Plan areas, if justified, however.

BCP Policy UE-1.2: Promote high residential densities along the Mandeville Transit Corridor within the Bellevue Community Plan.

The population near UC Merced will consist of a higher percentage of students, teachers, and employees than in other part of Merced. This population will need

opportunities for a range of housing opportunities ranging from apartments, condominiums, rooming homes, among others.

C.6.4 Joint Planning Efforts

Urban Expansion Policy UE-1.3

*The University Community Plan area is planned as an urban area requiring urban services. Consideration has been given to making this area part of the incorporated City of Merced. Cooperative planning efforts will be necessary to ensure the effective development of this area for all interested and affected parties. For these reasons, the **Land Use Policy L-1.2** of the Merced Vision 2030 General Plan spotlights the need to “Continue Joint Planning Efforts on the UC Merced Campus and University Community Plans.”*

Plan for Annexation of UC Merced

Implementing Action UE-1.4.a of the *Merced Vision 2030 General Plan* states, “**Incorporate the UC Merced campus area as part of the City’s SUDP/Sphere of Influence and begin planning for the eventual annexation of the Campus.**” The City should begin the process of planning for the eventual annexation of the Campus to the City, including evaluating various corridors for possible annexation in order to bridge the gap between the current City limits and the Campus boundary. Planning of the land uses along those corridors should also begin as well, including possible locations for research and development parks.

BCP Policy UE-2.1: Seek to form a collaborative approach to planning and implementing future growth near UC Merced.

A broad discussion of how best to utilize limited financial resources, to devise an intra-government infrastructure plan for roads and sewer, etc., and to decide governance issues should occur prior to development within or near the BCP. These efforts would be aimed to result in decisions that direct growth in a manner that serves the interest of the community as a whole. Such discussion an decisions would involve the University of California, the City of Merced and Merced County, as well as the Merced Irrigation District, local schools and the Merced County Association of Governments.

BCP Policy UE-2.2: In conjunction with the collaborative approach above, assess annexation options, and where appropriate, consistent with these efforts, encourage annexation of lands between the City and UC Merced.

Annexation of lands between UC Merced and the City need to be consistent with a community-based strategic approach to infrastructure improvement and property development in order to avoid: 1) an uncoordinated dispersal of infrastructure; 2) uncertainty in the marketplace; and 3) inefficient use of public infrastructure, services and funds.

Implement City's Position Regarding Development of the University Community Plan (UCP)

Implementing Action UE-1.4.b of the *Merced Vision 2030 General Plan* states, “**Working in cooperation with the County, implement the following (3-part) policy statement from City Council Resolution #2006-89 regarding the University Community Plan Area.**

1. Long-term Land Use and Governance

The University Community should be incorporated into the City of Merced, and should not be part of the unincorporated County, or a separate City.

- It is in the public interest that the University Community's development not result in the creation of a new city or other jurisdiction.
- Multiplication of jurisdictions can lead to conflicts, which should be avoided. A separate City on Merced's border is inherently undesirable.
- The University Community is expected to develop at an urban density. Merced County does not currently provide urban services. The City is already serving the University of California campus, and it is logical for the City to serve the adjacent area as well.
- No separate wastewater treatment plant should be allowed or constructed in the area, given the risks to the City's groundwater supply that could result, and competition for qualified licensed operators. This statement does not, however, preclude consideration of innovative methods of wastewater treatment for the area which are reasonably viable from an economic perspective.

The University Community should be developed with the use of annexation agreements and phased annexations, not through the creation of a County services district, either as an interim or permanent measure.

2. Phasing of Development and Services

The City of Merced is willing to provide interim sewer and water services from existing sewer and water lines along Bellevue Road that serve the University campus, provided that certain conditions are met:

- Interim services to the University Community require compliance with environmental law and permitting, including the California Environmental Quality Act (CEQA) and approval by the Local Agency Formation Commission (LAFCo).
- Prior to providing interim services, the City must receive an acceptable plan for long term service provision, enforceable commitment for annexation, and financial planning and commitments necessary to fund long term services.

The City should encourage annexation along the Bellevue Corridor to provide contiguity between the University Community and the City of Merced.

- The Bellevue corridor is expected to become a major regional transportation arterial. Bellevue Road also contains sewer and water lines which have been extended from the City to the University of California campus. The western half of the Corridor, from G Street to Golf Road, is already within Merced's SUDP, and annexation proposals are pending. East of Golf Road, the area along Bellevue Road is held in large tracts by a few land owners, and is mostly undeveloped. It is realistic to expect development proposals in this area in the near term.
- Phasing of the University Community's development should provide for logical extension of urban services.
- The Merced County "Rural Residential Center" bounded by Lake Road, Cardella Road, Yosemite Avenue, and Golf Road (extended) should be annexed into the City of Merced as well. However, this area, which is already developed to a large extent, should be allowed to retain its rural character, with a special plan Designation to be worked out through the General Plan update process.

3. Planning Processes

The City accepts the University Community Plan adopted by Merced County on December 21, 2004 as a general conceptual framework for the planning of the University Community.

- That existing plan can be used as foundational work for further planning for the area, with the City as lead agency in the planning process.
- If a special planning process or framework is used for the development of the University Community, then the costs of that planning process shall be borne by applicants and developers, not by Merced residents.

The City should revise all of its various planning documents to accommodate the incorporation of the University Community into the City of Merced. These include not only the General Plan, but also plans for wastewater treatment, water, storm drainage, parks, fire protection, and other services

C.6.5 Timing, Density and Location of New Growth

Urban Expansion Policy UE-1.4

“Leap-frog development” tends to be cost-prohibitive in these times due to the high up-front costs of extending utility lines, streets, etc., across undeveloped properties to outlying areas. Such development should be discouraged in most cases because of the service inefficiencies it creates. Developments of large singular land uses bar opportunities for citizens to live, shop or work in a setting conducive to sustainable environmental, social and economic communities. Large distances between land uses create unwanted economic and social costs. For example, road infrastructure costs to connect jobs and housing are higher the further these uses are from each other. Likewise, cost to the citizen, in terms money spent and loss of time for other activities, is similarly affected. Greater impact to air quality results the further uses are to one another. For these reasons, the Urban Expansion Policy UE-1.3.of the *Merced Vision 2030 General Plan* spotlights the need to **“control the annexation, timing, density, and location of new land uses within the City’s Urban Expansion Boundaries.”**

New Development Should occur next to Existing Urban Areas

Implementing Action UE-1.3.a of the *Merced Vision 2030 General Plan* states, **“The City should continue to require that all new urban development and annexations be contiguous to existing urban areas and have reasonable access to public services and facilities.”** Exceptions can be made for industrial areas which for business recruitment

reasons often need to provide infrastructure and services prior to development. Other exceptions may be made, with strong justification on a case-by-case basis, for other areas which may serve the public interest through early development.

BCP Policy UE-3.1: Development of Research and Development Parks that are not contiguous to existing urban areas may be considered.

Implementation Action UE-1.3a of the *Merced Vision 2030 General Plan* emphasizes that new urban development and annexations be contiguous to existing urban areas and have reasonable access to public services and facilities. Given that the City also seeks to provide significant job-based land uses, flexibility on the proximity of these land uses may be permitted. Important considerations include: reasonable provision and access to public services and facilities; extent of new jobs compared to community needs; impact costs of services and infrastructure and sources to compensate and mitigate.

BCP Policy UE-3.2: In the context of Implementing Action UE-1.3.a of the *Merced Vision 2030 General Plan*, growth adjacent to or in close proximity to UC Merced is considered one that is contiguous to an existing urban area.

