



#### **MERCED COUNTY**

### University Community Plan

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#### INTRODUCTION

he University Community Plan (UCP) guides the development of lands, infrastructure, and services and the sustenance of agricultural and environmental resources to support the growth induced by the proposed development of the 10<sup>th</sup> campus of the University of California in the County of Merced. The Plan establishes policy to manage an increment of growth that is not forecast to occur without the University's presence. It defines the framework to structure and guide development in a comprehensive manner that will result in a cohesive and integrated community, in lieu of the disconnected housing tracts and commercial centers that often result from independent project approvals. In recognition of this inextricable relationship, the adoption of the UCP by the County Board of Supervisors on December 21, 2004, is directly related to the approval of the UC Merced Long Range Development Plan and plans for the first phase of campus development by the University of California Board of Regents.

The UCP defines comprehensive policies and programs for properties within the University Community planning area, designated by the General Plan as "Specific Urban Development Area," and addresses all issues and topics required by state Planning Law. At the same time, the UCP defines strategies that can be implemented by the County to address the appropriate relationship of the Community's development on lands, infrastructure, and services outside of the planning area and in the greater Merced area (referred to as the "Area Plan" chapter of the UCP).

The UCP is an integral component of and fully consistent with the County of Merced General Plan. As such, it maintains the goals, objectives, and policies contained in the adopted General Plan and supplements these with detailed policies and programs that uniquely pertain to the development of the University Community.

#### STATUTORY REQUIREMENTS

he Draft UCP has been prepared in accordance with the requirements of the California Government Code Section 65300 et seq. The State of California General Plan Guidelines, published by the Governor's Office of Planning and Research (OPR), state that:

Area and community plans are part of the general plan. 'Area plan' and 'community plan' are terms for plans that focus on a particular region or community within the overall general plan area. An area or community plan is adopted as an amendment to the general plan in the manner set forth in §65350 et seq. It refines the policies of the general plan as they apply to a smaller geographic area and is implemented by ordinances and other discretionary actions, such as zoning. An area or community plan must be internally consistent with the general plan of which it is part...Each area or community plan need not address all of the issues required by \$65302 when the overall general plan satisfies these requirements...while an area or community plan may provide greater detail to policies within its boundaries...

#### ROLE AND PURPOSE OF THE COMMUNITY PLAN

n conformance with the State of California General Plan Guidelines, the role and purpose of the University Community Plan is to provide more definitive guidance than the County General Plan for how lands are developed and natural resources conserved in anticipation of the population, employment, and supporting uses induced by the proposed development of the University of California Merced. The Plan incorporates policies that reflect and respond to the unique issues and conditions, and opportunities associated with the integration of the community and campus, as well as the specific characteristics of the University Community site and its environs.

The UCP defines a long-term strategy in recognition of the anticipated rate and timing of campus development, extending 40 years or more. This is considerably longer than the 20-year time frame normally addressed by municipalities in comprehensive General Plans. History teaches that over such an extended time frame considerable economic and social changes will occur that preclude the ability to precisely forecast the uses and building product that will be economically supported in the University Community. To this end, the UCP has been written to enable it to adapt to changing conditions, while maintaining the essential objectives and principles of development and environmental conservation. The UCP is structured as a "framework" document that defines overarching planning objectives,

principles, and policies, while actual development will be defined by and guided by detailed Specific Plans to be subsequently prepared in accordance with Section 65450 et seq. of the Government Code and adopted by the Board of Supervisors. Development entitlements and commitments for infrastructure and services shall be made at the time of the approval of these plans and are not conveyed by the UCP.

The UCP has been developed in consideration of and complements the adopted UC Merced 2001 Long Range Development Plan (LRDP). Cumulatively, these Plans provide a coordinated approach for the interface of land uses, circulation, and infrastructure, as well as common strategies for the management of the area's significant natural resources.

While the UCP centers on development, infrastructure, and resource management within the designated planning area, the Area Plan chapter defines policies to address several unique issues in areas abutting the Community Plan area that are anticipated to result from the community's and campus' development. In particular, these address the relationship of the University Community to the City of Merced, impacts on adjoining agricultural and open space lands, and enhancement of Lake Yosemite Regional Park.

#### USE OF THE UCP FOR FUTURE DEVELOPMENT

he UCP consists of a land use diagram, development capacity table, and policies that are designed to guide future development and resource conservation within the University Community Planning Area. The site is assigned a "Multiple Use Urban Development" land use designation, which will accommodate a diversity of uses including housing, retail commercial, office, industrial/research, schools, parks, open spaces, and complementary uses. The Plan provides for an efficient pattern of urban uses and infrastructure that achieves a critical mass of development enhancing the Community's vitality and livability and, at the same time, protects the site's natural resources and agriculture.

The "Multiple Use Urban Development" designation does not convey entitlements for development of urban uses for any property within the Community. Urban land uses and their precise layout will be entitled through the subsequent preparation and adoption of Specific Plans for Community sub-areas defined by the UCP to be approved by the County Board of Supervisors, with public input.

The University Community is divided into planning sub-areas that correspond with a system of cohesive and complete mixed-use districts and residential neighborhoods. Generalized boundaries of a Town Center and four Residential Villages are designated. For each generalized planning sub-area, the UCP specifies the mix and maximum amount of land uses that may be accommodated and entitled through the Specific Plan process. The precise planning area boundaries, development mix and density, and number of Residential Villages may be modified to reflect site characteristics and market conditions at the time of the Specific Plan's preparation provided that the cumulative development permitted in the Community is not exceeded and the overall principles for land uses organization are achieved, in accordance with policies defined in the Land Use section of this Plan.

The UCP also contains schematic diagrams that illustrate intended principles for land use organization and relationships and one of several possible scenarios for how land uses may be distributed if the entirety of the planning area were to be developed consistent with these principles and development and design policies. These visually convey overarching principles for the intersection and sharing of uses at the core of the Community and campus, concentration of uses and densities at key activity centers, intermixing of uses and densities within centers and neighborhoods, use of open space and parklands as determinants of urban form, interconnection of neighborhoods and centers, and transitioning of use and densities at the Community's edges. Final development plans may look different, but shall maintain the fundamental principles that are stipulated by this Plan.

#### RELATIONSHIP TO OTHER DOCUMENTS

s indicated, the UCP shall be incorporated within the County of Merced General Plan. As such, all of the goals, objectives, policies, and programs contained in that document that are relevant to the Community shall be applied.

There are a number of other important policy and analytical documents that are integral to and support the UCP and AP. These include:

1. University Community Plan Technical Background Report (TBR). This document presents data and research pertaining to the site's existing conditions, trends/projections, and issues. It is published as a separate document in recognition of the changing conditions and trends that will occur during the lifetime of the UCP. As a separate document, the

background data can be periodically updated to reflect changing physical, economic, and socio-demographic conditions without necessitating formal amendments of the UCP that require approval by the Board of Supervisors. This separation is encouraged by OPR's General Plan Guidelines. The TBR also serves as a reference document for the "Existing Setting" section of the UCP Environmental Impact Report (EIR). It is available at the UC Development Office (address and telephone previously cited), County of Merced Planning Department, and local libraries.

2. University Community Plan Environmental Impact Report. A Final Environmental Impact Report (FEIR) has been prepared for the UCP in accordance with the procedural and substantive requirements of the California Environmental Quality Act (CEQA) and is available for public review. It defines the existing environmental setting, impacts attributable to the implementation of the UCP, mitigation measures, adverse impacts that cannot be effectively mitigated, alternatives to the proposed project and their impacts, and the preferred environmental alternative. Additionally, public comments received on the Draft EIR and responses to these are incorporated into the document.

Other documents of relevance to the University Community include the:

- University of California Merced 2001 Long Range Development Plan
- 2. University of California Merced 2001 Long Range Development Plan Environmental Impact Report (EIR)
- 3. Campus Parkway Environmental Impact Report/ Environmental Impact Statement (EIR/EIS)—in progress
- 4. Merced Water Supply Plan

#### OVERVIEW OF THE PLANNING PROCESS

n 1988, the Regents of the University of California (UC) projected the need for three new campuses to accommodate growth in the early twenty-first century. It was concluded that the first of these three campuses would be located in the "Central Region" of California, where no UC campus currently exists. From a list of 85 potential sites, a site in eastern Merced County was selected, after analyses of economic, environmental, and social characteristics of each site were conducted. The site was located north and east of Lake Yosemite, outside of the City of Merced. In May 1995, the Lake Yosemite site was approved by the UC Regents

for development of "UC San Joaquin," the tenth UC campus. In October 1996, the Merced County Board of Supervisors amended the County General Plan to acknowledge the site for the future campus and to identify a *Specific Urban Development Plan* (SUDP) boundary for the University Community as the planning area for development adjacent to the campus. The lands within this boundary are designated "University Community Urban Reserve." In December 1997, the campus was designated as the University of California, Merced.

In April 1997, the City of Merced completed a comprehensive update of its General Plan, including the University Community SUDP within its Sphere of Influence. The City agreed to cooperate with Merced County in planning the University Community. The Merced County Board of Supervisors approved a *Guidance Package for University Community Planning* in February 1998 to clarify the roles and relationships of various planning participants and to outline steps for planning the University Community. The first step, a Concept Planning phase aimed at providing an overall vision and framework for planning the University Community, resulted in publication of the *University Community Concept Report*, published in May 1999.

Throughout the campus site selection and the UCP process, the County and the University have undertaken various studies to evaluate the environmental impacts, economic costs and benefits and other planning considerations associated with the development of a new university and its surrounding community. The County and University have prepared extensive wetland delineations and endangered species surveys as part of planning and in anticipation of the federal permitting process, and, through this ongoing process, the County has come to recognize the necessity of considering the University Community in a regional context, rather than focusing solely on the Lake Yosemite site selected in 1995. In the year 2000, it was determined that the area to the southwest of the original site was a more appropriate location for the UC Merced campus and University Community. A Draft Comprehensive Alternatives Analysis, published in March 2001, concurred with this assessment, and planning for the UC Merced Campus and University Community was initiated.

As a result of the *Comprehensive Alternatives Analysis*, the University and County jointly endorsed a shift of the location of the UC Merced campus to the southwest corner of the Virginia Smith Trust lands, on and around the Merced Hills Golf Course. Community development was shifted to lands to the south on properties owned by the Flying "M" Ranch and Hunt Farms. This area was established as the "University Community Planning Area" and subject to the formulation of this Community Plan.

Formulation of the UCP involved the following general tasks:

- 1. Identification of the Planning Area's resources, conditions, and characteristics. Information was developed for land use (agriculture), ownership, plant and animal habitats, soils and geology, drainage/flooding, viewshed, topography, quality, circulation and utility infrastructure, public services, and noise are addressed. Comprehensive evaluation and documentation of the site's wetlands and biological resources were completed through scientific field surveys conducted in accordance with agency-approved protocols. Pertinent constraints and opportunities affecting the planning of the site were identified. This information is compiled in the University Community Plan Technical Background Report.
- Derivation of a vision and principles for the planning of the University Community in consideration of the previously developed Concept Report and public input (see below).
- 3. Formulation of alternative land use concepts for which infrastructure (water, wastewater, and storm drainage) and circulation improvements were identified and costs estimated. These were evaluated for their financial feasibility and environmental impacts (integrated with the *Comprehensive Alternatives Analysis*). Based on the review of the options, a preferred concept was selected.
- 4. Definition of **policy options** for each UCP topic. These were presented for public review (in the form of Policy Discussion Papers) and preferred policies selected based on the input received.
- Publication of the Draft UCP and associated Draft EIR and conduct of public hearings by the Merced County Planning Commission and Board of Supervisors.
- 6. Publication of the revised UCP incorporating recommended changes based on input received from the public and deliberations of the Planning Commission and Board of Supervisors.

Throughout the planning process, extensive meetings were conducted with UC Merced and its team of planners, designers, engineers, and environmental consultants to ensure consistency among the UCP, campus LRDP, Environmental Impact Reports, and other planning and environmental documents. Affected County departments and agencies, the City of Merced, Merced Irrigation District, Merced County Association of Governments, Merced School District, California Department of Fish and Game, Governor's Office of Planning and Research, the United States Army Corps of Engineers, Environmental Protection Agency, and Fish and Wildlife Service, other state and federal agencies are representative of the numerous entities consulted and involved at various stages of the planning process.

#### COMMUNITY PARTICIPATION IN THE UCP PREPARATION

n extensive program of public involvement contributed to the preparation of the University Community Plan. Three overarching purposes guided the public process: (a) education about the intent, process, and substance of the planning program; (b) opportunity to provide input to the Plan's policies; and (c) consensus-building for the Plan's recommendations.

The public involvement program spun off of the processes initiated during the formulation of the *University Community Concept Report*, which involved four community workshops, or "Planning Fairs," publication of three newsletters, an interactive Website. Components of the UCP public involvement program included:

1. Maintenance of an interactive **Website** on which information about the planning program was posted and opportunities provided for questions and input. Each of the draft policy discussion papers was posted to enable the public to review and/or download the information. There were over 16,000 "hits" on the site prior to the publication of the Draft UCP and an additional 7,000 "hits" during the Concept Planning Process.



Introduction

2. Conduct of regular meetings of a committee of individuals representing a broad cross section of local interests appointed by the County of Merced. The twenty-six-member Community Plan Advisory Committee (CPAC) was composed of representatives from the property owners (Virginia Smith and Cyril Smith Trusts, the Hunt family, and John Myers), interest groups (Sierra Club, Building Industry Association, Farm Bureau, etc.), the County Board of Supervisors, City of Merced, Merced Irrigation District, and UC Merced. All CPAC meetings were open to the public and interested parties were encouraged to provide input at each meeting. During the planning process, 28 CPAC meetings were conducted.



3. Conduct of four community workshops, "Planning Fairs," providing the opportunity for a broad representation of the public to provide input. The first introduced participants to the planning process and provided opportunities to confirm basic visions, planning principles, and land use and open space concepts developed during the Concept Planning Process. It was conducted during June 2000 at five locations to broaden interest and participation including the City of Merced, Delhi, Los Banos, Madera, and Modesto. The second, conducted on March 24, 2001, presented information and addressed issues regarding the relocation of the community site south of the Merced Hills Golf Course and group discussion sessions in which participants provided input for a number of key policy areas including preliminary concepts for the development of the new site. On June 9, 2001, the third Planning Fair presented the recommended University Community land use, transportation, and phasing concept and small group sessions assessing concurrence with land use, agricultural preservation, economic development, circulation, and infrastructure policies. Opportunities were also provided for the participants' input for the planning of the UC Merced campus. The fourth Planning Fair, conducted on August 18, 2001,

provided opportunities for the public to learn about the Draft UCP and AP policy recommendations and findings of the EIR.





- 4. Conduct of public hearings by the Planning Commission and Board of Supervisors on the Draft UCP and Draft UCP EIR (September 12, 13, and 19; October 30; and November 6 and 20, 2001). At the conclusion of these public hearings, the Board of Supervisors provided initial policy direction to staff concerning development phasing in the University Community, mitigation for the loss of agricultural resources, infrastructure, and schools.
- 5. Conduct of study sessions and public hearings by the Planning Commission on the Proposed Revisions to the Draft University Community Plan and Supplemental Environmental Impact Report (SEIR) on October 27, November 10, and December 1, 2004. Final recommendations to the Board of Supervisors were made at the December 1 meeting.
- 6. Conduct of study sessions and public hearings by the Planning Commission on the Proposed Revisions to the Draft University Community Plan and Supplemental Environmental Impact Report (SEIR) and Planning Commission recommendations on December 7, 14, and 21, 2004. The final UCP was approved and SEIR certified by the Board at the December 21 meeting.