The siting of UC Merced has created a second growth node within the City's Sphere of Influence. The City's model to form a compact urban form can be applied to a community with more than one center. Development adjacent to UC Merced, concurrent with growth adjacent to the City's traditional form, should be considered.

BCP Policy UE-3.3: Support efforts that permit campus serving housing, office and commercial development adjacent to UC Merced.

Under circumstances that are compatible with logical provision of City public infrastructure and services, development adjacent to UC Merced could be supported. The development should be related to proven market demands that originate predominately from UC Merced, and may include housing, office and commercial development.

Encourage Phasing of New Development

Implementing Action UE-1.3.c of the *Merced Vision 2030 General Plan* states, "**The City shall encourage phasing of new development.**" Phasing of new development can

prevent the premature conversion of agricultural land, and permit the efficient and cost effective extension of services. When approving General Plan Amendments and Specific/Community Plans for large areas, the City should consider applying phasing to the development tied to the ability of the City to provide infrastructure and municipal services to new development and/or consider designating certain areas for development within 10-year time frames. These policies can be implemented through the Pre-Annexation Development Agreement process with property owners who seek these land use entitlements.

BCP Policy UE-3.4: Annexation proposals in the BCP shall be accompanied by a phasing plan.

In order to assure efficient and cost-effective extension of services, a phasing plan that matches infrastructure needs with anticipated development will need to be submitted with applications to annex lands within the Bellevue Community Plan area. The Phasing Plan will need to be consistent with City mechanisms and tools to finance and install public infrastructure and services.

Plan for a Mixture of Land Uses

Implementing Action UE-1.3.e of the *Merced Vision 2030 General Plan* states, ***“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.

Evaluate Annexation Proposals to Meet Specific Criteria

Implementing Action UE-1.3.g of the *Merced Vision 2030 General Plan* states, ***“Evaluate future annexation requests against the following conditions:***

- a) Is the area contiguous to the current City limits and within the City’s Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI)? Do the annexed lands form a logical and efficient City limit and include older areas where appropriate to minimize the formation of unincorporated peninsulas?***
- b) Is the proposed development consistent with the land use classifications on the General Plan Land Use Diagram (Figure 3.1)?***
- c) Can the proposed development be served by the City water, sewer, storm drainage, fire and police protection, parks, and street systems to meet***

acceptable standards and service levels without requiring improvements and additional costs to the City beyond which the developer will consent to provide or mitigate?

- d) Will this annexation result in the premature conversion of prime agricultural land as defined on the Important Farmland Map of the State Mapping and Monitoring Program? If so, are there alternative locations where this development could take place without converting prime soils?*
- e) Will a non-agricultural use create conflict with adjacent or nearby agricultural uses? If so, how can these conflicts be mitigated?*
- f) Does annexation of the area help the City reach one of the following goals?*
 - 1) Does annexation of the area bring the City closer to annexation of the UC Merced campus and University Community?*
 - 2) Does the area contain significant amounts of job-generating land uses, such as industrial, commercial, office, and business/research & development parks?*
 - 3) Does the project provide key infrastructure facilities or other desirable amenities, such as the extension of major roads, utility trunk lines, parks and recreational facilities, etc.?"*

C.6.6 Rural Residential Centers

Urban Expansion Policy UE-1.5

Unincorporated suburban development within the City's SUDP/SOI has resulted in problems of public protection (police and fire) service delivery to residents in addition to posing potential long term problems to residents with respect to maintenance of on-site water systems and wastewater disposal (septic) systems. Such problems could also threaten the City's future water quality. Also, residents of these areas, while directly impacted by the City's planning decision making process, have no direct voice in municipal affairs. In the long-term interest of both the City and the residents, these unincorporated suburban areas should be annexed to the City of Merced. For these reasons, the Urban Expansion Policy UE-1.5 of the *Merced Vision 2030 General Plan* "promotes annexation of developed areas within the City's Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI)."

Annex Suitable Rural Residential Areas

Implementing Action UE-1.5.a of the *Merced Vision 2030 General Plan* states, "The City should continue to promote the annexation of unincorporated urban areas within the urban expansion boundaries, which cause a duplication of public services and hinder extension of City services to new development, if they are financially feasible." The

RRC area within the BCP has the potential to hinder extension of City services to future development lands located east of Lake Road. Continued growth in the County will create developments that do not include municipal utilities and bar future development of land that could help contribute to the cost of such infrastructure. Annexation of these lands prior to further development would resolve these issues.

Remove Unnecessary Obstacles to Annexation

The *Merced Vision 2030 General Plan* includes other implementing actions of Urban Expansion Policy UE-1.5 to examine methods to ease annexation of the RRC in and adjacent to the BCP plan area, and include:

Implementing Action UE-1.5.b of the *Merced Vision 2030 General Plan* states, ***“Review relevant City improvement and development policies to remove unnecessary obstacles to annexation.”***

Implementing Action UE-1.5.c of the *Merced Vision 2030 General Plan* states, ***“Provide assistance to residents of unincorporated areas to address public health and safety concerns of on-site water and sewer systems.”***

Implementing Action UE-1.5.d of the *Merced Vision 2030 General Plan* states, ***“Establish annexation policies and outreach program regarding the annexation of the existing Rural Residential Centers (existing development on one-acre lots).”***

Implementing Action UE-1.5.e of the *Merced Vision 2030 General Plan* states, ***“Provide information to interested unincorporated area residents on the benefits of annexation.”***

C.7 Public Facilities and Services

C.7.1 General Plan Goal and Policy Guidance

GP Goal Area P-1: Public Facilities and Services

- Plan for Utility Capacity and Extensions
- Develop Phasing Plans for Public Facilities and Services
- Develop “Plans for Service”

GP Goal Area P-2: Police and Fire Protection

- Determine Appropriate Sites for Future Fire Stations

GP Goal Area P-3: Water

- Explore Range of Uses for Untreated Water
- Limit Expansion of City Utilities outside its Incorporated Limits
- Preserve and Enhance Surface Water System
- Develop Groundwater Recharge and Storage Facilities

GP Goal Area P-4: Wastewater

- Coordinate Wastewater Planning Activities with the County
- Design Growth Areas to Use Treated Wastewater

GP Goal Area P-5: Storm-Drainage and Flood Control

- Provide “Open Space” Type Storm-Drainage Infrastructure

GP Goal Area P-6: Solid Waste

- Minimize Solid Waste

GP Goal Area P-7: Schools

- Plan for School Sites near Parks, Bikeways and Adjacent to Residential Uses.
- Coordinate Infrastructure Needs with UC Merced

GP Goal Area P-8: Government, Health, Library, Cultural Facilities

- Plan for Government, Health, Library and Cultural Facilities.

GP Goal Area P-9: Telecommunications

- Plan for Telecommunications Infrastructure

C.7.2 Public Facilities and Services

Public Services and Facilities Policy P-1.1

*One of the key elements to promoting a healthy local economy in Merced is the quality of life enjoyed by the City's residents. The quality and availability of urban services and infrastructure is found to be an important measure of urban quality of life. It is understood that facilities and infrastructure not provided by the City is the planning and funding responsibility of other governmental, quasi-public, or private entities. For these reasons, the **Public Services and Facilities Policy P-1.1** of the *Merced Vision 2030 General Plan* spotlights the need to "Provide Adequate Public Infrastructure and Municipal Services to Meet the Needs of Future Development."*

Plan for Utility Capacity and Extensions

Implementing Action P-1.1.a of the *Merced Vision 2030 General Plan* states, "Through development review and long range planning efforts, ensure that utilities are adequately sized to accommodate the proposed development and, if applicable, allow for extensions for future developments, consistent with master plans." Improvement standards applied through the long range planning and/or development review processes should be based upon existing and potential utility needs to a site as well as existing and potential utility needs in surrounding areas.

BCP Policy P-1.1: Ensure that utilities are adequately sized to serve proposed development within the BCP and other lands within the City's Sphere of Influence.

The BCP does not include improvement standards for utilities. It along with other long-range planning efforts within the City's Sphere of Influence identify desired arrangement and density of land uses, which can be used to determine improvement needs. Infrastructure Master Plans for sewer, water, storm-drainage are needed to describe the system needed to serve the land use plans. Along with such determination, it is important to identify feasible funding for such improvements, and to make necessary adjustments to the long-range planning documents to align with fiscal constraints or opportunities. The study should include the urban expansion area in northeast Merced, and be developed collaboratively with UCM and Merced County.

Develop a Phasing Plan for Public Facilities and Services

Implementing Action P-1.1.c of the *Merced Vision 2030 General Plan* states, “**Include in Community Plans, Specific Plans and master plans, a phasing plan for providing access, sewer, water, drainage, flood control, schools, parks and other appropriate governmental facilities and services.**” A phasing plan helps ensure that adequate service facilities can be accommodated in the planning area and that new facilities and services will be provided in a manner that keeps pace with population growth.

Public Services and Facilities Policy P-1.3

New growth and development within the City is accommodated to assure that adequate space is provided to meet future population growth needs. The City will endeavor to provide for cost-effective new infrastructure and public service expansion to serve that growth. It is the City’s policy, however, that new development should not create a financial burden for existing City residents and that all new development should be more self-supporting with respect to infrastructure availability, maintenance, and future municipal service provision. For these reasons, the **Public Services and Facilities Policy P-1.3** of the *Merced Vision 2030 General Plan* spotlights the need to “**Require New Development to Provide or Pay for its Fair Share of Municipal Public Facility and Infrastructure Improvements.**”

Develop “Plans for Service”

Implementing Action P-1.3.e of the *Merced Vision 2030 General Plan* states, “**Master Plans, Community Plans, General Plan amendments, pre-zoning, and annexation proposals, through the Development Agreement process, shall ensure that infrastructure development and public facilities and municipal services are consistent with overall local public agency plans, and that the local public agencies can reasonably provide and/or extend services within the proposed development time frame of implementation.**” Master Plans, Community Plans, General Plan amendments, pre-zoning, and annexation proposals prepared for areas subject to annexation to the City shall include an evaluation (prepared by the applicants with input from the City, School Districts, and other service providers) of all infrastructure, public facilities, and services under the jurisdiction of all local public agencies. These Plans for Service should include an evaluation of existing infrastructure and services, future public facilities and services required to serve the development, and the timing and funding of such public facilities and municipal services.

BCP Policy P-1.2: Development within the BCP should be based on “Plans for Service”, which will be prepared at the time of annexation of the project site. As part of the decision-making process, “Plans for Service” will be prepared and considered by the City and Merced County LAFCO to assure that infrastructure development and public facilities and municipal services are consistent with overall local public agency plans. These public agency plans include Master Infrastructure Plans that need to be prepared using the BCP and other long-range land use plans as a basis for assessment and provision of service.

C.7.3 Police and Fire Protection

Public Services and Facilities Policy P-2.1

*Public protection services and facilities are to be maintained in the City of Merced at a level that promotes the health and welfare of the City’s residents. The City is committed to assuring that facilities, equipment and staffing levels of its fire and police service units meet the highest standard. For these reasons, the **Public Services and Facilities Policy P-2.1** of the *Merced Vision 2030 General Plan* spotlights the need to “**Maintain and Enhance Public Protection Facilities, Equipment, and Personnel to the Maximum Extent Feasible Within the Resource Constraints of the City to Serve the City's Needs.**”*

BCP Policy P-2.1: Ensure adequate service levels for police and fire protection in order to service substantial growth in the BCP area.

Consistent with the City’s General Plan, the BCP does not include a proposed police or fire station site; but at the same time, the BCP does not preclude the placement of a station in the planning area.

C.7.4 Water

Public Services and Facilities Policy P-3.1

According to the Merced Water Supply Plan and the Urban Water Management Plan, the City of Merced currently has adequate water resources and will continue to do so if they are properly managed to meet its future growth needs. The City must continue to work closely with the Merced Irrigation District (MID) in order to ensure that these resources remain stable. The City of Merced is committed to a program of cooperating in the long-term management of the area's water resources and utilizing policies and programs which conserve and manage water use in such a manner as to maintain the potable quality of the City's system and reduce treatment costs on applications which do not require the use of treated water. For these reasons, the **Public Services and Facilities Policy P-3.1** of the Merced Vision 2030 General Plan spotlights the need to **"Ensure That Adequate Water Supply can be provided Within the City's Service Area, Concurrent with Service Expansion and Population Growth."**

Explore Range of Uses for Untreated Water

Implementing Action P-3.1.a of the Merced Vision 2030 General Plan states, **"Pursue innovative programs to reduce the demand for potable ("drinkable") water."** The City should explore programs for utilizing untreated water since many urban water uses do not require treated, "drinkable" water. Non-treated water can be used for landscape irrigation, industrial processing, and other uses. Possible sources of non-treated water might include: (1) MID surface water supplies; (2) storm water; or (3) reclaimed water.

BCP Policy P-3.1: Examine the value and feasibility of using a variety of multi-purpose storm-water capture features compared with the traditional curb-and-gutter system.

In lieu of current practice of capturing and transporting water immediately into basins, a multi-use distributed system of features can offer multiple benefits to the City and residents. Along with encouraging the capture and use of rainwater on private properties, the siting of street planters, curb extensions, and green strips in the medians can provide cost-effective peak flood reduction, filter pollutants, be a source of groundwater recharge, improve pedestrian safety, beautify neighborhoods, help alleviate the urban "heat-island" effect, and conserve the City's potable water source. This alternate system could blend well with the rural character of the plan's residential neighborhoods.

Limit Expansion of City Utilities outside its Incorporated Limits

Implementing Action P-3.1.g of the *Merced Vision 2030 General Plan* states, **“The City shall not extend water service outside its incorporated limits, except under limited circumstances.”** City policy requires that an area be annexed to the City before City water can be provided. Exceptions to this policy include emergencies where public health and safety are threatened or a significant public interest is served, such as the UC campus or as otherwise determined by the City Council. (Refer to the Urban Expansion Chapter for other policies which relate to the UC.)

Public Services and Facilities Policy P-3.2

Studies have concluded that the long-term potable water needs of the City can best be served through the use of the area’s groundwater resources. To the same degree, there is a need to improve and enhance the ability to utilize surface water resources and to develop groundwater recharge facilities for the long-term stabilization of the regional aquifer. The City has historically cooperated with the Merced Irrigation District to preserve and enhance the regional water resources and is committed to continuing this cooperation. For these reasons, the **Public Services and Facilities Policy P-3.2** of the *Merced Vision 2030 General Plan* spotlights the need to **Stabilize the Region’s Aquifer, in Cooperation with the County and the Merced Irrigation District Work”**

Preserve and Enhance Surface Water System

Implementing Action P-3.2.b of the *Merced Vision 2030 General Plan* states, **“Work cooperatively with MID to preserve and enhance its surface water delivery system.”** It is important that the viability of the MID irrigation system be preserved and enhanced to assure long term, cost-effective water supplies for area agricultural interests. MID’s water rights must also be protected. The long term strategy of promoting surface water use by area farms will reduce agricultural demands on the area’s groundwater resources and promote water conservation throughout the region.