# ntroduction

#### SITE LOCATION

he University Community planning area is located northeast of the City of Merced in an unincorporated area of Merced County, in California's Central Valley (See Figure 1). The City of Merced is the Merced County seat of government, as well as a major regional commercial and service center. The City of Merced and Merced County are also important agricultural centers for the state of California.

The University Community planning area is located near the intersection of several state highways, including Highway 59, Highway 99, and Highway 140. Merced is a primary access point to Yosemite National Park, located approximately 80 miles southeast of the University Community planning area. The western slopes of the Sierra Nevada visually frame the eastern edge of the University Community planning area.

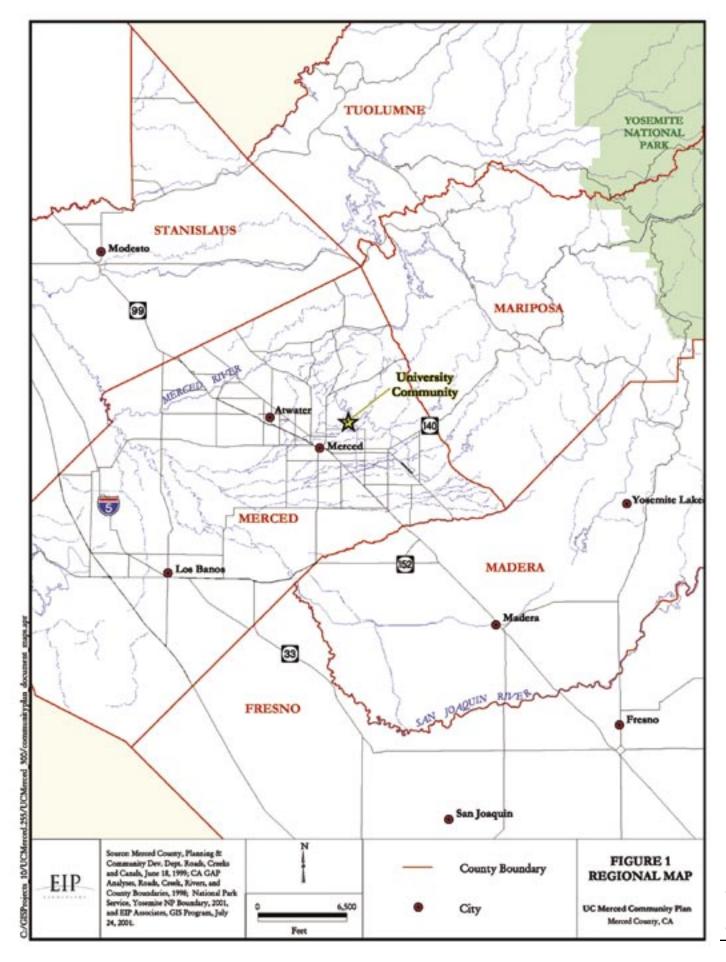
The University Community planning area consists of approximately 2,133 acres of land bounded generally by Lake Road on the west, an extension of Bellevue Road to the north, Yosemite Avenue on the south, and by the Fairfield and Le Grand Canals to the east. The University Community planning area also includes approximately 50 acres north of the Bellevue Road boundary in the Merced Hills Golf Course and approximately 60 acres east of the Le Grand Canal in the northeast corner of the site (see Figure 2).

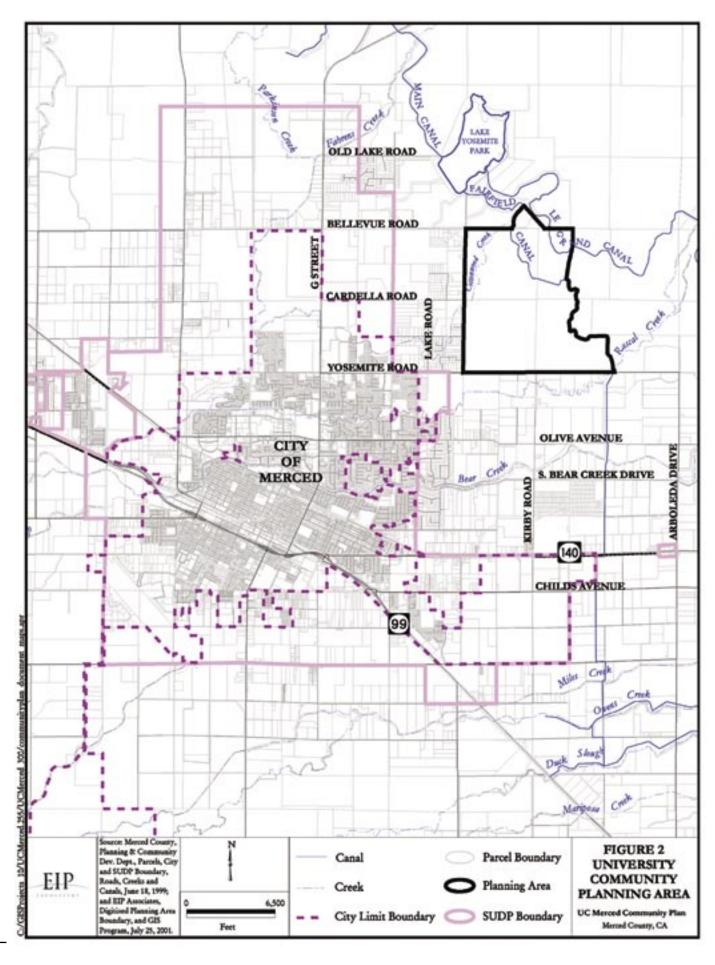
The site is used primarily for agricultural purposes, except for the northernmost portion, which is within the existing Merced Hills Golf Course. The northern portion is generally used for grazing pastureland, while the southern part of the site is cultivated cropland. Topography on the University Community planning area ranges from gently rolling to the north and northeast to relatively flat toward the south.



Access to the University Community planning area from the west is provided by Yosemite Avenue and Bellevue Road, both two-lane roads. Lake Road, which is adjacent to the western edge of the area, also provides access to Lake Yosemite.







# UNIVERSITY COMMUNITY DEVELOPMENT NEEDS FORECASTS

he anticipated development of the University Community at build-out is correlated with the planned enrollment and staffing of UC Merced and is indicated in Table 1 below. As shown, the University Community will occupy approximately 2,133 acres of land and contain 11,616 residential units, 716,000 square feet of retail, 1.3 million square feet of office/research and development space, and seven public schools.

TABLE I UNIVERSITY COMMUNITY AT BUILDOUT			
Category	Buildout Amount		
UC Merced Campus Generated Population			
Students	25,000		
Faculty	1,420		
Staff	4,828		
Direct Campus Population 31,248			
University Community Residential Development			
Single-Family	6,968 Units		
Multi-Family	4,648 Units		
Total II,616 Units			
University Community Commercial Development			
Retail	716,000 Square Feet		
Office/Research and Development (R&D)	1,307,000 Square Feet		
Total 2,023,000 Square Fee			
Public Schools (Estimated) 7			
Total Acres 2,133			

The amount and type of land use planned for the University Community is based on an analysis of the socio-economic impact of the UC Merced campus. Specifically, UC Merced through its population of students, faculty, staff, and their families, as well as their expenditures and the expenditures of the University itself, will create a demand for housing, retail, and other locally produced goods and services. The corresponding amount of residential, commercial, and industrial real estate demand generated by UC Merced has provided a point of reference for determining the development potential of the University Community.

The Community Plan assumes a 1:1 ratio between the off-campus population generated by UC Merced and the size of the surrounding community at build-out. Not all students or staff will choose to live in the University Community nor will all of the businesses that serve this population. Some may choose to locate in the nearby communities of Merced and Atwater, for example. At the same time, it can be reasonably expected that, as experienced at other UC campuses, persons who may be employed in Merced, Atwater, or other locations in the County will choose to live in the University Community due to its unique qualities, culture, and environment. Thus, for the purposes of the Community Plan, it is assumed that for every student or faculty member who chooses to live outside of the University Community another person that is not related to UC Merced will choose to live in the Community.

## VISION FOR THE UNIVERSITY COMMUNITY

he advent of UC Merced offers a rare opportunity to define a new community in Merced County. This opportunity is supported by a legacy of tried-and-true principles of urban planning and lessons learned from thirty years of an unprecedented pattern of growth. The successes and mistakes of past development populate the land, manifesting a variety of views, rules, economic conditions, and natural constraints. Upon this legacy is overlain a refined knowledge of the present relationship between humans, the natural environment, and economic realities. The choices, opportunities, and quality of life for future residents hinge upon the current ability to synthesize this vast knowledge and the clarity to define policies that balance the needs of society, the environment, and the economy. This Community Plan rises to that challenge with the explicit purpose of creating a vibrant community where multiple generations are supported by an urban setting whose fundamental characteristics are capable of sustaining a high quality of life, vital economy, and critical environmental resources. One might ask, "What is this University Community?"

#### CONTEXT

he University Community is a new community that results from, supports, and nurtures the development of the tenth campus of the University of California. While it represents a new group of users and cultures, it builds upon and sustains the rich history, qualities, and environments that distinguish Merced and the San Joaquin Valley. The Community enhances the vitality of the region's economy, supports the social well-being of its residents, and is environmentally sustainable.

The University Community and UC Merced are inextricably linked, breaking down the barriers that often separate town and gown. A common and connected framework of streets and blocks establishes a uniform urban form in which uses that serve both campus and Community are interspersed. The activity cores of the Community and campus adjoin and reinforce one another, enhancing and sustaining livability and vitality for Community residents and the campus population.



#### COMMUNITY

he University Community is a residential community that contains the full range of uses and services that cumulatively create "neighborhood." It supports and contributes to the wellbeing of populations who decide to live in proximity to the campus—students, faculty, staff, and others attracted by the intellectual, social, and cultural qualities of a university environment. It is a place where one can live, shop, work, socialize, be entertained, educated, and culturally enriched, recreate, enjoy and respect nature, engage in philosophical and religious pursuits, and experience a high quality of life. It is a community of choices, in recognition the resident population will be diverse in demographics, culture, education, income, needs, and life experiences.







The University Community complements the City of Merced and region. Its uses are additive to and enhance the mix and quality of existing business centers in downtown Merced, at Castle Airport, and other communities throughout the County.

The Community accommodates an increment of population and employment growth and provides new opportunities that would not have existed without UC Merced.

#### LIVABILITY

he University Community promotes the value of livability. It offers the opportunity for people to know and engage with their neighbors, where they live, shop, work, play, and are entertained. Its built environment contains places that promote activity and social interaction, where public plazas, sidewalks, and the street are the "public living room" for the community. A network of inter-connected pedestrian paths and bikeways facilitates accessibility among the Community's neighborhoods and districts. The Town Center and Residential Village Centers are places where people can walk, dine, shop, participate in events, and observe the casual comings and goings of other. The neighborhoods contain housing that faces the public space, the front yard, and the street, and, at the same time, offer opportunities for privacy. Each neighborhood centers on a school, park, multi-purpose facility, local services, and similar facilities that serve as the common center of identity and activity.









#### **ECONOMY**

he presence of UC Merced provides a unique opportunity to stimulate the development of **new industries** that capitalize upon its intellectual capital and research and expand Merced's economy. The University Community is the incubator for these new ventures and economic activity that diversify and improve the fiscal vitality of the region. These businesses produce new jobs for Merced's residents, which coupled with training to advance their skills, enhance the incomes and well-being of residents. A diverse population also broadens the mix of retail and offices that can be supported in the marketplace (food stores, restaurants, book stores, clothing, sporting goods, etc.), contributing new revenue to Merced.



#### **SOCIAL WELL-BEING**

he University Community provides a diverse range of education, cultural, recreation, health, safety, and other services that, coupled with the job opportunities and livable neighborhoods, contribute to a high level of social well-being for its residents. Schools are located next to parks, which, together, serve as centers for each Residential Village. Libraries, performing arts venues, art galleries, and other cultural facilities are

located in the Town Center. A continuous network of parks and open spaces gives form to the Community and provides a diversity of recreational opportunities for all ages. Health, social, youth, seniors, and other programs are developed in response to Community resident needs. The provision and maintenance of housing that is affordable for all residents in the long term heightens the quality of life for Community residents.

#### INNOVATION

he University Community nurtures the innovation and experimentation that are intrinsic to a university-related population. Opportunities are provided for the research, testing, and use of new building forms and construction techniques that make housing and other development more affordable and conserve energy, water, building materials, and other natural resources. The area's wetlands, vernal pools, and other natural habitats provide opportunities for education and research for methods to protect and restore scarce plant and animal species and habitat. Academic and private sector research stimulate the incubation of new industries and technologies, as well as the region's productive agricultural economy. New arts and cultural activities are available in the Community.

#### **MOBILITY**

he University Community fosters mobility and accessibility for its residents, businesses, and visitors. A diversity of transportation alternatives is provided, reducing the need for automobile use. The concentration of housing in proximity to the Town Center and Village Center (schools and parks), mixed use development that integrates housing with commercial uses, extensive streetscape improvements, shared parking facilities, and network of trails and paths promote pedestrian activity and make it enjoyable.



Transportation corridors are used for multiple transportation modes, integrating bicycle and public transit use with automobiles. The multi-modal transportation center in the Town Center provides convenient access to the campus and Community from surrounding areas and enables the Community and campus populations to access downtown Merced and other regional centers.



#### **INFRASTRUCTURE**

he University Community is supported by an innovative and environmentally sustainable infrastructure system. All water-related elements are integrated into a single system—potable water, wastewater, and storm drainage. It extracts water from groundwater sources and rainwater collected on site, collects and treats wastewater, and disperses the recycled treated water for landscape irrigation, building cooling, and other purposes. The use of solar and wind generated energy are used to augment traditional sources. The Community is interconnected by wiring, fiber optics, and other new technologies that facilitate telecommunications and access to government, library, educational, health, entertainment, and other information, as well one another.



#### NATURAL RESOURCES

he University Community recognizes the importance of its environmental resources. It participates in regional programs to conserve wetlands, habitats, and agricultural uses. Natural resources on site are preserved in a continuous open space network that is linked to surrounding open spaces. Buildings are constructed using recycled materials and energy conserving fixtures and techniques. They are located to minimize heat gain and loss and provide shelter from prevailing winds.



#### NATURAL HAZARDS

evelopment in the University Community is located and designed to mitigate the potential impacts of noise, brush fire, earthquakes, flood, landslides, and other natural hazards. These are coupled with the implementation of police and fire emergency response programs to ensure the public safety.

#### ADJACENT COMMUNITIES AND USES

he University Community recognizes the values and qualities of adjacent land uses and places. It supports continued agricultural uses on properties to the east and south, expanded use and improvement of Lake Yosemite Regional Park, and a partnership with the City of Merced in assuring a linked transportation and infrastructure network and determining the long-term development opportunities for lands between the Community and City.

# Goals, Objectives, and Policies

#### GOALS, OBJECTIVES, AND POLICIES

oals, objectives, and policies are defined to guide development and resource conservation in the University Community in accordance with the University Community Vision. These expand upon Countywide policies defined in the County of Merced General Plan. Development in the University Community shall adhere to both Countywide and Community policies. Each University Community policy is correlated with a program that defines the manner in which the policy shall be implemented. Implementation Programs are referenced at the close of each policy indicated by (Imp \_\_\_) and described in a separate section of this Plan.





#### **Community Development**

#### LAND USE—CREATING A NEW COMMUNITY

#### **STATUTORY**

alifornia Government Code, Planning and Zoning Law, Section 65302 stipulates that the General Plan shall contain:

A land use element which designates the proposed general distribution and general location and extent of their uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall identify areas covered by the flood which are subject to flooding and shall be reviewed annually with respect to those areas.

This section of the UCP addresses state statutes pertaining to the development of lands in the University Community. Requirements pertaining to open space, agriculture, natural resources, recreation, scenic beauty, solid and liquid waste disposal, and flooding are addressed in other sections of this Plan.

#### CONTEXT

he fundamental objective of the UCP is to accommodate the development of uses that will be generated by and support the presence of the University of California Merced campus. From a simplistic perspective, the absence of urban development provides a "clean slate" on which the types and densities/intensities of use to be accommodated, their organization and distribution, and design and development characteristics can be defined. However, the presence of existing agricultural production activities, isolated wetlands and other natural resources, absence of on-site infrastructure and services, and adjacent existing and planned land uses must be considered in shaping the types, distribution, and character of uses to be accommodated.

#### **OVERVIEW OF LAND USE POLICIES**

he underlying theme for the Community is dictated by its origin as a support community to UC Merced. The new Community is induced by, capitalizes upon, and supports the successful development of the UC Campus. It will promote the vitality of the region's economy, support the social well-being of residents, and integrate environmental sustainability within its construction. The Community will accommodate a diversity of land uses that reflect this origin and purpose, complementing uses within the City of Merced and the region. The Community will nurture innovation and experimentation—elements intrinsic to a university-related population—by encouraging innovation in the creation of new building forms and construction techniques, innovation in the management of environmental resources, innovation in the conservation of scarce resources, innovation in stimulating economic development, and innovation in the culture and the arts.

Concentrated land uses will minimize impacts on natural environmental resources, agricultural uses, and the need for supporting infrastructure, simultaneously enhancing pedestrian activity and transit use. Establishing requirements for the orientation of buildings and public spaces will minimize climatic impacts and promote the use of sustainable energy systems.

The fundamental organizing principle of the University Community is the establishment of a high density mixed-use Town Center abutted by and integrated with a number of distinct Residential Villages. The Town Center will serve as the common meeting ground and activity center for the University and Community residents. The Residential Villages integrate the diversity of housing, schools, parks, services, and amenities that sustain a residential population. These are interconnected through a continuous system of greenbelts, parklands, and mobility corridors.

The concentration and intermixing of uses within the Town Center will promote pedestrian and transit use and establish it as the heart of the community. Structures that incorporate housing with ground level retail, office, and similar uses will be integrated with independent commercial and housing into a cohesive urban pattern that stimulates pedestrian activity. Opportunities for social interaction and activity will result from the development of public gathering places throughout the Community, both in the Town Center and Neighborhood Centers

within the Residential Villages. The Plan's policies stress the design of public plazas and the streets to create an outdoor "living room" for community activity.

The Community will be a livable place that offers opportunities for a diverse population of faculty, students, staff, and others attracted to the unique environment, culture, and intellectual quality of a university campus. Policies that define the neighborhoods will promote interaction among neighbors and provide a variety of housing types, convenient businesses for goods and services, job opportunities, schools, parks, and open spaces—all contributing to the making of complete neighborhoods. At the same time, it will offer opportunities for individual and family privacy and reflection—in its neighborhoods and by the enjoyment of nature preserved within the Community area.

Residential Villages will integrate parks, schools, services, and compatible uses, achieving a high level of livability and quality. Single- and multi-family residential units will be distributed among the villages to maintain an adequate density, and offer a variety of housing alternatives.

#### **GOALS, OBJECTIVES, AND POLICIES**

and use goals, objectives, and policies are organized according to a number of fundamental values about the University Community's diversity of uses; development phasing; physical form; component districts and neighborhoods; architecture, landscape, and streetscapes; and maintenance of natural resources.

#### A COMMUNITY OF DIVERSE USES



A new community that contains the mix of uses that supports the successful development of the University of California Merced, promotes the vitality of the region's economy, and provides for the needs and social well being of its residents.

#### Objective

#### LU 1.0

To develop the diversity of land uses that support UC Merced and its induced population and businesses.

#### **Policies**

#### **LU 1.1**

Accommodate a mix of land uses to support the UC Merced campus and its induced population growth that are economically feasible and supported by the marketplace, designated as "Multiple Use Urban Development (MUUD)" (as shown on Figure 3). These may include housing, retail, offices, industrial, visitor-serving accommodations, entertainment, cultural, recreational, public/civic, institutional, education, and related uses. In particular, emphasize the attraction of businesses that uniquely capitalize upon the presence of the University, its education, innovation, and culture, which would not have otherwise been supported by the marketplace. (Imp 1.4, 2.5, 2.7, 5.11)

#### LU 1.2

Accommodate the development of a mix of land uses that sustains and supports the daily needs of residents living in the University Community and contributes to the sense of complete neighborhoods offering a variety of housing types, supporting convenience goods and services, job opportunities, schools, parks, and open spaces. (Imp 1.4, 2.5, 2.7, 5.11)

#### LU 1.3

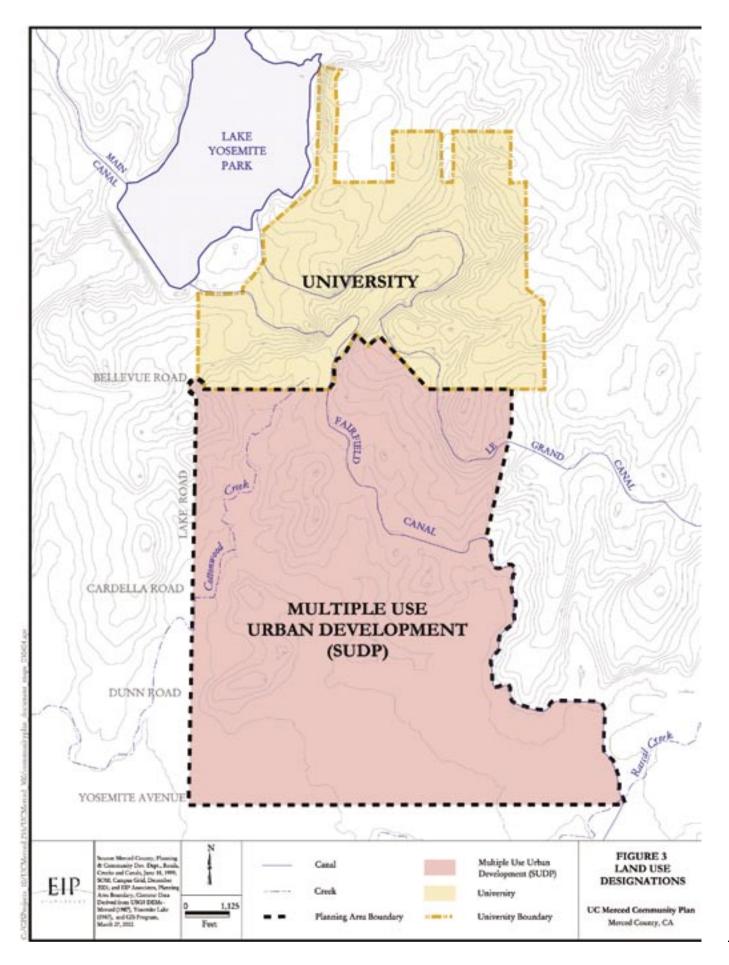
Accommodate land uses that complement and enhance the local and regional economic vitality and are coordinated with the City of Merced and other major business centers. Uses that serve the region and are not uniquely related to the campus environment and economy, such as "big box" retail, and whose development would adversely impact the City and other areas shall be discouraged. (*Imp 1.4, 2.5, 2.7, 5.11*)

#### **LU 1.4**

Allow flexibility in uses and densities that may be accommodated over time to reflect the evolving characteristics, needs, and objectives of the marketplace, provided that the overall objectives for the form, character, relationships, and design quality of the University Community are maintained. (Imp 2.5, 2.7, 2.9)

#### **LU 1.5**

Develop and implement open spaces as essential amenities that distinguish the University Community, provide recreational opportunities for residents, contribute economic value, serve as visual relief, and reflect the region's distinct character. (*Imp 2.4, 2.5, 2.7, 4.8*)



#### LU 1.6

Permit and encourage continued agricultural uses as interim uses as the University Community lands are progressively developed. (Imp 2.5, 2.7, 5.11)

## A COHESIVE AND INTEGRATED COMMUNITY COMPOSED OF DISTINCT NEIGHBORHOODS AND DISTRICTS THAT ARE INTEGRATED WITH UC MERCED

#### Goal

A community that is a unique, definable, and cohesive new place that reflects and capitalizes upon the special role and opportunities afforded by adjacency to the University campus, linked to and complements the County's and City's existing and planned land uses, and respects the area's natural resources.

#### Objective

#### LU 2.0

To create a land use pattern that respects the site's natural resources.

#### **Policies**

#### **LU 2.1**

Locate and design development to reflect the site's natural topography and formations (refer to Topography policies). (Imp 2.5, 2.7, 2.9)

#### **LU 2.2**

Locate and design development to capitalize upon viewsheds of UC Merced, Sierra, Lake Yosemite Regional Park, and adjoining urban and agricultural uses (refer to Viewshed policies). (Imp 2.5, 2.7, 2.9)

#### **LU 2.3**

Site and design land uses to reflect and incorporate the property's natural drainage courses, to the extent feasible in consideration of public safety and habitat preservation. (Imp 2.5, 2.7, 2.9)

#### Objective

#### **LU 3.0**

To create an integrated pattern of commercial and business districts and residential neighborhoods that is integrated with the UC Merced and promotes community livability and vitality.

#### Policies

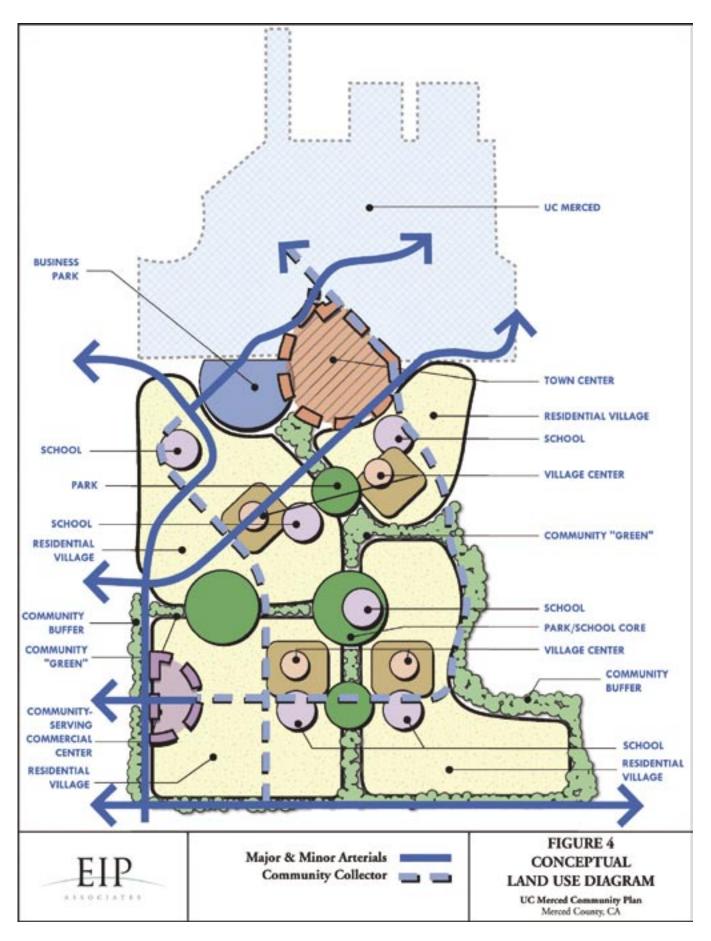
#### LU 3.1

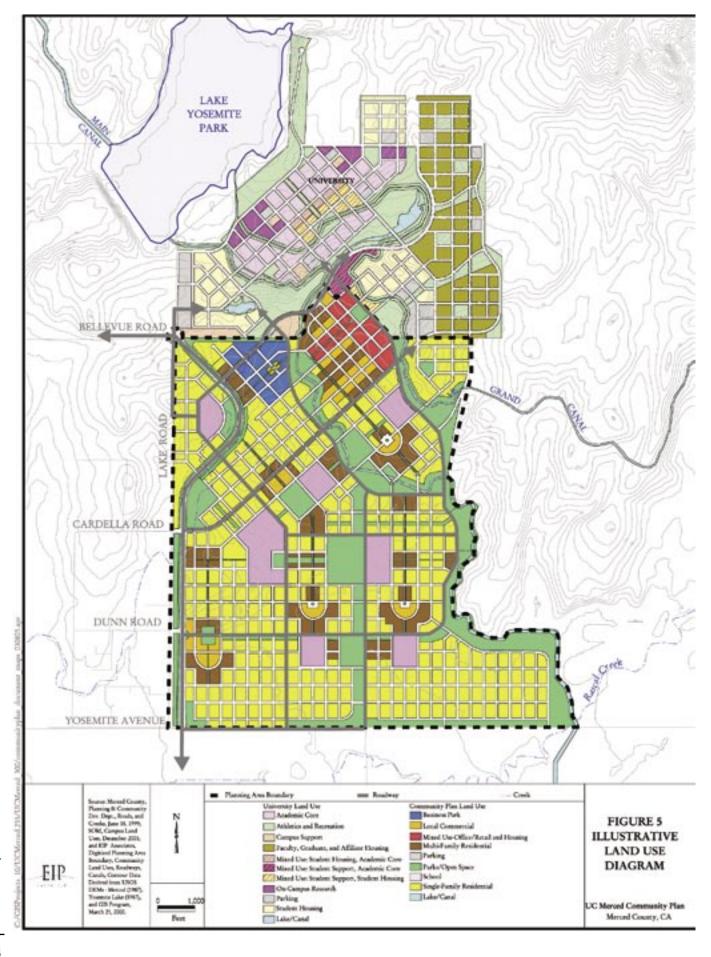
Concentrate land uses to minimize impacts on natural environmental resources and agricultural uses, and maximize the efficiency of supporting infrastructure, community/ pedestrian activity, and transit use. (Imp 2.5)

#### **LU 3.2**

Establish a land use pattern composed of distinct districts and neighborhoods differentiated by function, use, density, physical form and character, and design that are integrated into a cohesive, seamless, and definable community. Land use districts shall be organized around a core activity area that is directly linked and blends with the core activities of UC Merced and a continuous network of parklands, open spaces, and multi-modal transportation corridors (as conceptually illustrated in Figures 4 and 5). Distinct residential neighborhoods ("villages") shall be oriented around the University Community Town Center that serves as the primary focal point of Community identity and Communitycampus interaction. Each neighborhood/village shall contain a mix of housing units/densities that focus on a school, park, local retail, and other services. A business center shall be developed adjacent and relate to the Town Center and UC Merced campus. (Imp 2.5)

Note: Figure 5 is an illustrative depiction of how land uses may be distributed in the University Community Planning area that reflects the planning and design policies contained in this Plan. As such, it represents one of a possible number of scenarios that illustrates basic principles for land use organization, such as the relationship of schools to parklands and concentration of development around a community center. The ultimate mix of uses, intensity of development, urban form, and extent of the area to be developed may vary in accordance with this Plan's policies. It is not a commitment for the development of the entirety or any portion of the University Community planning area.