Explore Range of Uses for Untreated Water

Implementing Action P-3.2.c of the *Merced Vision 2030 General Plan* states, **“Explore the use of MID water resources for applications that do not require treated water to reduce demand on the regional groundwater supplies and reduce costs of water treatment.”** By using surface water for uses such as landscape maintenance that do not require treated water, the City can reduce its demand on regional groundwater supplies and perhaps reduce the costs of water treatment.

BCP Policy P-3.2: Initiate a program to irrigate public parks with MID surface water supplies.

Large portions of the BCP park and open space network is planned to be located adjacent to MID surface waters, that can be used for landscape irrigation, thereby reserving clean groundwater for potable uses.

Develop Groundwater Recharge and Storage Facilities

Implementing Action P-3.2.d of the *Merced Vision 2030 General Plan* states, “**Cooperate with MID and the County in the development of groundwater recharge facilities.**” Groundwater recharge has been identified as key to maintaining an adequate water supply into the future. Groundwater recharge can operate in conjunction with park and open space facilities incorporating the development of recreational lakes and use of storm water retention basins for summer recharge programs. Recharge facilities should be designed as multi-use facilities within the Merced urban area where feasible.

BCP Policy P-3.3: Coordinate with the Merced Irrigation District (MID) to design and operate laterals as sites for recharge, storm-water management and recreational open space corridors while protecting its primary function as conveyance of water to agricultural pursuits.

Several MID laterals trace through the BCP conveying Merced River surface water in the spring and summer (May to October) to agricultural fields both inside and out of the BCP planning area. To the east of the BCP planning area is UCM including its canal-based open space features, the Lake Road bike-path, future bikeways within and around UC Merced, and Yosemite Lake Regional Park. The planning area is void of any notable creek that can connect Merced to these features. The MID laterals in the BCP provide a unique opportunity to link these features and address a range of community needs including groundwater recharge, storm-water management and recreational open space corridors. A collaborative effort between the City, Merced County and MID should be initiated to create a long-term multiple-use strategy for the future use of the MID laterals.

C.7.5 Wastewater

Public Services and Facilities Policy P-4.1

*Future growth and development will depend on the availability of wastewater system capacity. The City is committed to keeping the City's system current with respect to present and projected future needs of the growing urban area. For these reasons, the **Public Services and Facilities Policy P-4.1** of the *Merced Vision 2030 General Plan* spotlights the need to **"Provide Adequate Wastewater Collection, Treatment and Disposal Capacity for Existing and Projected Future Needs."***

Coordinate Wastewater Planning Activities with the County

Implementing Action P-4.1.c of the *Merced Vision 2030 General Plan* states, **"Coordinate wastewater planning activities with the County."** The City and County should develop a joint strategy for accommodation of development in the Rural Residential areas to minimize ground water contamination from septic tank systems. Additionally, development proposed within the City's SUDP/SOI and not yet annexed to the City or proposed within an area that will likely be annexed in the future should be reviewed by both the City and County to assure its future compatibility with the City's wastewater collection, treatment and disposal plans. Plans for servicing the UC Merced campus and University Community should also be coordinated.

BCP Policy P-4.1: Coordinate wastewater planning activities with UCM and Merced County.

Include the Bellevue Community Plan, the University Community Plan and UCM's Long-Range Development Plan, as well as other development plans within the City's Sphere of Influence in any update to the City's wastewater planning activities. Such studies should include an assessment of potential strategies to minimize groundwater contamination from septic tank systems in Rural Residential areas.

Public Services and Facilities Policy P-4.2

In future years, the urban expansion area of Merced may require the development of expanded wastewater treatment systems as part of a long-term comprehensive wastewater treatment plan. Their design should incorporate beneficial use of treated wastewater. It is necessary that other development components also be planned to

incorporate the potential to utilize reclaimed water as a primary or secondary disposal process. For these reasons, the **Public Services and Facilities Policy P-4.2** of the *Merced Vision 2030 General Plan* spotlights the need to “**Consider the Use of Reclaimed Water to Reduce Non-Potable Water Demands Whenever Practical.**”

Design Growth Areas to Use Treated Wastewater

Implementing Action P-4.2.a of the *Merced Vision 2030 General Plan* states, “**Consider the development of reclaimed water systems, including pipelines, pump stations and storage ponds.**” Design and development would be dependent upon proximity of the system to potential users.

BCP Policy P-4.2: Encourage innovative distributed reclaimed water improvements for buildings.

Private on-site systems should be encouraged provided that water quality issues can be adequately addressed. These systems may involve the collection of rainwater, the use of gray-water, or other similar reclaimed technologies. For example, buildings can incorporate wastewater reuse systems, encouraging on-site water recycling for cooling systems and landscaping needs.

C.7.6 Storm Drainage and Flood Control

Public Services and Facilities Policy P-5.2

In order to provide for the most cost effective infrastructure development and maintenance strategy, the City is committed to a program of developing facilities that can accommodate multiple uses. To this end, the City will identify multiple use sites throughout the Merced SUDP/SOI. For these reasons, the **Public Services and Facilities Policy P-5.2** of the *Merced Vision 2030 General Plan* spotlights the need to “**Integrate Drainage Facilities with Bike Paths, Sidewalks, Recreation Facilities, Agricultural Activities, Groundwater Recharge, and Landscaping.**”

BCP Policy P-5.1: Craft a Storm-water Master Plan that emphasizes multiple use objectives of the community.

Assure that storm-water flow from and through the BCP is addressed on a regional scale, taking into consideration the important opportunities and constraints of the Lake Yosemite Reservoir. The plan will need to identify

conveyance channels and stormwater basins, whether inside or outside the BCP, in anticipation of future flood waters and need to divert water from urbanized areas, including UC Merced. As part of this assessment, the plan should include methods to create a multi-use distributed system of features (in lieu of the simple curb and gutter system). Such features can include the capture and use of rainwater on private properties, the siting of street planters, curb extensions, and green strips in street medians. These features can provide cost-effective peak-flood reduction, filter pollutants, be a source of groundwater recharge, improve pedestrian safety, beautify neighborhoods, help alleviate the urban “heat-island” effect, and conserve the City’s potable water source.

Provide “Open Space” Type Storm-Drainage Infrastructure

Implementing Action P-5.2.a of the *Merced Vision 2030 General Plan* states, **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.

BCP Policy P-5.2: Examine the value and feasibility of using a variety of multi-purpose storm-water capture features compared with the traditional curb-and-gutter system.

In lieu of current practice of capturing and transporting water immediately into basins, a multi-use distributed system of features can offer multiple benefits to the City and residents. Along with encouraging the capture and use of rainwater on private properties, the siting of street planters, curb extensions, and green strips in the medians can provide cost-effective peak flood reduction, filter pollutants, be a source of groundwater recharge, improve pedestrian safety, beautify neighborhoods, help alleviate the urban “heat-island” effect, and conserve the City’s potable water source. This alternate system could blend well with the rural character of the plan’s residential neighborhoods.