#### **LU 3.3**

Site and design land uses and buildings to maximize the Community's quality of life, including the establishment of pedestrian-oriented mixed use districts and residential neighborhoods that reflect the traditional qualities of Merced, while providing opportunities for innovative and creative forms of development. (*Imp* 2.5, 2.9)

#### **LU 3.4**

Locate the highest development densities within and adjacent to the Town Center and primary transit corridors and stations to support community activity and transit use. Encourage the development of housing that is suitable and affordable for UC Merced students, faculty, and staff in proximity and adjacent to the Town Center. (Imp 2.5)

#### **LU 3.5**

Integrate the Community's land use patterns, urban form, transportation and infrastructure corridors, and open spaces with those of the UC Merced campus, promoting a seamless interaction of community and campus activities. (Imp 2.4, 2.5, 3.3, 4.8)

#### **LU 3.6**

Locate and design land uses to promote efficiency of access, reduce costs, and enhance livability by the sharing of recreation, community and public facilities, institutions and cultural attractions, activity areas, and transportation infrastructure. (Imp 2.5)

#### **LU 3.7**

Allow for and encourage creativity in the siting and design of land uses that take advantage of the innovation that can be stimulated in a University environment and offer choices for the Community's population, provided that they complement overall development patterns and densities and achieve objectives for a cohesive and high quality community. (Imp 2.5, 2.9)

#### **LU 3.8**

Establish appropriate land use and open space transitions to reflect long-term development, agricultural, and conservation objectives for properties abutting the University Community. (Imp 2.5, 4.10)

#### A COHESIVE AND DISTINCT COMMUNITY THAT IS INTEGRATED WITH UC MERCED

#### Goal

A community that is developed in a manner that achieves the integration and cohesion among its distinct districts, neighborhoods, and UC Merced; is integrated with efficient infrastructure improvements; minimizes the loss of natural resources; and fosters continued agricultural activities.

#### Objective

#### **LU 4.0**

To establish a development program for the University Community that creates unified and cohesive patterns of urban use and development that capitalize upon the presence of UC Merced

#### **Policies**

#### LU 4.1

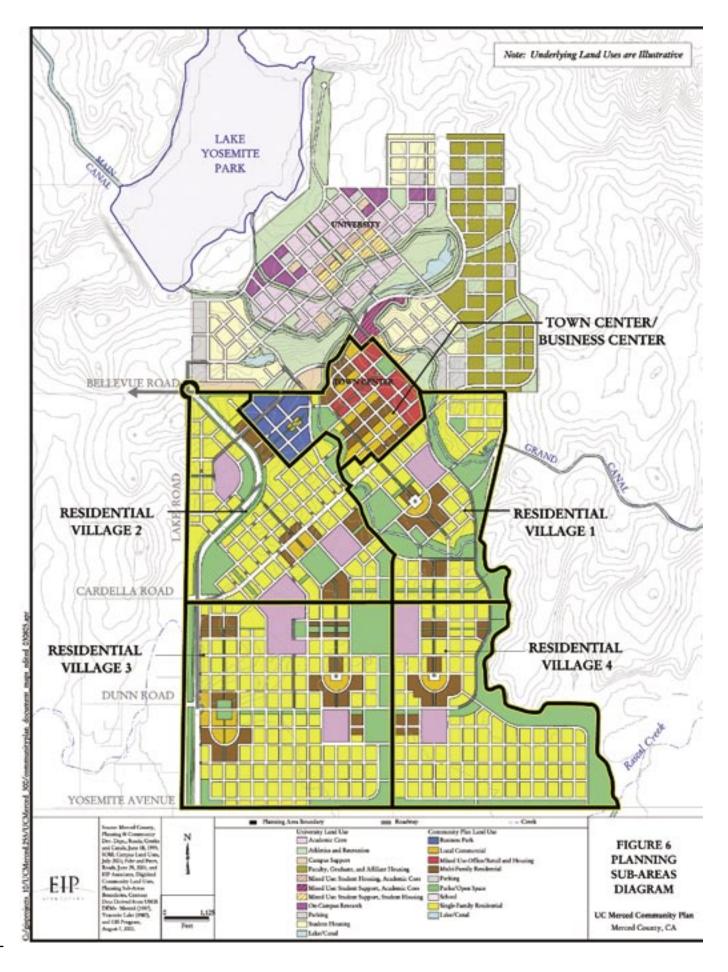
Adoption of the UCP shall be dependent upon the prior adoption of The Long Range Development Plan (LRDP) and approval of Phase I for UC Merced by the Regents of the University of California. (Imp 2.1, 2.2)

#### LU 4.2

Issuance of building and/or grading and excavation permits for development within the University Community shall be dependent upon prior issuance of applicable permits under the *Clean Water Act* and state and federal endangered species acts for resources impacted by that development in the University Community. (Imp 2.5)

#### **LU 4.3**

Development in the University Community shall be phased to create complete, cohesive, and integrated districts and neighborhoods. This shall be accomplished through the preparation and adoption of Specific Plans for each planning sub-area, as conceptually shown on Figure 6, which shall provide the opportunity for public review and comment. These boundaries and the number of Residential Villages may be modified to reflect site conditions and land use development market projections at the time of the preparation of the Specific Plan, provided that the UCP's underlying goals, objectives, and policies for urban form, development character, and community and neighborhood identity are achieved. (Imp



#### **LU 4.4**

The maximum amount of housing units and mixed use, retail, office, and research and development building square feet to be accommodated in the University Community shall not exceed the totals shown in Table 2 (right column). The acreage for parklands, open spaces, and schools are generalized estimates based on the Conceptual and Illustrative Land Use Diagrams (Figures 4 and 5) and may vary to reflect subsequent detailed site planning and actual school facility needs based on projected student generation from development. The latter shall be subject to negotiation between developers and jurisdictional School Districts. The development allocations among the Town Center and each Residential Village shown in Table 2 may vary to reflect the number of Villages to be developed or otherwise transferred among the five sub-areas provided that the cumulative amount of development in the Community is not exceeded, nor reduced to a level that jeopardizes the ability to fund Community infrastructure, public services, and environmental mitigation. The Specific Plans shall be found to be consistent with the UCP, in accordance with the requirements of the California Government Code (Section 65450 et seq.). (Imp 1.2, 2.1, 2.5)

#### **LU 4.5**

Specific Plans prepared for University Community sub-areas shall meet fundamental objectives for the establishment of a community that supports the development of UC Merced. To this end, the Specific Plans and their phasing program shall demonstrate that they:

- Are fully consistent with applicable policies of the Merced County General Plan and UCP
- Employ site planning, architectural and landscape design, and amenities that exhibit the quality and character that contributes to a distinct, cohesive, livable, sustainable, and quality place consistent with the UCP's objectives and design guidelines, which, in turn, serves as a model for development in the San Joaquin Valley
- Structure and organize land uses, building locations, and open spaces to establish a consistent and unified urban pattern and scale of mixed use districts, residential neighborhoods, and open spaces throughout the entirety of the University Community, which is consistent with and complements development on the UC Merced campus

- Support the economic vitality and success of the campus and student supporting uses in the mixed use Town Center and Research/Business Park
- Locate, design, and size transportation and utility infrastructure improvements to achieve an integrated and consistent community-wide system and services
- Adequately fund the development of supporting infrastructure and services that are related to their needs and do not impose an undue financial burden on other properties or uses within the University Community, other areas served by the University Community (as defined by the "Integrated Water Infrastructure" policies), or Merced County
- Provide for development in a manner that supports the conservation of productive agricultural and other open space lands consistent with the policies of the Merced County General Plan and the Local Agency Formation Commission (LAFCO)
- Provide for the phased and concurrent development of land uses, infrastructure, and public services that is orderly, results in cohesive, complete, and economically viable neighborhoods and districts, and is liked to and does not adversely impact the integrity of surrounding land uses, open spaces, and agricultural lands (Imp 1.2, 2.1, 2.5)

#### **LU 4.6**

Require that the distribution and location of land uses within each Community sub-area be defined by Specific Plans in accordance with the policies for land use mix and urban form defined in this element. Land use delineations depicted on Figure 4 may be modified provided that the principles for land use organization, inter-relationships, and densities are maintained. Specific Plans for areas abutting UC Merced shall incorporate land use and open space plans that reflect and are integrated with the pattern of uses developed and open spaces in abutting areas of UC Merced. (Imp 2.5)

#### **LU 4.7**

As part of the approval process for each Specific Plan, the County shall consider the timing of the proposed development in consideration of the extent and timing of campus development and campus growth projections in the current LRDP or LRDP EIR for UC Merced. (Imp 2.5)

TABLE 2 LAND USE CAPACITY						
Land Use	Town Center	Residential Village I	Residential Village 2	Residential Village 3	Residential Village 4	Total
Residential						
Single Family						
Acres	0	170	238	296	264	968
Units	0	1,225	1,714	2,134	1,895	6,968
Multi Family						
Acres	27	18	44	48	27	164
Units	648	430	1,050	1,146	648	3,922
Mixed Use						
Total Acres	20	0	0	0	0	20
Retail (sq. ft.)	305,000	0	0	0	0	305,000
Office (sq. ft.)	130,680	0	0	0	0	130,680
Housing Units	726	0	0	0	0	726
Retail						
Acres	5	3	2	12	3	25
Square Feet	61,000	50,000	50,000	200,000	50,000	411,000
Office						
Acres	16	2	2	7	2	29
Square Feet	593,320	20,000	20,000	120,000	20,000	776,320
Research & Develop	oment					
Acres	22	0	0	0	0	22
Square Feet	400,000	0	0	0	0	400,000
Schools						
Acres	0	10	20	50	30	110
Square Feet	0	I (K-5)	2 (K-5)	I (High) I (K–5)	I (6–8) I (K–5)	7
Parks & Open Space	e					
Acres	0	66	42	74	74	256
Total Development						<u> </u>
Acres	90	269	348	487	400	1,594
Streets						
Acres	30	91	118	164	136	539
Total						
Acres	120	360	466	651	536	2,133
		-			1	,

**Note**:The land use capacities may be transferred among planning subareas or otherwise varied to account for the number of Villages to be developed provided that the cumulative amount of residential, mixed use, retail, office, research and development uses within the University Community is not exceeded or reduced to impair financing of infrastructure, public services, and environmental litigation, and provided that such changes are consistent with other design and development policies contained in this Plan

#### **LU 4.8**

Extend infrastructure and related services and utilities to urbanizing areas within the University Community only following the adoption of an Infrastructure Master Plan and pursuant to its specification for such infrastructure and services. Such services and improvements shall be limited to the planned development area except where they are necessary to independently or jointly serve the University Community and UC Merced. (Imp 2.4, 3.3, 4.13)

#### **LU 4.9**

Establish an Urban Limit Line contiguous with the Community Plan boundary. This Urban Limit Line is intended to delineate the maximum extension of urban development and urban services. The Urban Limit Line may be modified by the Board of Supervisors through a revision of the UCP and subject to all applicable goals, objectives, and policies of the County General Plan. (Imp 2.1)

# A COMMUNITY OF VITAL AND LIVABLE PLACES

# THE TOWN CENTER IS THE HEART OF THE COMMUNITY

### **Objective**

#### **LU 5.0**

To develop the University Community Town Center as the symbolic and functional center of the University Community that is directly linked and shares uses with the University campus core and linked to surrounding Residential Villages.

#### **Policies**

#### **USES**

#### LU 5.1

Require that a mix of uses be developed in the University Community Town Center that reinforce its role as the primary business and shared activity center for the community and campus. Representative uses may include community and campus-serving retail commercial, personal services, financial institutions, offices, entertainment, hotels/motels, civic, cultural (library, museum, etc.), food service/grocery stores, housing, and similar uses that are supportable in the marketplace. (Imp 2.5)

#### LU 5.2

Encourage the development of buildings and sites that contain a mix of uses, including the vertical integration of housing with retail, office, civic, or other uses. (Imp 2.5)



#### LU 5.3

Integrate public uses (e.g., day and senior care facilities, community meeting rooms, recreation facilities, libraries, police and fire facilities, health facilities, and so on) with other uses in the Town Center. (Imp 2.5, 4.4–4.6, 4.8)



#### **LU 5.4**

Collaborate with UC Merced to identify and promote the development of uses in or immediately adjacent to the Town Center that support and can be jointly used by the campus and community (e.g., conference facility, performance arts center, sports stadium, and recreation fields). (Imp 2.5, 3.3)

#### **LU 5.5**

Promote the development of housing units for UC Merced students, faculty, and staff in the Town Center to facilitate access between the campus and community. (Imp 1.4, 2.5, 3.3)



#### **LU 5.6**

Encourage the development of senior housing within the Town Center. (*Imp 1.4, 2.5*)

#### LU 5.7

Develop a multi-modal transportation center that serves both the community and the campus at the earliest feasible date to lessen automobile dependence. Work with the UC in the siting and design of this facility to ensure its compatibility with adjoining uses and the transportation network and facilities. (Imp 2.5, 4.1, 6.1–6.4)



#### **DENSITY/INTENSITY**

#### **LU 5.8**

Develop the Town Center with the highest densities in the University Community to reinforce its role as the "heart" of the community and foster pedestrian and transit use, according to the following standards:

 Retail and office uses (free-standing)

Minimum floor area ratio (FAR) of 0.4 and maximum of 3.0 (one to six stories)

Mixed use (housing/retail or office) Minimum FAR of 1.5 and maximum 3.0, with a minimum FAR of 0.35 and maximum of 1.0 for retail or office components (three to six stories)

■ Residential An average range of 8 to 32

units per net acre (minimum height of two stories). Individual sites may be developed at lesser densities provided that the average density for the Town Center planning area is achieved.

#### LU 5.9

Increased densities and building heights may be permitted to reflect uses of special merit that further functional, economic, and design objectives for the Town Center, provided that they complement and are consistent with adjoining uses and the UC Merced campus. In no case shall densities below the defined minimums be permitted. (Imp 2.5, 2.9)

#### **DESIGN AND DEVELOPMENT**

### LU 5.10

Integrate the Town Center's land uses into a cohesive urban pattern that provides the sense of a complete and identifiable place. Establish an urban form that ties together individual parcels and uses into a cohesive whole, addressing the location and massing of buildings, architecture, landscape, connective pedestrian paths and walkways, streets and transit, use of key landmarks, and similar elements. (Imp 2.5, 2.9)



Mixed-Use Center—Grocery store, housing above ground floor commercial. Narrow street and wide sidewalks

#### LU 5.11

Allow three development typologies in the Town Center: (a) mixed use structures that integrate housing with ground level retail, office, cultural, or other use; (b) independent commercial, office, and other non-residential use; and (c) independent housing. Each development type shall be integrated into a cohesive urban pattern, in accordance with other policies in this section. To the extent practical, these development typologies shall be grouped, emphasizing the concentration of mixed structures along primary pedestrian streets as depicted by the Illustrative Town Center Diagram (Figure 7, 8, 9, 10 and 11). Their precise location shall be established by a Specific Plan to be adopted by the County. (Imp 2.5, 2.9)

#### LU 5.12

Work with UC Merced during the preparation of the Town Center Specific Plan to ensure the blending and continuity of uses, the street grid, and open spaces along the Town Center and campus core boundary. (Imp 2.4, 2.5, 3.3)

#### LU 5.13

Design sites and buildings that are constructed in the early phases of the Town Center's development to facilitate intensification and/or adaptive re-use to achieve the intended long-term scale and intensity of building and activity. For example, parking lots may be developed as interim uses that may be replaced by higher density buildings coupled with the development of shared use parking structures. (*Imp 2.5, 2.6*)

#### LU 5.14

Require that buildings be located to front onto public sidewalks and plazas forming a semi-continuous "building wall" (with parking located to the rear or in structures with ground level retail uses), that the ground floor of

buildings be restricted to uses that have a high level of customer activity, and that buildings be designed to open onto the sidewalk/plaza and provoke visual interest (e.g., visual transparency, façade modulation/fenestration, etc.). (Imp 2.5, 2.9)



Building "wall" along sidewalk, transparent facades, pedestrianoriented signage, streetscape amenities

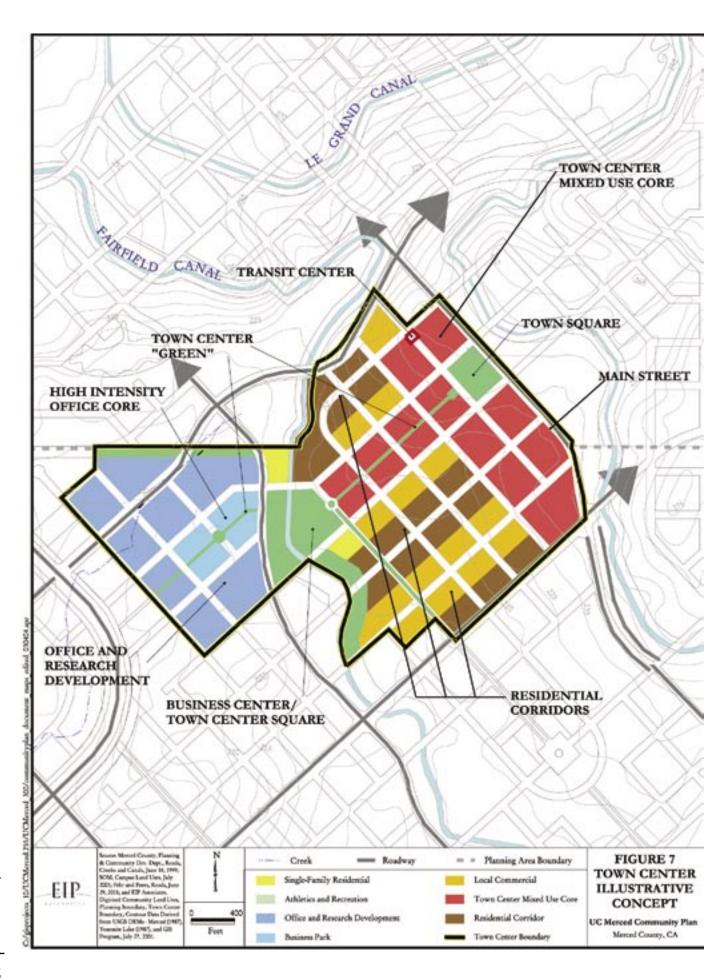
#### LU 5.15

Incorporate a major public plaza/town square to serve as the centerpiece of community activity that shall be designed to accommodate events, celebrations, outdoor performances, community meetings, and similar functions. (Imp 2.5, 2.7, 2.9)



LU 5.16

Develop and design public streetscapes to enhance pedestrian activity including the integration of landscape, street furniture, signage, lighting, public art, distinctive paving materials, and other amenities. Local and/or campus artists should be involved in the design of streetscapes, in lieu of the exclusive use of traditional "catalogue" elements, to impart a distinctive character and enhance ownership by the community. (*Imp 2.5, 2.9, 3.5*)





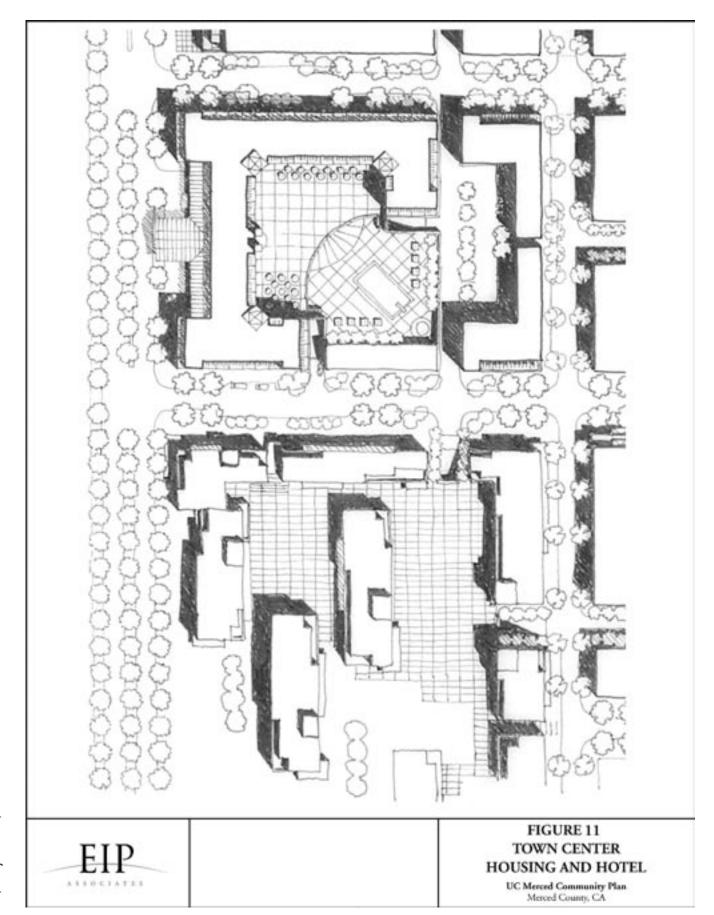


# FIGURE 8 ILLUSTRATIVE BUILDING MASSING & URBAN DESIGN

UC Merced Community Plan Merced County, CA



Goals, Objectives, and Policies





Indoor/outdoor uses, streetscape amenities, wide sidewalks, narrow streets

#### LU 5.17

Accommodate plazas, small parks, and open spaces that provide viewshed opportunities of the campus and landmark buildings from the Town Center. (Imp 2.5, 2.9)

#### **LU 5.18**

Develop shared parking facilities in lieu of separate parking for each site/use in the Town Center, including possible parking facilities to serve both community and campus uses. (Imp 1.5, 4.1)



### LU 5.19

Designinternallocalstreets to emphasize pedestrian activity and slow traffic using such techniques as appropriate width, angled parking, traffic circles, landscaped "bulb outs," alleys, and comparable techniques. A standard of a minimum of 15 feet shall be established as the minimum width of sidewalks, which may be modified to reflect specific planned uses and urban form within the Town Center, provided that the intention for functional pedestrian sidewalks is achieved. (*Imp 2.5, 2.9*)

#### LU 5.20

Promote the use of high quality and distinctive architecture that avoids the use of clichéd styles and idioms, is reflective of adjoining campus buildings, and considers the region's history, landscape, and materials. (*Imp 2.5, 2.9*)

#### LU 5.21

Encourage the development of individual buildings that serve as landmarks for the Town Center that may be differentiated by their scale, architectural design, or use of special design elements. (Imp 2.5, 2.9)

#### LU 5.22

Design structures that integrate housing with commercial, office, and other uses to protect residents from adverse impacts of the non-residential use such as noise, odors, vibration, and lighting. Parking and access to the different uses should be separated and secured. Housing units should be designed to maximize their daylighting and air circulation. (*Imp 2.5, 2.6, 2.9*)



THE BUSINESS CENTER IS THE FOCAL POINT OF INNOVATION AND ECONOMIC ACTIVITY

# Objective

#### **LU 6.0**

To establish a business center that provides opportunities to attract and incubate new businesses that benefit from the presence of the intellectual capital and research of UC Merced, is integrated with the Community Town Center and Campus Core, and provides job opportunities for local residents.

#### **USES**

#### **LU 6.1**

Accommodate the development of a University-related Business Center that contains research and development, light manufacturing, electronic/digital, and other uses that provide job opportunities that uniquely are induced by the presence of the UC Merced campus. (Imp 2.5)



#### LU 6.2

Encourage the development of buildings and facilities that support the formation of business incubators capitalizing upon the University's faculty and research. (Imp. 1.4, 2.5, 5.11)

#### LU 6.3

Work with local business to train local residents to take advantage of new job opportunities that may be developed in the University Community (refer to Economic Development and Public Services—Education sections of this Plan). (Imp 1.4, 3.5, 5.11)

#### **LU 6.4**

Integrate a mix of uses into the Business Center that support its primary research, industrial, and manufacturing functions and products, such as limited retail, financial, personal service, dining, entertainment, recreation, and similar uses. (*Imp 2.5*)

#### **LU 6.5**

Allow for the development of new types of industries as they evolve in the marketplace, provided that they complement existing uses and the University of California Merced. (Imp 2.5, 2.9)

#### **DENSITY/INTENSITY**

#### **LU 6.6**

Accommodate the development of Business Center uses at a minimum FAR of 0.35 and maximum FAR of 2.0 (one to four stories). Higher densities and building heights may be considered as they provide special opportunities to capitalize upon the University's presence, new job opportunities for local residents, economic enhancement for the community, and are compatible in scale and character with adjoining uses and UC Merced. (Imp 2.5)

#### **DESIGN AND DEVELOPMENT**

#### **LU 6.7**

Site and design Business Center development to achieve a cohesive and integrated district including the use of unifying streetscape and signage, location of buildings in proximity to street frontages, and incorporation of retail shops and restaurants in the ground floor of buildings, inclusion of architectural and landscape elements that unify sites, and comparable techniques. (*Imp 2.5, 2.9*)

#### **LU 6.8**

Develop a network of streets, sidewalks, bicycle trails, infrastructure, and open spaces that connect with and continue the basic pattern established in abutting University campus, the Town Center, commercial districts, and Residential Villages. (Imp 2.4, 2.5, 4.1, 4.8)

#### LU 6.9

Promote the use of high quality and distinctive architecture that avoids the use of clichéd styles and idioms, is reflective of adjoining University Community Town Center and campus buildings, and considers the region's history, landscape, and materials. (Imp 2.5, 2.9)

# THE RESIDENTIAL VILLAGES NURTURE THE QUALITY OF LIFE OF THE UNIVERSITY COMMUNITY'S RESIDENTS

# Objective

#### **LU 7.0**

To establish distinct neighborhoods that integrate parks, schools, services, and comparable uses that fully support the needs of a resident and are designed to achieve a high level of livability and quality.

#### **USES**

#### **LU 7.1**

Integrate a mix of housing types within each Residential Village with supporting schools, parks, retail, and other uses that support local needs. (Imp 2.5)

#### **LU 7.2**

Accommodate a resident population of a minimum of 5,000 and maximum of 6,750 persons (approximately, 2,000 to 2,500 housing units), or of sufficient size to support a K–5 school and local services, within each Residential Village. (Imp 2.5)

### Residential

#### LU 7.3

Distribute the mix of single and multi-family units among the Residential Villages according to Table 2. Allow for modification of the mix of units to reflect resident needs, market conditions, innovation, and creativity provided that the character and quality of the village is maintained and basic requirements for the development of a mix of units to meet the needs of a spectrum of resident income demographics are met. (Imp 2.5, 2.9)

#### **LU 7.4**

Encourage the development of various forms and densities of housing units including single family detached on "traditional" or "small" lots, zero lot line; attached or common wall units, apartments, townhomes, condominiums, co-housing, duplexes, triplexes, quadplexes, and so on. (*Imp 2.5, 2.9*)









#### **LU 7.5**

Encourage the development of "granny flats," or "companion units," as a portion of a Village's residential capacity in concert with single-family detached housing. (*Imp 2.5, 2.6, 2.9, 4.11*)



"Granny flats" at rear of single-family units

#### **LU 7.6**

Prioritize the development of off-campus student housing within walking or bicycling distance of the UC Merced campus. (Imp 2.5, 3.3)

#### **LU 7.7**

Allow for the development of innovative housing forms and building materials that may emerge during the buildout of the Community Plan, contingent on their compatibility with adjacent uses and achievement of other Land Use objectives and policies. Consider modifications of building and subdivision codes, where appropriate, that would facilitate the development of affordable units, while maintaining the public health and safety. Work closely with the University and potential developers to develop new housing prototypes that increase affordability. (Imp 2.5, 2.6, 2.9)

#### **LU 7.8**

Provide opportunities for the development of housing types to meet the special needs of students and others attracted to a "University environment" (e.g., co-housing, higher density units, sustainable building materials, group quarters, etc.). This may include areas set aside for the development of experimental or housing prototypes provided that they are compatible with adjoining uses. (*Imp 2.5, 2.6, 4.11*)

# Village Centers

#### LU 7.9

Accommodate local-serving commercial, services, small restaurants/cafes, public/civic meeting facilities, libraries, cultural facilities, parks, schools, religious facilities, public plazas, and comparable uses as the physical, functional, and symbolic focal point of neighborhood identity and activity and supportable by the market. (*Imp 2.5, 4.6–4.8*)



School, and park serve as neighborhood focal point

#### LU 7.10

Allow for the development of mixed-use structures that integrate housing with retail, offices, community, and other uses. (*Imp 2.5*)

#### **DENSITY/INTENSITY**

#### LU 7.11

Accommodate a mix of residential densities, with single-family units at an average of 4.7 units per gross acre and multi-family units at an average of 24 units per gross acre throughout the University Community. Densities may be varied within and transferred among the Residential Villages, provided that the cumulative number of permitted units in the Community is not exceeded and any reduction does not jeopardize the financing and implementation of infrastructure, services, and environmental mitigation or otherwise frustrate the goals and policies of the UCP. (Imp 2.5)

#### LU 7.12

Establish minimum and maximum lot size limits for each Residential Village. In general, lots larger than 7,500 square feet should be, located in areas that serve as transitions among Residential Villages and neighborhoods and to serve as a buffer with adjoining agriculture and open spaces. (Imp 2.5)