C.7.7 Solid Waste

Public Services and Facilities Policy P-6.1

State law mandates that the waste stream be reduced significantly and that local governments implement programs and activities to accomplish this objective. The City of Merced deems that it is in the City's long term interest to support efforts to reduce the amount of solid waste deposited in the Merced County Regional Waste Management Authority's landfill sites and support private and public recycling efforts. For these reasons, the **Public Services and Facilities Policy P-6.1** of the *Merced Vision 2030 General Plan* spotlights the need to "**Establish Programs to Recover Recyclable Materials and Energy from Solid Wastes Generated within the City.**"

Minimize Solid Waste

Implementing Action P-6.1.a of the *Merced Vision 2030 General Plan* states, **Continue to implement source reduction and recycling programs to minimize waste at the point of manufacture or use.** Such programs should include the following: 1) Continuing citywide recycling efforts for homes and businesses; 2) Supporting public and private recycling efforts to divert wood, leaves and yard waste from being deposited in the landfill site; and 3) Assisting the private sector wherever possible in developing methods for the reuse of inert materials (concrete, asphalt and other building materials waste) which currently use valuable landfill space and increasing resource and material recovery from solid wastes.

BCP Policy P-6.1: Collaborate with UC Merced to implement new recycling, composting, and source reduction programs.

In 2007, the University of California adopted a *Policy on Sustainable Practices*, which sets waste diversion goals of 75 percent by June 2012 and zero waste by 2020. This presents an opportunity for the City of Merced to collaborate with UC Merced to identify and implement new programs to reduce the waste-stream in the City.

C.7.8 Schools

Public Services and Facilities Policy P-7.1

*While the primary responsibility of providing education services in the City of Merced belongs to the various school districts which operate in the community, the City can provide an important element of support to education service providers. In a time of limited resources, cooperative arrangements between all levels of local government are essential to maintaining and enhancing service levels. The City of Merced is committed to working cooperatively with local educational service providers, both public and private, in the improvement of the educational resources available to City residents. For these reasons, the **Public Services and Facilities Policy P- P-7.1** of the *Merced Vision 2030 General Plan* spotlights the need to “**Cooperate With Merced Area School Districts to Provide Pre-Kindergarten, Elementary, Intermediate, And High School Sites That Are Centrally Located to the Populations They Serve and Adequate to Serve Community Growth.**”*

Plan for School Sites near Parks, Bikeways and Adjacent to Residential Uses.

Implementing Action P-7.1.d.of the *Merced Vision 2030 General Plan* states, “**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.

BCP Policy P-7.1: During the annexation process of any of any portion of the BCP, work with property owners and the school district to more definitively site potential schools in appropriate areas.

Due to their singular use and non-residential or employment nature, school sites should not be located within one-quarter mile of Mandeville Lane, or within the Mixed-Use Transit-Oriented Development place-type. Outside these areas, schools should be located near high population areas, share active recreational facilities; and be well connected to bikeways and sidewalks.

Schools that are designed with limited outdoor open space, dense populations and a small footprint may be appropriate within transit-oriented development

place-types, especially the mixed-use flex place-type. While these may take the form of private technical schools, the BCP would not preclude a public school with such design.

Public Services and Facilities Policy P-7.2

*The City of Merced is fortunate to have well regarded institutions of higher education. The City is committed to promoting these institutions and facilitating their growth and development. For these reasons, the **Public Services and Facilities Policy P-7.2** of the Merced Vision 2030 General Plan spotlights the need to “**Support Higher Educational Opportunities.**”*

Coordinate Infrastructure Needs with UC Merced

Implementing Action P-7.2.b of the Merced Vision 2030 General Plan states, “**Work closely with both the Merced Community College District and University of California Chancellor’s Office to assure that adequate community infrastructure is available to meet their institutional needs.** The City’s street system, along with water, sewer, and drainage systems, serve the existing Merced College campus site and the UC Merced campus site. The City will work closely with Merced Community College and the UC system on future campus expansion and development plans, coordinate infrastructure extension, and upgrade programs to meet the development needs of these two campuses to the maximum extent feasible. The City anticipates and expects these institutions to pay their fair share of facility costs and to mitigate their impacts on the community.

C.7.9 Government, Health, Library and Cultural Facilities

Public Services and Facilities Policy P-8.1

*The long term vision of the City of Merced is that of a major urban center in the San Joaquin Valley. With growth comes the normal problems of urban expansion but along with the problems, comes expanded opportunities. With the development of the UC Merced campus, many new cultural resources will become available in the City of Merced. The City’s vision is to plan for the development of facilities which complement the expanded community resources and reflect the future status of Merced as a major metropolitan area in the region. For these reasons, the **Public Services and Facilities Policy P-8.1** of the Merced Vision 2030 General Plan spotlights the need for the City to*

“support the cultural and health related needs of the community by incorporating such facilities and service in development and redevelopment proposals.”

Encourage multicultural and performing arts programs in Downtown Merced.

Implementing Action P-8.1.b of the *Merced Vision 2030 General Plan* states, **“Encourage the continued operations of the multi-cultural and performing arts program and facilities in the Downtown area of Merced.”** The City will work closely with civic groups and other public agencies in continuing to support arts programs in the Downtown area. The City will work closely with civic groups and other public agencies in continuing to support arts programs in the Downtown area.

Public Services and Facilities Policy P-8.2

*The City of Merced recognizes that local governments are faced with increasingly limited resources and while demand for community services is constantly increasing. New ways of providing cost effective public services must be explored if existing service levels are to be maintained. For these reasons, the **Public Services and Facilities Policy P-8.2** of the *Merced Vision 2030 General Plan* spotlights the need for the City to **“Promote Consolidation of Complementary or Support Services to Avoid Duplication of Programs.”***

Locate related public uses together in neighborhood centers.

Implementing Action P-8.2.a of the *Merced Vision 2030 General Plan* states, **“Senior centers, satellite libraries, adult education, recreation and/or other public facilities should be located in proximity to each other in each Village Core mixed-use area to allow for integrated activities to the maximum extent feasible.”**

Specific plans, site plans and other development plans for Village Core areas should be reviewed to ensure that adequate area is available for the development of these types of uses. Not every village will have these facilities. However, when they are provided, they should be located in core areas where they will serve the population most efficiently.

BCP Policy P-8.1: Encourage senior centers, satellite libraries, adult education, recreation and/or other public facilities to locate near each other in neighborhood centers.

Emphasize Downtown as the Central Location for Public and Government Facilities.

Implementing Action P-8.2.b of the *Merced Vision 2030 General Plan* states, “Continue to emphasize Downtown Merced as the central location for public and government facilities in the City (e.g., County and City government centers, civic center, post office, department of motor vehicles, federal and state offices, etc.)” These facilities should be located in close proximity to, or adequately served by, public transportation.

BCP Policy P-8.2: Allow public and government offices and service centers in the Mixed-Use TOD place-type to enhance and support a community-related use within UCM’s “Gateway” area.

Locate Child Care Centers close to High-Demand Sites.

Implementing Action P-8.2.c of the *Merced Vision 2030 General Plan* states, “Encourage development of child care centers in all areas, including non-residential areas. Locating child care facilities in areas with similar uses like schools and near employment centers will help reduce unnecessary vehicular trips and to facilitate parental involvement. The development of a Downtown child care center is of particular interest to the City.

BCP Policy P-8.3: Encourage child care centers to locate near schools and high-employment areas.


C.7.10 Telecommunications

Public Services and Facilities Policy P-9.1

Telecommunications infrastructure and services have been identified as important community resources, which are likely to be important to the continuing economic development of the community as basic infrastructure, such as sewer, water, and road systems. For these reasons, the Public Services and Facilities Policy P-9.1 of the Merced Vision 2030 General Plan spotlights the need to “develop city standards for telecommunications infrastructure and encourage its installation in all new development.”