#### LU 7.13

Accommodate commercial and/or office uses in the Village Center typically at a FARs of 0.2 to 0.35, with one Residential Village developed at higher densities to accommodate a second grocery store within the University Community. (Imp 2.5)

#### LU 7.14

Accommodate mixed use structures that integrate housing and retail/office uses in the Village Center at a maximum FAR of 1.5, with a minimum FAR of 0.2 and maximum FAR of 0.5 for non-residential uses, and a maximum height of three stories. (*Imp 2.5*)

#### **DESIGN AND DEVELOPMENT**

#### LU 7.15

Integrate housing, parks, schools, commercial, public, and other uses into a cohesive urban pattern that provides the sense of a complete and identifiable neighborhood, in accordance with other policies in this section of the Plan. Establish an urban form that ties together individual parcels and uses into a cohesive whole, addressing the location and massing of buildings, architecture, landscape, connective pedestrian paths and walkways, use of key landmarks, and similar elements (as illustrated in Figure 12). (*Imp* 2.5, 2.9)

#### LU 7.16

Require the development of neighborhoods that integrate a diversity of housing types and densities. (Imp 2.5)

#### LU 7.17

Prohibit the over-concentration of multi-family units by limiting the maximum number of such units to 350 in any area that is not separated by lower density development, except within and abutting the Town Center and the Village Centers. (Imp 2.5, 2.9)

#### LU 7.18

Site and design development to enhance neighborhood quality of life by:

- Establishing a pattern of blocks that promotes access and neighborhood activity
- Minimizing the width of streets to slow traffic and promote intimacy, while maintaining acceptable fire protection and traffic flows
- Integration of a diversity of housing types within a neighborhood and on individual blocks, ensuring their compatibility with adjoining units

- Use of variable setbacks and parcel sizes to accommodate diverse housing types
- Physically and visually relating the unit to the street frontage
- Locating and designing garages to minimize their visual dominance from the street
- Incorporating sidewalks and parkways to foster pedestrian activity
- Promoting architectural diversity
- Other appropriate techniques (*Imp 2.5, 2.9*)



Housing oriented to street frontage

#### LU 7.19

Design the Village Center as the focal point of neighborhood identity and activity locating buildings along the street frontage and public spaces, designing structures to enhance pedestrian activity (e.g., visual transparency and façade modulation/fenestration), integrating community meeting facilities and plazas for public gatherings, constructing streetscape improvements, and locating higher density housing, such as townhomes, on adjacent parcels. (Imp 2.5, 2.9)

#### **LU 7.20**

Locate Village Centers within walking distance of all homes within the village/neighborhood, connected by a network of trails and pedestrian paths. (Imp 2.5, 4.8)

#### LU 7.21

Support the development of public uses that offer the opportunity for the sharing of facilities such as the integration of school play fields and athletic facilities with public parks, multi purpose auditoriums that serve multiple schools, and libraries and multi-purpose facilities that serve both schools and the general public.

(Imp 2.5, 4.6-4.8)

#### **LU 7.22**

Promote the use of high quality and distinctive architecture that avoids the use of clichéd and repetitive styles and idioms and considers the region's history, landscape, and materials. In particular, the Village Centers should be designed to convey distinctive architectural qualities that distinguish them from typical suburban commercial centers. Architectural elements and landscape should be used as landmarks that provide identity and a sense of location and orientation. (Imp 2.5, 2.9)





#### **LU 7.23**

Design structures that integrate housing with commercial, office, and other uses to protect residents from adverse impacts of the non-residential use such as noise, odors, vibration, and lighting. Parking and access to the different uses should be separated and secured. Housing units should be designed to maximize their daylighting and air circulation. (*Imp 2.5, 2.6, 2.9*)

#### **LU 7.24**

Establish landscaped buffers and berms adjacent to major transportation corridors to protect adjoining residential neighborhoods from vehicular noise and traffic. Housing may be set back from the buffer with vehicular access from rear alleys or streets or located to face the interior of a neighborhood with their backyards located along the corridor and buffer. The use of walls along the transportation corridor should be discouraged, unless there is no feasible alternative that effectively protects the housing. (Imp 2.5, 4.8)

# THE QUALITY OF THE COMMUNITY IS ENHANCED BY ITS PUBLIC USES

#### **Objective**

#### LU 8.0

To integrate public uses into the development fabric of the Community.

#### **Policies**

#### **LU 8.1**

Integrate schools, libraries, cultural facilities, parks, civic, and similar public uses into the Town Center and Residential Village Neighborhood Centers to maximize their accessibility by local residents and recognize their contribution to community and neighborhood identity. (Imp 2.5, 4.4–4.8)

#### LU 8.2

Cluster elementary, middle, and/or high schools for the purposes of sharing capital-intensive facilities such as auditoriums, libraries, athletic fields, multipurpose meeting rooms, and similar uses (refer to Public Services—Schools). (Imp 2.5, 4.7)

#### **LU 8.3**

Locate schools and parks adjacent to one another to facilitate the sharing of play and athletic fields. (Imp 2.5, 4.7, 4.8)

#### **LU 8.4**

Integrate public libraries and community multipurpose facilities with schools, where feasible. (Imp 2.5, 4.6, 4.7)

# THE NETWORK OF PARKS AND OPEN SPACES DEFINE THE COMMUNITY'S **CHARACTER**

#### **Objective**

#### LU 9.0

To develop an open space system that sustains natural resources, protects the community from natural hazards, offers opportunities for recreation, and serves as an amenity that heightens the quality and livability of the University Community.

#### **Policies**

#### LU 9.1

Design open spaces as amenities that contribute to the quality of life, image, and economic value of the University Community. (Imp 2.5, 4.8)

### LU 9.2

Develop open spaces for the purposes of active and passive recreation, habitat preservation, education and research, flood control/public safety, agricultural production, and similar functions. (Imp 2.5, 4.2, 4.8, 4.10)

#### LU 9.3

Use natural drainages, trails, recreation areas, and similar techniques to link the University Community's land use districts and open space elements, the UC Merced campus, Lake Yosemite Regional Park, and surrounding open spaces. (Imp 2.5, 4.8)

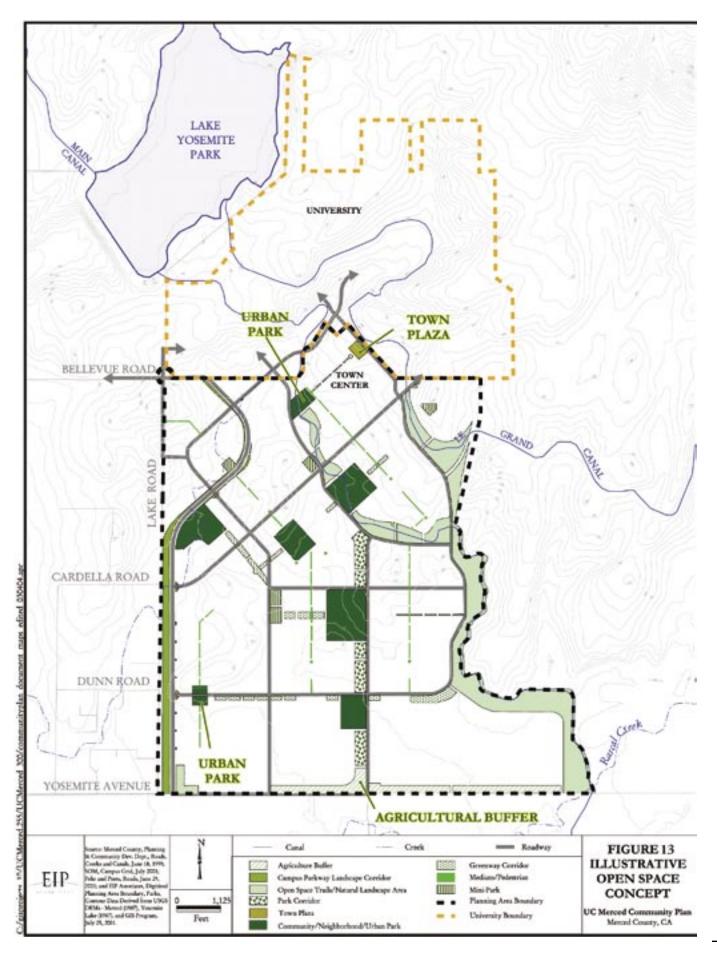


#### LU 9.4

Develop a continuous greenbelt corridor/park system as the centerpiece of the University Community ("Village Green/Central Park"), which will be linked with each Village Center and Community open spaces by a network of connecting trails. Accommodate parklands and open spaces within the greenbelt system that provide residents with a diversity of open space experiences, ranging from active urban spaces to passive open lands. This may encompass landscaped urban squares, neighborhood and community-serving parks, mini-parks, linear greenways, landscaped hiking and bikeway trails, and similar elements (as illustrated on Figure 13). At a minimum, the greenbelts and parks developed for active recreational use shall encompass 150 acres, based on standard of 5 acres per 1,000 residents. However, to create the amenity and economic and social values that are essential to uniquely define and differentiate the University Community, developers shall be encouraged to exceed this minimum for habitat and native grassland preserves, open space buffers, and other purposes. (Imp 2.4, 4.8, 4.10)







#### **LU 9.5**

Design the "Village Green" as an organizational element for the siting and design of development, such as the orientation and linkage of multi-family housing and commercial uses to the park (e.g., restaurants "opening" onto the park). (Imp 2.5, 4.8)

#### LU 9.6

Require that the acquisition and development of the "Village Green" be funded equitably by all development within the University Community. (Imp 2.5, 2.7, 6.1–6.4)

#### LU 9.7

Integrate the Le Grand and Fairfield canals into the University Community's open space network, preserving and protecting their primary function as a conduit of agricultural water, consistent with the requirements and to the satisfaction of the Merced Irrigation District (MID). (Imp 2.5, 3.3, 4.8)

#### **LU 9.8**

Design any uses, landscape, trails, and improvements located in proximity to MID canals to protect the physical integrity of the canals, levees, and related water conveyance systems. (Imp 2.7, 2.8, 3.3)

#### LU 9.9

Incorporate barriers, such as fencing, and other elements to ensure public safety and prevent public access to the canal, to the satisfaction of MID. Collaborate with the MID in the use of landscape, fencing, and other elements that assure a high level of public safety and visual quality that complements the open space system. (Imp2.7, 2.8, 3.3)

#### LU 9.10

Allow for the use of existing prime agricultural land as open space that would be integrated into the final design of the University Community, where possible. Open space uses could include parks, community gardens, and educational/research activities. (Imp 2.4, 2.5)

# A COMMUNITY OF QUALITY ARCHITECTURE, LANDSCAPE, AND PUBLIC **STREETSCAPES**

#### Goal

A new community distinguished by its urban form, architecture, landscape, and public streetscapes.

# **Objective**

#### LU 10.0

To develop buildings, sites, and public places whose design contributes to the sense of community identity, quality, and livability and reflects the history, landscapes, and character of the Merced region.

#### **Policies**

#### **LU 10.1**

Establish a program of streetscape improvements that distinguish and uniquely identify the Town Center, Business Center, and Residential Village centers and neighborhoods. This may be accomplished through entry identification, signage, landscape, street furniture, public art, lighting, banners, and other design elements. (Imp 2.5)

#### LU 10.2

Develop a pattern of landscape that differentiates public places and streetscapes and private development throughout the Community's business districts, and residential neighborhoods. Require the use of landscape materials that reflect the region, are drought-tolerant, and native species, to the extent feasible. (Imp 2.5)



Commercial streetscape



Residential neighborhood tree canopy

#### LU 10.3

Encourage the planting of trees along sidewalks and in parks, civic facilities, public plazas, and parking lots that provide an extensive canopy and shade in the summer, and are deciduous to facilitate solar access in the winter, as feasible and appropriate. (Imp 2.5)

#### LU 10.4

Promote architectural diversity and interest creating consistency through building location, massing, scale, height, materials, fenestration, modulation, signage, lighting, and comparable elements, rather than a specific design idiom or style. (Imp 2.5, 2.9)

#### LU 10.5

Discourage the use of clichéd architectural design styles emblematic of other regions (e.g., Cape Cod, Southwest, and Spanish Mediterranean), encouraging the development of an architectural character that is reflective of the history, landscape, and materials of Merced, the Central Valley, and Sierra foothills. (*Imp 2.5, 2.9*)

#### LU 10.6

Consider the use of building and landscape materials that reflect the region's history such as stone, aggregate, and wood. (Imp 2.5, 2.9)

#### LU 10.7

Promote architectural design of unique merit and quality, particularly in the Town Center, Business Center, and public buildings, while ensuring their compatibility with the overall quality and character of the Community. (Imp 2.5, 2.9)

# A COMMUNITY THAT SUSTAINS SCARCE NATURAL RESOURCES

#### Goal

A new community whose physical form and development sustains the region's natural resources.

# **Objective**

#### LU 11.0

To develop sites and buildings in a manner that minimizes the depletion of non-renewable resources.

#### **Policies**

#### **LU 11.1**

Locate and design development in consideration of the University Community's climatic conditions. Examples of techniques that may be considered include:

- Orientation, configuration, and massing of buildings and public spaces to provide shelter from wind and temperature extremes and capitalize upon opportunities to use sustainable energy systems (solar, wind, other)
- Use of architectural elements to reduce the impacts of temperature extremes (overhangs, arcades, recessed windows, etc.)
- Use of building materials that promote energy efficiency by minimizing heat gain and loss
- Use of landscape to provide shelter and relief from heat in the summer and solar access in the winter (e.g., deciduous trees such as sycamores)
- Incorporation of water amenities as a relief from heat, with emphasis on the use of treated gray water (*Imp 2.5, 2.8, 2.9*)

#### LU 11.2

Promote the use of recycled materials in building, streetscape, infrastructure, and other construction. (Imp 2.6, 2.8)

#### LU 11.3

Promote the use of grading techniques and roof-drainage systems that capture rain water on site and facilitate its use for landscape irrigation and water amenities. (Imp 2.7, 2.8)

#### LU 11.4

Promote the re-use of treated wastewater on site (refer to Infrastructure-Water-Related Systems). (Imp 2.7, 2.8)

#### LU 11.5

Promote the use of native and drought-tolerant landscape and drip irrigation systems. (Imp 2.7)

#### LU 11.6

Promote the use of energy-efficient fixtures and building techniques (refer to Energy Infrastructure). (Imp 2.6)

### HOUSING—PROVIDING SHELTER FOR COMMUNITY RESIDENTS

### STATUTORY REQUIREMENTS

alifornia State Planning Law, Government Code Sections 65300 and 65580 et seq. require the preparation of a Housing Element that defines programs to "...attain decent housing and a suitable living environment for every Californian..." The Element is mandated to include an analysis of housing needs, a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The housing section is specifically required to address affordability of housing and define a five-year plan of action on meeting these needs. These requirements are addressed on a countywide basis by the County of Merced's adopted Housing Element. Local governments are mandated to update the Housing Element every five years.

As the University Community is vacant and development is not anticipated for a number of years from the date of the publication of this Plan, it is premature to define specific housing programs for the University Community. Housing needs will evolve as residents move into the Community. The character of a university's population (students, faculty, staff, and service workers) implicitly infers that the population and its housing needs will be diverse. As such, the University Community Plan outlines a broad framework of policies intended to provide an adequate supply of housing units for a range of households, demographics, and incomes. These address both short and long term housing affordability. The policies also address key strategies intended to establish a high quality character of residential neighborhoods and sustain environmental resources. The UCP mandates the formulation of a housing program to be incorporated in the Specific Plans to be subsequently prepared for the Town Center and each Residential Village.

As housing is developed in the Community, the needs of its residents will be reviewed annually and specific actions to ensure the provision of adequate housing in the Community will be incorporated in the five-year updates of the County General Plan Housing Element.

#### **OVERVIEW**

evelopment of adequate housing to support the needs of the population growth induced by the presence of UC Merced is intrinsic to the success of the University Community. In the early years of development, few constraints will affect the ability to produce units that will be affordable for many faculty, students, staff, and others attracted by the presence of the campus due to the prevailing low land values. However, the need to fund "up front" infrastructure and public services could escalate Community costs somewhat higher than those found for housing in the City of Merced and surrounding region, placing the Community at a comparative disadvantage in the marketplace. Potentially, some subsidy or holding cost will be necessary to offset these differences.

The Community's most significant issue of housing affordability will be in the long-term. It is the experience in other UC communities that housing prices inflate dramatically, typically above those in the greater region. Frequently, this is due to the scarcity of land and product available (demand outstrips supply), as well as the desirability of a university environment as a place to live for non-individuals not related to the university. Most UC communities are characterized by high-priced units that are extremely overcrowded (ultimately contributing to their physical deterioration) and extreme travel commutes by students, faculty, and staff who cannot afford or find housing locally.

Thus, the challenges for the University Community are threefold: provision of sufficient housing capacity to stabilize prices, construction of units that can be afforded by students and low income populations, and the ability to maintain affordability as the Community matures. At the same time, the University Community will share in the County's need to provide a range of housing types to meet the unique needs of a diverse general population.

Housing goals and policies for the Community are consistent with and build upon the existing County of Merced housing policy. In addition to securing affordable and special needs housing, the Community will need to provide a variety of housing opportunities that accommodates a broad band of residents in terms of household economics and lifestyles. As lifestyles change, the housing will need to be flexible to accommodate the change for future generations. The community will provide a variety of adequate and affordable housing opportunities for residents. The policies allow a mix of housing units to adjust to market and affordability needs. Affordable single-family detached and attached residences, multi-family rental and ownership units, co-housing, cooperatives, and live/work units will be provided. The use of variable setbacks and parcel sizes will accommodate a diversity of housing types. Housing near public transportation access points will give seniors and students needed mobility. Clustering of buildings around common activity spaces and outdoor uses will create social "micro-climates" with individual identity though interaction of residents.

Appropriate infrastructure will be provided to assure the support of residential development and ensure the proper integration of all services. Functional residential design will provide pedestrian oriented developments, and aesthetically pleasing views that will contribute to the sense of community. Narrower streets will slow traffic and promote intimacy while maintaining adequate emergency response.

A sustainable design will allow the use of energy efficient materials and measures, use landscaping for heat relief, maximize use of natural light, and encourage the use of systems to monitor energy use. Use of recycled materials for construction will protect natural resources.

The use of water efficient fixtures and systems to monitor water use will promote water conservation. Buildings will incorporate wastewater reuse systems, encouraging onsite water recycling for cooling systems and landscaping needs.

# GOALS, OBJECTIVES, AND POLICIES

ousing goals, objectives, and policies are organized according to a number of fundamental values about the University Community's housing sufficiency, diversity, ability to meet the special needs of the population, short and long term affordability, quality, and environmental sustainability.

# A COMMUNITY OF DIVERSE HOUSING CHOICES

#### Goal

Sufficient housing to meet the needs of the University Community's diverse residential population—students, faculty, staff, employees of supporting businesses, and those attracted to the unique environment of a university campus.

# Objective

#### H 1.0

To provide adequate sites for housing in the University Community.

#### **Policies**

#### HIJI

Designate sufficient sites for housing development in the University Community's Residential Villages in Sub Area Specific Plans, in accordance with the development capacities specified by Land Use policies. (Imp 2.5)

#### H 1.2

Allow for flexibility in the mix of housing units to be accommodated to reflect market and affordability needs as those needs evolve during the buildout of the University Community. (Imp 2.5, 2.9)

#### H 1.3

Work with UC Merced in developing opportunities to provide housing to meet the needs of students, faculty, staff, and guest facilities for University visitors on the campus and in the University Community. (Imp 3.3)

#### H 1.4

Monitor the housing needs induced by the presence of UC Merced at least once every five years and ensure that the University Community contains sufficient capacity, through its Specific Plans, to provide adequate housing until the planned development capacity of each sub-area is exhausted. At that time, evaluate the need to develop additional housing capacity to support UC Merced and its induced uses and determine the appropriate location(s) in which this growth should be targeted. (Imp 2.1)

#### H 1.5

Expand infrastructure as needed to support anticipated residential development and ensure the proper integration of all services. (*Imp 4.1–4.3*)

#### H 1.6

Maintain consistency among the sub area Specific Plans to provide the necessary services and infrastructure to support housing demands. (Imp 2.5, 4.1–4.3)

#### H 1.7

Ensure that the Community's housing capacity is sufficient to support the employment generated by UC Merced, businesses, and industries and correlate the mix of units to their income levels, offering a variety of rental and ownership opportunities. (Imp 2.5)

# **Objective**

#### H 2.0

To provide a diversity of housing types to meet the needs of the University Community's residents.

#### **Policies**

#### H 2.1

Foster the development of a variety of housing types to serve the needs of residents in consideration of household size, age, incomes, special needs, cultures, and other relevant factors. These may encompass affordable, single-family detached and attached residences, multifamily rental and ownership units, condominium, co-housing, cooperatives, live/work, second units, senior, intergenerational housing, units integrated with nonresidential uses, student housing, and similar units. A range of housing units to support a diversity of household sizes and incomes shall be accommodated in each Residential Village (as specified by Land Use policies). (Imp 2.5)









#### H 2.2

Promote mixed-use developments that integrate a mix of housing types and housing with commercial (office or retail), institutional, and public uses. The latter may consist of sites on which more one use is located (horizontal integration) or buildings in which housing is located on floors above non-residential uses (vertical integration). The development of mixed-use buildings shall be emphasized in the Town Center and encouraged in the Residential Village Centers. (Imp 2.5





#### H 2.3

Support the development of multi-family housing projects that contain a variety of unit sizes, including larger unit sizes for low /moderate income families. (*Imp 2.5, 4.11*)

#### H 2.4

Allow the development of live/work housing units to provide flexible work space needs and meet changing consumer housing demands. (Imp 2.5, 2.6)

#### H 2.5

Support the use of increased densities and a variety of unit sizes to allow for different family size and composition, to better address current trends in housing demand. (Imp 2.5, 2.9)

#### H 2.6

Accommodate the development of new forms of housing that may emerge based on their compatibility with adjacent uses and achievement of land use objectives. In particular, encourage innovation in building types, configuration, and materials for student-related housing, provided that they meet public health and safety requirements and are compatible with adjoining land uses. (Imp 2.5, 2.9)

### **Objective**

#### H 3.0

To provide adequate housing to meet the special needs of the University Community's population.

#### **Policies**

#### H 3.1

Promote the development of housing for students and seniors near the Town Center, transportation access points, and Residential Village Centers. Prioritize the location of student housing in proximity to UC Merced. (Imp 2.5)

#### H 3.2

Require that housing be designed to accommodate the needs of the disabled and seniors, in accordance with state and federal legislation. (*Imp 2.5, 2.6*)

#### H 3.3

Work with local private and nonprofit developers (e.g., Merced College "Build-A-House" Project) to finance, design, and construct housing to meet special needs. Such projects might include, but are not limited to, senior housing, including congregate care facilities; housing for people with physical and mental disabilities; and housing for large families. (Imp 3.5, 4.2)

#### H 3.4

Assess the special housing needs of the University Community's population as development occurs and, at least every five years, establish programs to ensure that these needs are being met. (Imp 2.1, 4.11)

#### A COMMUNITY OF AFFORDABLE HOUSING

## Goal

Adequate housing opportunities for all income levels in the University Community.

# **Objective**

#### H 4.0

To develop housing for higher income residents of the University Community.

#### H 4.1

Encourage development of high quality housing by incorporating larger lot projects within the Residential Villages and "quality" townhomes in the Town Center, Residential Village Centers, and along park frontages. (Imp 2.5)





#### **Objective**

#### H 5.0

To develop housing that is affordable to moderate-, low-, and very low-income households in the University Community.

**Note:** It is recognized that affordable housing requirements will vary over the build-out of the University Community. Prevailing housing costs in the Merced market are low in comparison to most UC communities. However, experience suggests that such costs will rise as the Community matures and affordability will be reduced. Therefore, it is expected that the production of adequate affordable housing units will become more critical and programs will have to become more aggressive in the middle and later stages of the Community's development.

#### **Policies**

#### H 5.1

Develop a Housing Program for each Specific Plan area that commits to the development of adequate affordable housing, facilitates access by low-income households, and promotes its long-term affordability to meet Community needs. The Program shall be consistent with the provisions of the County of Merced Housing Element in consideration of housing affordability in the greater Merced market. It shall be a condition of approval for the sub-area Specific Plans and include actions that may be undertaken by a diversity of entities including the County of Merced, the Housing Authority, other agencies, and private developers. A variety of elements may be incorporated including land use development strategies, production of affordable units by developers and other entities, contribution of in-lieu fees to a separate housing development entity, regulatory and programmatic approaches, and financial assistance to buyers and renters. Possible components of the Housing Program are defined in Policies 5.1.1 through 5.1.18 (below). (Imp 2.5, 4.11)

#### LAND USE STRATEGIES

#### H 5.1.1

The development of a mix of single-family and multi-family, owner—occupied and rental units in each Residential Village (in accordance with Land Use policies). Vary the unit size, including smaller single-family detached, apartment, and townhome units. (Imp 2.5)

#### H 5.1.2

A variety of lot sizes to assure affordability. This may reduce minimum lots sizes from current County standards. (Imp 2.5, 2.6, 4.11)

#### H 5.1.3

The construction of second units as an option for affordable housing and to promote an integrated neighborhood. "Granny flats"/second units/accessory apartments allow elderly residents, students and low-income residents to live in moderate- and higher-income neighborhoods. This provides housing diversity, encourages neighborhood stability, improves the local tax base, and improves local government control (fewer illegal housing units). (Imp 2.5, 2.6, 4.11)

#### H 5.1.4

The development of affordable innovative housing units (*Policy H 2.6*), live/work facilities (*Policy H 2.4*), and manufactured homes in residential neighborhoods provided that they are designed to complement adjoining housing and meet public health and safety requirements. (*Imp 2.5, 2.6, 2.9, 4.11*)

#### HOUSING PRODUCTION

#### H 5.1.5

The development of affordable housing by project developers through:

- a. The use of "inclusionary zoning," wherein the developer is required to produce a stipulated percentage of the total housing units for low- and very low-income households (120 percent and 80 percent of the County median household income, respectively);
- b. Provision of development density bonuses when specified minimums are exceeded; and/or
- c. Contribution of an in-lieu fee, based on the calculation of the value of the required affordable units, to the County or other entity (e.g., non-profit) for the construction of affordable units.

At a minimum, the developer shall be responsible for the *provision* of sufficient affordable units, as determined by the County, through construction or in-lieu fees. (*Imp 2.5, 4.11*)

#### H 5.1.6

Supporting and encouraging innovative efforts for the construction of affordable housing units in the University Community by private and non-profit developers, such as the Merced County Housing Coalition. An example program is the City of Merced and Merced College Partnership's "Habitat Build a House" program that provides funding and technical assistance for residential development in which college students are responsible for construction. (Imp 2.5, 2.6, 2.9, 3.3, 3.5, 4.11)

#### H 5.1.7

Supporting UC Merced as a potential affordable housing provider or partner within the community for students and faculty. This may involve joint public/private development of affordable rental and ownership housing. (Imp 3.3, 4.11)

#### REGULATORY AND PROGRAMMATIC

#### H 5.1.8

Incentives for the development of affordable housing units, which implement and, as appropriate, expand upon the County of Merced Housing Element's programs. Examples of potential incentives to developers of projects that include below market rate units to be sold or rented to persons of low and moderate in come include:

- Density Bonuses. To decrease the per-unit costs of the development, the County could provide a density bonus for eligible projects. The County might also allow increased lot coverage for affordable large-family developments. Alternately, a percentage bonus (e.g., 20 percent greater than that allowed under the designated zoning) could be offered. For example, a development site of 90,000 square feet could accommodate 15 units under R-1-6 zoning. With density bonus, the site would accommodate 18 units (at 5,000 square feet per unit).
- Development Related Inducements. Waivers may be granted to affordable housing projects for permit fees or selected impact fees, fee deferment, fast track processing (priority review and permitting), allowing second floor residential above ground floor retail.
- Fee Deferment. To reduce the "carrying costs" of a project, the County could provide a deferment for payment of permit and development fees through the duration of the project's construction loan. Fees would be due at the point when long-term financing for the development in secured or the project is sold. A maximum deferment period could also be set (e.g., two years).
- Low interests Financing/Equity Sharing. Developments that are deemed eligible could be provided low-interest financing or even equity participation by the County through a Joint Development Agreement. Such projects might be required to meet stricter eligibility requirements (e.g., a higher percentage of units affordable to low- and moderate-income household).
- Low-Income Housing Tax Credits (LIHTC). This is a primary vehicle for production of affordable rental housing. Credits are used for the development of affordable housing for low-income families and the elderly for minimum 30 years. Some units can be permanently dedicated for low income. Housing credit is allocated for renters with incomes below 60 percent of the area median income.