Plans for Telecommunications Infrastructure

Implementing Action P-9.1.a of the *Merced Vision 2030 General Plan* states, **“The City will consider new development standards for the installation of telecommunications infrastructure so that new residential, commercial, and industrial development projects include the infrastructure components necessary to support modern communication technologies.”** The City would develop plans and standards for the installation of telecommunications infrastructure. Examples would include conduit space within joint utility trenches for future high speed data equipment and flexible telephone conduit to allow for easy retrofit for high speed data systems. To minimize street cutting and trenching for the City, consideration should be given to requiring installation of conduit when streets are initially constructed. This conduit can be empty, and available for any and all service providers to fill with cable; filled with 'dark' fiber that is owned by the City, and leased for use by service providers; or, filled with 'lighted' fiber that allow the City to operate its own telecommunications services. Merced should develop a telecommunications infrastructure that is not dependent on any single medium, but incorporates a variety of media such as wireless and fiber optics as appropriate. Encourage new residential development to provide for the maximum reasonable bandwidth connectivity to each unit.



C.8 Sustainable Development

C.8.1 General Plan Goal and Policy Guidance

GP Goal Area SD-1: Air Quality and Climate Change

- Address Regional Air Quality Planning
- Coordinate Land Use and Transportation Planning
- Consult with Transit Providers
- Site Transit and Pedestrian Facilities near Housing
- Minimize Impacts of Large-scale Transportation Projects
- Enhance Urban Forest to improve Air Quality
- Improve Public Understanding
- Support Formation of Air Quality Education Programs
- Deploy Employer Based Trip Reduction Programs
- Install State of the Art Communication Infrastructure
- Implement Climate Action Planning
- Implement Air Quality Policies
- Implement Greenhouse Gas Reduction Policies

GP Goal Area SD-2: Cultural Resources

- Follow Guidance of the City's General Plan

GP Goal Area SD-3: Energy Resources

- Use Solar Energy in New Construction
- Maximize Solar Orientation of Subdivided Lots
- Encourage use of Solar Energy Technologies
- Utilize Passive Solar Design
- Update Standards to Reduce Energy Consumption
- Voluntary Actions to use Energy Efficient Designs and Equipment
- Promote Enhanced Energy Conservation Standards
- Reduce Air Quality Impacts from Area Sources and Energy Consumption
- Encourage Construction of LEED-Certified Buildings

C.8.2 Air Quality and Climate Change

Sustainable Development Policy SD-1.2

Effective coordination and cooperation between local agencies in the implementation of government air quality programs is critical. Air quality problems transcend local agency boundaries and management of these problems requires various units of government to search for comprehensive solutions to the problem. Local governments working together for a common interest can multiply the resources available to accomplish air quality goals. For these reasons, the Sustainable Development Policy SD-1.2 of the Merced Vision 2030 General Plan spotlights the need to “Coordinate Local Air Quality Programs with Regional Programs and Those of Neighboring Jurisdictions.”

Address Regional Air Quality Planning

Implementing Action SD-1.2.a of the *Merced Vision 2030 General Plan* states, “**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:

- 1) Congestion on City streets from increased traffic caused by the project;
- 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,
- 4) Proposed circulation amendments that may restrict traffic flow to or from the City or that produce urban sprawl.

BCP Policy UD-2.3: Continue to work with UC Merced and Merced County on cross-jurisdictional, regional transportation and air quality issues, as described in *Merced Vision 2030 General Plan* policy SD-1.2.

In the future, a functional and interconnected network of regional roadways, transit service and community-wide bikeways will be essential to the formation of a quality living environment near and within the BCP. Lack of coordination between agencies with jurisdiction in the area will likely result in a suite of negative transportation, land use and air quality impacts.

Sustainable Development Policy SD-1.3

*In the past, transportation planning emphasized the construction of new roadway capacity to reduce congestion and to meet the needs of planned development. Air quality legislation now mandates all transportation plans to consider air quality. This new emphasis requires our land use and transportation plans to create patterns of development and transportation infrastructure that reduce the need for new capacity and improve air quality. For these reasons, the **Sustainable Development Policy SD-1.3** of the *Merced Vision 2030 General Plan* spotlights the need to “**Integrate Land Use, Transportation, and Air Quality planning for the Most Efficient Use of Public Resources and for a Healthier Environment.**”*

Coordinate Land Use and Transportation Planning

Implementing Action SD-1.3.a of the *Merced Vision 2030 General Plan* states, “**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.

Deploy Transportation Projects consistent with Air Quality Goals and Policies

Implementing Action SD-1.3.b of the *Merced Vision 2030 General Plan* states, “**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.

Consult with Transit Providers

Implementing Action SD-1.3.c of the *Merced Vision 2030 General Plan* states, **“The City of Merced will consult with transit providers to determine project impacts on long range transit plans and ensure that impacts are mitigated.”** Work with transit providers to develop long range transit plans based on land use plans supportive of future transit service. Consult with transit providers during the CEQA process to determine the impacts of development projects on the transit system.

Site Transit and Pedestrian Facilities near Housing

Implementing Action SD-1.3.d of the *Merced Vision 2030 General Plan* states, **“Encourage the construction of low income housing developments that use transit-oriented and pedestrian-oriented design principles.”** The Village Plan policies provide sufficient density to make public transit feasible. The City, in cooperation with other public agencies, may explore the use of special funding sources which could assist in financing necessary infrastructure which would enhance residential development and maintain affordability for low and moderate income households.

Minimize Impacts of Large-scale Transportation Projects

Implementing Action SD-1.3.e of the *Merced Vision 2030 General Plan* states, **“The City of Merced will work with Caltrans and MCAAG, 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.

Enhance Urban Forest to improve Air Quality

Implementing Action SD-1.3.f of the *Merced Vision 2030 General Plan* states, **“Provide for installation and maintenance of additional landscaping which helps maintain and improve air quality, by continuing to increase the extent of landscaped areas in the City using street trees, parking lot shading, median islands, and landscape buffers.”** The City has a strong history of requiring the planting of trees (i.e. street trees, parking lot trees) and landscaping on residential, commercial, and industrial projects and that tradition will continue.

Sustainable Development Policy SD-1.4

*Without the understanding and support of the general public, local air quality programs cannot be expected to achieve the desired results. Programs to educate the public on air quality issues are a vital component of a successful air quality program. For these reasons, the **Sustainable Development Policy SD-1.4** of the *Merced Vision 2030 General Plan* spotlights the need to “**Educate the Public on the Impact of Individual Transportation, Lifestyle, and Land Use Decisions on Air Quality.**”*

Improve Public Understanding

Implementing Action SD-1.4.a of the *Merced Vision 2030 General Plan* states, “**Work to improve the public's understanding of the land use, transportation, and air quality link.**” The City should support the SJVAPCD 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.

Support Formation of Air Quality Education Programs

Implementing Action SD-1.4.b of the *Merced Vision 2030 General Plan* states, “**Support SJVAPCD efforts to encourage formation of local groups that provide air quality education programs.**” The City supports the SJVAPCD efforts in forming a community-wide public/private air quality organization to promote air quality education programs. To this end, the City will work with the SJVAPCD, Farm Bureau, the University of California Extension Studies, farm organizations, and other community-based air quality groups on educational programs.

Sustainable Development Policy SD-1.5

*City and county governments are often the largest employers in a jurisdiction and operate large vehicle fleets. While it is recognized that the City of Merced has very limited resources with which it can play any meaningful role in supporting private sector energy conservation efforts, the City can pursue policies and programs which may have private sector applicability. In this respect, the City may take a leadership role in implementing employer-based trip reduction programs and fleet operator programs to reduce the City's emissions, demonstrate cost effective energy management techniques, and save public money. For these reasons, the **Sustainable Development Policy SD-1.5** of the *Merced Vision 2030 General Plan* spotlights the need to “**Provide Public Facilities and Operations that Can Serve as a Model for the Private Sector in Implementation of Air Quality Programs.**”*

Deploy Employer Based Trip Reduction Programs

Implementing Action SD-1.5.a of the *Merced Vision 2030 General Plan* states, “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.

BCP Policy UD-2.4: Through the permitting process, implement employer-based trip reduction programs for employees who work in the BCP plan area.

The BCP planning area includes sizable amounts of land for future employment-based land uses. The BCP is also planned to provide a broad range of functional mobility options including transit, bicycles, pedestrians and cars and trucks. Employer based vehicle trip-reduction programs compliments these features. Consistent with existing General Plan Sustainable Development Policy SD-1.2, the City should implement innovative employer-based trip reduction programs.

Install State of the Art Communication Infrastructure

Implementing Action SD-1.5.e of the *Merced Vision 2030 General Plan* states, “Encourage the development of state of the art communication infrastructure linked to the rest of the world.” Support changes to the State Building Code to encourage new homes and businesses to be wired with fiber-optic cables or to encourage wiring conduits with easy access and adequate capacity to allow for efficient retrofitting. Encourage the development of video-teleconferencing facilities and telecommuting centers. The City should study formation of public/private partnerships with major employers employing large numbers of long distance commuters. Telecommuting centers are generally compatible with mixed-use, pedestrian-oriented and transit-oriented neighborhood commercial areas.

Sustainable Development Policy SD-1.7

Through recent changes in State and Federal law, local governments like the City of Merced have begun to pay more attention to what can be done regarding Climate Change and Greenhouse Gas reduction on the local level. For these reasons, the Sustainable Development Policy SD-1.7 of the Merced Vision 2030 General Plan spotlights the need to “Develop and Implement a Climate Action Plan for the City.”

Implement Climate Action Planning

Implementing Action SD-1.7.a of the *Merced Vision 2030 General Plan* states, **“Complete the development and implementation of a Climate Action Plan for the City of Merced.”** In 2009, City staff began preparation of a Climate Action Plan for the City, which is expected to be completed by no later than September 2012. The Climate Action Plan will include an evaluation of existing City and community programs aimed at reducing greenhouse gas emissions; an evaluation of other City programs, that although established for other purposes, also have greenhouse gas reduction benefits; an evaluation of greenhouse gas emissions efforts of other Cities in the State; a discussion of the legal framework, including State and Federal laws; an evaluation of possible available funding sources; a baseline greenhouse gas emission inventory for the City; the selection of an Emissions Reduction Target; and finally, recommended goals, policies, and actions to reach the selected Emissions Reduction Target. The development of the Climate Action Plan will involve a citizens committee and extensive involvement of elected officials.

BCP Policy UD-2.5: Consistent with existing General Plan Sustainable Development Policy SD-1.7, the City should apply applicable greenhouse gas reduction actions to development and activities within the BCP.

The City’s October 2012 Climate Action Plan includes recommended actions that support a broad range of community values related to resource conservation, energy efficiency, use of renewable energy, building healthy communities and establishing leadership and partnerships.

Sustainable Development Policy SD-1.8

The City’s General Plan contains policies in various chapters that address air quality and greenhouse gas emissions reduction goals. For these reasons, the **Sustainable Development Policy SD-1.8** of the *Merced Vision 2030 General Plan* spotlights the need to **“Implement Policies in Other General Plan Chapters to Address Air Quality and Greenhouse Gas Emissions Reduction Goals.”**

Implement Air Quality Policies

Implementing Action SD-1.8.a of the *Merced Vision 2030 General Plan* states, **“Continue implementation of land use, transportation, urban expansion, urban design, open space, and public facilities General Plan policies that address air quality goals.”** State law now requires cities and counties in the San Joaquin Valley Air Basin to amend

their General Plans to include goals, policies, and implementing strategies to improve air quality. The San Joaquin Valley Air Pollution Control District has issued Air Quality Guidelines for General Plans (June 2005), which contains suggested goals and policies for General Plans. When the Merced Vision 2015 General Plan was adopted in 1997, many of the suggested air quality policies were included in the General Plan and are still included in this Vision 2030 General Plan. 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 air quality goals:

Sustainable Development-Air Quality Policies:

- Environmental assessment of development (Policies SD-1.1)
- Coordination with Air District (Policies SD-1.2 & SD-1.6)
- Measures to reduce energy consumption (Policies SD-3.1, SD-3.2, SD-3.3)
- Urban Expansion Policies:
- Establishment of urban limit lines (Policies UE-1.1, UE-1.2, & UE-1.3)
- Encouragement of Compact and In-fill Development (Policies U.E-1.2; Land Use L-2.8 & L-3.2: and Public Facilities P-1.2)

Land Use Policies:

- Encouragement of Mixed-use Development (Policies L-1.1, L-1.2, L-1.7, L-2.7)
- Increased residential densities (Policies L-1.2, L-1.7, 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 through UD-1.5)
- Pedestrian-oriented or pedestrian-friendly developments (Policies L-2.7, L-3.1, L-3.3; Transportation T-2.7 & T-2.8)
- Locating services near employment centers (Policies L-1.1, L-1.2, L-1.7, L-2.1, L-2.4, L-2.6, and L-2.9)

Transportation Policies:

- Dedicated transit corridors or "Transitways" (Policies T-2.1, T-2.2, T-2.3)
- An interconnected street system (Policies Land Use L-2.7 and L-3.3; Transportation T-1.2 and T-1.3)
- Trip reduction measures (Land Use L-2.9, 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 Transportation T-1.5, & T-3.5; Urban Expansion UE-1.1; and Land Use L-2.10)
- Congestion management programs (Policies T-2.9)

Implement Greenhouse Gas Reduction Policies

Implementing Action SD-1.8.b of the *Merced Vision 2030 General Plan* states, “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.” The City has begun preparation of a Climate Action Plan (SD-1.7) which will address goals, policies, and actions relating to reducing greenhouse gas emissions. In the interim, staff was referred to recommendations from the California Air Pollution Control Officers Association (CAPCOA), entitled “Model Policies for Greenhouse Gases in General Plans” (June 2009). When the Merced Vision 2015 General Plan was adopted in 1997, many of the suggested greenhouse gas policies from the document above were already included in the General Plan and are still included in this Merced Vision 2030 General Plan. 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 greenhouse gas emission reduction goals:

Urban Expansion Policies:

- Establishment of urban limit lines (Policies UE-1.1, UE-1.2, & UE-1.3)
- Encouragement of Compact and In-fill Development (Policies U.E-1.2; Land Use L-2.8 & L-3.2: and Public Facilities P-1.2)

Land Use Policies:

- Encouragement of Mixed-use Development (Policies L-1.1, L-1.2, L-1.7, L-2.7)
- Increased residential densities (Policies L-1.2, L-1.7, 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 through UD-1.5)
- Pedestrian-oriented or pedestrian-friendly developments (Policies L-2.7, L-3.1, L-3.3: Transportation T-2.7 & T-2.8)
- Locating services near employment centers (Policies L-1.1, L-1.2, L-1.7, L-2.1, L-2.4, L-2.6, and L-2.9)

Transportation Policies:

- Dedicated transit corridors or “Transitways” and emphasis on public transit (Policies T-2.1, T-2.2, T-2.3)
- An interconnected street system (Policies Land Use L-2.7 and L-3.3; Transportation T-1.2 and T-1.3)
- Trip reduction measures (Land Use L-2.9, 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)

Public Facilities Policies:

- Higher development fees based on distance from City center (Policies P-1.1 & P-1.3)
- Solid waste diversion targets (Policies P-6.1 & P-6.2)
- Hazardous materials management (Safety Policies S-7.1, S-7.2, & S-7.3)
- Water conservation (Policies Public Facilities P-3.1; and Open Space OS-5.1)
- Recycled water (Policies P-3.2, P-4.2)

Open Space Policies:

- Urban forest management & shade tree planting (Policies OS-1.4 and Transportation T-2.7)

C.8.3 Cultural Resources

Follow the guidance in the City’s General Plan

C.8.4 Energy Resources

Sustainable Development Policy SD-3.1

*Merced is located in an area that can benefit from the use of solar energy technology and other alternative energy resources to lower household heating and cooling costs. For these reasons, the **Sustainable Development Policy SD-3.1** of the *Merced Vision 2030 General Plan* spotlights the need to “**Promote the Use of Solar Energy Technology and Other Alternative Energy Resources.**”*

Solar Energy

Implementing Action SD-3.1.a of the *Merced Vision 2030 General Plan* states, **“Encourage the use of solar energy in design and management of all new construction in the City.”** The City should work with members of the building and utility industries in identifying public policies and regulations which inhibit the construction of energy efficient development. The City should prepare guidelines and standards which can be used by members of the construction industry in the design of new building and development projects.

Solar Orientation of Subdivided Lots

Implementing Action SD-3.1.b of the *Merced Vision 2030 General Plan* states, **“Require all new subdivisions to maximize, to the extent feasible, proper orientation of lots with regard to solar utilization.”** Proper solar orientation of lots often results in inefficient or poor circulation system designs. Good subdivision design attempts to maximize the benefits of lot orientation for solar access while maintaining the optimum circulation system design. The City planning staff may develop a library of subdivision design concepts that have proven effective in furthering energy conservation goals in other similarly situated communities and the City of Merced. This information should be made available to real estate developers and home builders.

Encourage use of Solar Energy Technologies

Implementing Action SD-3.1.c of the *Merced Vision 2030 General Plan* states, **“Encourage developers and builders to properly design all structures on each building lot in the City to take fullest advantage of solar use in heating and cooling.”** The City planning staff might develop a library of building design concepts that have proven effective in furthering building energy conservation goals in other similarly situated communities. This information should be made available to real estate developers and home builders.

Utilize Passive Solar Design

Implementing Action SD-3.1.d of the *Merced Vision 2030 General Plan* states, **“Encourage developers and builders to maximize “passive” solar design, such as large south-facing windows for winter heat gains and overhangs and shading for summer heat protection.”** The City should collect and make available to builders and homeowners design solutions to passive solar construction problems and support local the building industry’s efforts to comply with State regulations on energy conservation design standards.

Update Standards to Reduce Energy Consumption

Implementing Action SD-3.1.e of the *Merced Vision 2030 General Plan* states, “**Pursue further investigation of potential benefits utilizing building code revision, narrower streets, solar access rights, and other energy-saving techniques.**” The City should continue to monitor policy developments at the state level and in other San Joaquin Valley communities to determine the most efficient and effective design policies which might be applied to new development in the City. Where appropriate, staff should recommend changes in policies and standards where it can be demonstrated that such changes will appreciably reduce energy consumption.

Sustainable Development Policy SD-3.2

Natural gas burning appliances used for space heating, water heating, and cooking are a sizable source of NOx emissions. Consumption of electricity causes pollutant emissions when the power plant is fueled by fossil fuels. Local efforts to reduce energy consumption can save consumers money and improve air quality. For these reasons, the Sustainable Development Policy SD-3.2 of the Merced Vision 2030 General Plan spotlights the need to “Encourage the Use of Energy Conservation Features, Low-Emission Equipment, and Alternative Energy Sources for All New Residential and Commercial Development.”

Voluntary Actions to use Energy Efficient Designs and Equipment

Implementing Action SD-3.2.a of the *Merced Vision 2030 General Plan* states, “**Work with the local energy providers on voluntary incentive-based programs to encourage the use of energy efficient designs and equipment.**”

- Encourage the incorporation of energy conservation features in the design of all new construction and the installation of conservation devices in existing developments.
- Encourage energy audits of existing structures, identifying levels of existing energy use and potential conservation measures.
- Encourage the use of passive design concepts that make use of the natural climate to increase energy efficiency.
- Encourage new development not to preclude the use of solar energy systems by uses and buildings on adjacent properties.

- Incorporate the most energy-efficient design consistent with a reasonable rate of return and the recognition of the environmental benefits of energy conservation for all local government facilities and equipment.
- Perform an energy audit of existing public buildings and retrofit where cost-effective.

Develop an energy management system for public buildings.”

Promote Enhanced Energy Conservation Standards

Implementing Action SD-3.2. of the *Merced Vision 2030 General Plan* states, “**Cooperate with the local building industry, utilities and the SJVAPCD to promote enhanced energy conservation standards for new construction.**” Work with the California Energy Commission (CEC) and local utilities to identify areas of the existing state standards that can be enhanced most cost-effectively.

Reduce Air Quality Impacts from Area Sources and Energy Consumption

Implementing Action SD-3.2.c of the *Merced Vision 2030 General Plan* states, “**Encourage new residential, commercial, and industrial development to reduce air quality impacts from area sources and from energy consumption.**”

- Support the use of weatherization programs for existing residential units and businesses.
- Encourage the installation of supplemental solar water heaters for new residential units.
- Support future SJVAPCD incentives and regulations to reduce emissions from swimming pool heaters.
- Encourage the use of solar water and pool heaters, and energy efficient lighting.
- Encourage developers to orient housing units and landscape building sites to maximize solar heating and cooling.
- Encourage the installation of energy efficient fireplaces and wood stoves in lieu of normal open hearth fireplaces.
- Establish standards for the provision of natural gas lines or electrical outlets to backyards to encourage the use of natural gas or electric barbecues, and electric gardening equipment.
- Support the use of electric vehicles, such as golf carts, where appropriate. Provide electric recharge facilities for electric vehicles.

- Encourage the installation of natural gas hook-ups for washers and dryers in housing units”

Encourage Construction of LEED-Certified Buildings

Implementing Action SD-3.2.d of the *Merced Vision 2030 General Plan* states, “**Encourage builders to develop “green” and/or LEED-Certified (or other similar programs) buildings.**” The City should consider developing incentives to encourage builders (residential, commercial, and industrial) to develop “green” or LEED-certified buildings. The Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed by the U.S. Green Building Council (USGBC), provides a suite of standards for the environmentally sustainable design, construction and operation of buildings and neighborhoods.

BCP Policy UD-2.6: All new City facilities in the BCP plan area should be designed, equipped and operated to conserve energy at a higher level than current practice.

Led by the City’s Development Services Department, in coordination with the Public Works Department, and others as appropriate, a comprehensive action plan to implement this policy should be developed. As an initial step, the targeted level of energy conservation should be set by the City Council. The action plan would include all City facilities, including but not limited to buildings, external lighting, and pumps. The City should involve local industry representatives, other public agencies, local schools, colleges and universities, and the general public in the development of the action plan. Existing guidelines and codes related to energy use should be considered and updated to emphasize energy efficiency. This work could be funded and supported through grants and local partnerships.