Infrastructure Financing Assistance. To reduce the "up-front" infrastructure improvement and development costs, the County could provide assistance in developing alternative, long-term infrastructure financing. Such financing might include formation of a Mello-Roos or special assessment district to support a low-term, low interest revenue bond to fund infrastructure improvements. Bond interest and principal would be paid over time by homeowners in the assessment district. (Imp 3.3, 3.5, 6.4, 4.11)

#### H 5.1.9

Establish an affordable housing trust fund to assist in the provision of affordable housing within the University Community. Housing Trust Funds: are dedicated sources of revenue administered by the County Housing Authority and used to build new housing, land acquisition, provide deferred loans for homebuyers, provide rental loan funds, provide low-interest financing for the construction of second units, and other assistance to very low- and lowincome families. (Imp 4.11)

#### H 5.1.10

Actively seek state and federal Funds in coordination with other local agencies and jurisdictions, with private developers and/or with local lending institutions:

- Identify and apply for funding at the state and federal levels to finance the construction of new affordable housing in the University Community.
- Assist private and nonprofit individuals or organizations in applying for state and federal funds. Assistance may take the form the information referral, consultation regarding program applications, and/or lobbing by local officials on behalf of the applicant.
- Identify and apply for funding at the state and federal levels to help bridge the "affordability gap" between housing prices and household incomes in the County (e.g., assistance for first-time homebuyers). (Imp 4.11)

#### FINANCIAL ASSISTANCE

#### H 5.1.11

Participation in programs that provide financial assistance for low- and moderate-income households to acquire adequate housing in the University Community, as defined by or in addition to those contained in the County General Plan Housing Element. Programs shall be directly correlated with the needs of the University Community and not adversely impact housing programs for other areas of the County. Examples of programs currently available include:

- Down Payment and Loan Assistance. Programs for first time homebuyers with low-interest loans for down payments and mortgages.
- First-Time Homebuyer Mortgage and Counseling. Programs specifically designed for low-and moderate-income homebuyers that include borrowing, budgeting, and housing maintenance training.
- Mortgage Revenue Bonds. Single-family and lowincome rental housing bonds, also known as Mortgage Revenue Bonds, sold by state and local governments as tax-exempt bonds using the proceeds to finance discount mortgages. A typical MRB mortgage can save as much as \$100/month compared to a conventional mortgage. MRBs can also provide down payment and closing cost assistance.
- Establish an Affordable Housing Community Fund. Establish a County account under the title of "Affordable Housing Community Fund" to serve as the depository for monies designated for general use in affordable housing programs (project-specific monies excluded). The Fund shall be managed by the County's Housing Program, with policy oversight and monitoring from the County's Affordable Housing Task Force. Potential uses for funded monies shall include land acquisition for affordable housing, participation in affordable housing development projects, contributions to loan and rental assistance programs, low-interest financing for the construction of seconds units, and support for down payment assistance for firsttime homebuyers.
- Sweat Equity and Self-Help Enterprises. Emphasizes ownership in housing by requiring a homebuyer to participate in the development and construction of housing, providing that such units comply with applicable codes and regulations and are designed to be compatible with adjoining residences. Can be implemented by a group of participants who collectively provide "sweat equity" in each other's homes, assisting one another in the construction of their homes. (Imp 4.11)

#### H 5.1.12

Work with the Housing Authority to continue to expand Section 8 programs for use in the University Community, as needed. These are federally funded certificates or vouchers that are used to pay up to 70 percent of the rental costs for tenants of existing housing who pay 30 percent or greater of their household income for rent. Cooperative activities may include, but are not limited to:

- Identification and/or development of housing units available for Section 8 occupancy
- Identification of households eligible for Section 8 assistance
- Assistance in lobbying the federal government for an increased allocation of Section 8 vouchers and certificates for Merced County's population of very low— and low-income households (Imp 3.3, 4.11)

#### H 5.1.13

Establish a revolving loan pool to provide qualifying low-interest loans to first-time low- and moderate-income homebuyers. The loan pool would be operated as a self-sustaining funding source distinct from other County programs, with established guidelines setting forth terms and conditions for down payment loans. Such guidelines might include a percentage-of-buying-price or total dollar limit on loans and conditions for interest and principal re-payment (e.g., due after 20 years or at time of resale). Guidelines would be developed based on the dual goals of making the loan pool self-sustaining and lowering the financial burden on first-time low- and moderate-income homebuyers. (Imp 4.11)

#### LONG-TERM AFFORDABILITY

#### H 5.1.14

Require that affordable for-sale housing units that are subsidized by federal, state, County, or other public funds and non-profit housing corporations be owner-occupied and carry subsidy recapture provisions for a minimum time period (e.g., 20 years) with the level of subsidy determined at the time of construction as a percentage of development costs. For example, if a subsidy of \$5,000 is provided towards a unit that costs \$50,000 to construct and that unit is sold in 25 years for a sum of \$500,000, the subsidizing entity shall receive \$50,000 from the sale to reinvest in new affordable housing development through an Affordable Housing Community Fund. (*Imp 4.11*)

#### H 5.1.15

Require that affordable for-sale housing units that are subsidized by the County or use of other public funds be re-sold at affordable rates, to be determined by the County based on cost of living increases and inflation. The County shall encourage a similar program for affordable units for faculty, students, and/or staff developed by or in partnership with UC Merced. (*Imp 4.11*)

#### H 5.1.16

Provide financial assistance to low- and very low-income households for the rental and purchase of affordable units as specified by Policies H 6.1 through H 6.3. (*Imp 4.11*)

#### **DATABASE AND EDUCATION**

#### H 5.1.17

Establish and monitor housing affordability levels to ensure that housing options remain affordable over time. This may be accomplished by regular surveys and review of census figures and five-year updates of the County General Plan Housing Element. (Imp 2.1, 4.2)

#### H 5.1.18

Educate the public regarding affordable housing issues and programs. (Imp 5.10)

# A COMMUNITY OF LIVABLE NEIGHBORHOODS

# Goal

Complete residential neighborhoods that integrate the full complement of uses that support a resident's needs and contribute to a high standard of livability and quality of life.

# Objective

#### H 6.0

To develop complete residential neighborhoods that contain the diversity of housing, school, parks, services, amenities, and other uses supporting the daily activities and needs of residents and are designed to enhance community socialization, as well as provide personal privacy.

#### H 6.1

Accommodate a mix of housing types within each Residential Village and establish an activity center that serves as the point of communal activity and identity that may include a school, park, multi-purpose facility, local commercial services, and similar uses in accordance with applicable Land Use policies. (Imp 2.5)





#### H 6.2

Design the residential neighborhoods to foster community activity by orienting housing units to the street (the neighborhood "living room") and enhancing walkability, in accordance with applicable Land Use policies. (*Imp 2.5*, 2.9)

#### H 6.3

Encourage development of housing units designed by recognized leaders in the architectural and design field. Promote diversity in the design of housing units, avoiding the monotonous repetition of a limited style palette. (Imp 2.5, 2.9)

#### H 6.4

Encourage the use of design features that are common throughout the neighborhoods to create a connection and "sense of place" within the University Community. (Imp 2.5, 2.9)

#### A SUSTAINABLE COMMUNITY

#### Goal

A housing community that sustains its non-renewable natural resources.

### **Objective**

#### H 7.0

To locate and design housing and it's supporting infrastructure to minimize depletion of non-renewable natural resources, emphasizing energy and water conservation and the re-use of materials.

#### **Policies**

#### H 7.1

Promote the development of residential sites and buildings to conserve energy consumption through their location/orientation, building materials, architectural design, fixtures, landscape, and use of alternative sources (refer to Infrastructure—Energy and Land Use policies). (Imp 2.5, 2.6, 2.9)



#### H 7.2

Promote the conservation of water through the re-use of treated wastewater, capture and re-use of rainwater, efficient plumbing and fixtures, and use of native and drought-tolerant landscape materials (refer to Infrastructure—Integrated Water Systems and Land Use policies). (Imp 2.5, 2.6, 2.8)

#### H 7.3

Encourage the development of "green" housing units. These are characterized by the use of energy efficient design and construction materials, siting and location of housing, use of innovative or non-mainstream techniques such as solar heating, organic insulation, day-lighting (capitalizing on natural lighting), on-site water storage and recycling, and other techniques that promote the concept of sustainability in construction. Green housing can often have higher front end costs, which may necessitate targeting higher end consumers, but long term cost savings are making green units increasingly more affordable. There is also a growing market of consumers who specifically seek green housing as a lifestyle choice (e.g., Civano, AZ and Davis, CA). (Imp 2.5, 2.6, 2.8)

# ECONOMIC DEVELOPMENT—CREATING A VITAL AND SUCCESSFUL COMMUNITY

### STATUTORY REQUIREMENTS

hile the California Planning and Zoning Law does note require an Economic Development Element of the General Plan, Section 65303 permits a community to "...include any other subjects which, in the judgment of the legislative body, relate to the physical development of the county or city." A permissive element enjoys the same weight of authority and must be consistent with mandated elements.

Inherently, an Economic Development Element is one of the most important elements of a General Plan as it specifies the actions to influence the marketplace to ensure that the objectives and uses defined in a Land Use Element are achieved. In a sense, a Land Use Element is a "blueprint" defining the framework within which development may occur and is reactive to the marketplace. On the other hand, an Economic Development Element defines a set of actions to intervene and shape the marketplace so that a Community's land use and development objectives are achieved.

The Economic Development Element describes the economic goals and objectives and corresponding policies that will guide economic development of the University Community in the context of the Merced County region as a whole. These economic development goals and objectives are linked to policies contained in other Community Plan elements and will be supported through consistent implementation of the Community Plan as a whole

#### CONTEXT

C Merced will potentially confer significant benefits to the economic University Community and the region as a whole. These economic benefits will be a function of both the scale and character of the campus activities as they emerge over time as well as the economic, institutional, and policy framework in which they occur. As has been the case with other UC campuses, the economic impacts will very likely take decades to unfold. Initially, the campus will be relatively small, with enrollments below 10,000 students during the first decade of operations. The campus size, its location within Merced County, and the larger economic forces affecting the San Joaquin Valley will tend to obscure its economic impacts. Over time, however, the campus will be a part of and will support larger changes in the San Joaquin Valley, a region that is expected to experience significant population and employment growth during the first part of the 21st Century.

Integration of the campus and the University Community into the larger fabric of Merced County will present a number of challenges and opportunities. For example, the large amount of regionally competitive real estate in the area will affect market conditions and absorption within the University Community. In addition, the location of the campus may create development challenges and concerns regarding urban sprawl and environmentally related impacts. At the same time, the campus also has the potential to increase demand for a range of real estate products and development due to the unique activities and individuals it will attract.

The presence of UC Merced and its growth over time will serve as an economic catalyst to both University Community and Merced County as a whole in two distinct ways, as described below.

- a. Direct Economic Impact. The direct expenditures by UC Merced students, faculty, staff, and their families, as well as the University itself will increase demand for goods and services throughout the County, leading to the creation and expansion of local businesses and a corresponding increase in County employment. In addition, the new employment and housing requirements generated by UC Merced will increase demand for both commercial and residential real estate in Merced County.
- b. Indirect Economic Effect. Over the long-term the University has the potential to have a transformative effect on the regional economy by fostering a business environment that is attractive to industries and sectors currently under-represented or non-existent. For example, the presence of a University will expand and diversify the local labor force and may attract entrepreneurs and/or spin-off businesses that benefit from proximity and accessibility to a premier research institution. Although difficult to quantify, this effect will serve as a major asset to the surrounding University Community, generating real estate demand that may have otherwise occurred elsewhere in the region or not at all.

Despite the potential growth inducing impacts described above, the development of the University Community will occur in an economic context that presents significant challenges. First, unlike the regions surrounding most of the other UC campuses, Merced County currently possess a relatively small and undiversified economy. Based on a variety of economic indicators including unemployment, wages, personal income, and education levels, the County lags behind the state's average. In addition, there currently exists a very large supply of developable land that is designated for urban uses. This excess land capacity will provide a competitive backdrop to the University Community that may effect the pace and character of development.

#### **OVERVIEW**

ustainable principles of economic development are applied to create opportunities for local and regional economic strengthening and development. The policies of this section identify measures to foster and sustain direct and indirect beneficial impacts of the university through creation of a high quality community. A high quality community has a strong sense of place stemming from managed regional growth, vibrant town centers, quality of life amenities, and convenient, accessible living environments. The policies will enact land controls that concentrate early development near the campus, provide opportunities for mixed land uses, set aside land along major transportation

corridors for future development, and obtain a high quality master developer capable of implementing these policies. Increased expenditures and land area used to create public amenities and infrastructure—such as parks, pedestrian-oriented roads, and schools-will be balanced by realistic expenditure limits and adequate financing. Financial analysis will be integrated into the planning process, incorporating input from private developers and property owners. A comprehensive financing plan that includes a mix of state, federal, regional, and private sources will be prepared to ensure that funding mechanisms are implemented in an appropriate manner. Timing and the incidence of costs will be controlled through policies to reserve development sites for future phases, maximize the use of existing public facilities in early years, encourage the development of shared facilities that serve the Campus and Community, and support infrastructure solutions that allow for incremental investment rather than large up-front costs. Market and institutional uncertainties will be reduced through policies that utilize development agreements to codify entitlements and ensure development rights and obtain necessary regulatory approvals. Lands zoned for business centers and other commercial and research uses will be located adjacent to the Campus to capture UC generated business.

Economic sustainability in this Community Plan also addresses equitable opportunity to take advantage of the economic growth provided by UC Merced. Accordingly, goals for affordable housing will provide equitable opportunity for lower income residents to live in the Community.

# GOALS, OBJECTIVES, AND POLICIES

n economic, vital, and healthy University Community is dependent upon five fundamental principles: a strong community identity, complementarity with adjoining uses, mix of housing, financially feasible development, and synergy with UC Merced created economic opportunities.

#### A STRONG COMMUNITY IDENTITY



A distinct and strong identity for the University Community that distinguishes it from other places in the region. Planning and development efforts will create a mix and scale of land uses that establish a strong and unique "community identity." The University Community will create an environment and facilities that attract high-caliber students, faculty, and staff and that will enhance the overall educational, work, and living experience for all residents and businesses. This quality environment and quality of life will be the foundation of economic development in the University Community.

# **Objective**

#### **ED 1.0**

To manage regional growth.

The large amount of regional land supply for a wide range of urban uses contrasted with a proportionally small annual land absorption suggests that land use policies established and enforced by Merced County, the City of Merced and other cities will be needed to direct growth to desired locations, including the University Community. Failure to direct growth will weaken the success of both existing developed areas (e.g. downtown Merced) as well as the University Community and cause a host of other problems, including urban sprawl and premature conversion of agricultural lands from production. Special concern should be given to rural residential areas between the City of Merced and the University Community to avoid random "strip" development along major transportation corridors.

#### **Policies**

#### **ED 1.1**

Establish a cooperative planning program with the City of Merced to assure that appropriate and coordinated land use controls are consistently applied within the north Merced area, both in the City and the County. (Imp 3.3)

#### **ED 1.2**

Maintain land uses surrounding the University Community in current General Plan designations and zoning, subject to further study regarding the appropriate type and pattern of uses that will complement the University Community. (Imp 2.1)

#### **ED 1.3**

Limit access on existing and new roads approaching the University Community and strictly control commercial land uses to maintain the visual quality and focus commercial development in the University Community, north Merced, or other existing commercial areas. (Imp 2.1, 3.3)

#### **ED 1.4**

Design development activity in the University Community to minimize conflicts with surrounding agriculture and thus help sustain the agricultural economy of the County (refer to Area Plan-Agriculture policies). (Imp 2.5)

#### **ED 1.5**

Designate commercial land uses in the University Community in proportion to demand generated by UC Merced and the Community. (Imp 2.5)

# Objective

#### **ED 2.0**

To establish a vibrant town center.

Community identity will be established through creation of a town center within the University Community that physically links the Campus to the Community. Creating a vibrant town center requires that it be active and lively into the evening hours. Cafes, bookstores, and restaurants with extended hours can be attracted to the town center to draw students and professionals alike and offer a welcome setting for studying and socializing if retail, service, and entertainment businesses are concentrated in one village center near the edge of the campus in the early phases of development. High density residential can also contribute to the success of the town center, providing customers within walking distance.





#### **ED 2.1**

Establish flexible, mixed-use planned development requirements for the Town Center that reflects the use and density policies of the Land Use section of the UCP. (Imp 2.5)

#### **ED 2.2**

Concentrate and mass development in the Town Center area through Specific Plan requirements and a joint marketing effort with the University to attract tenants and businesses that provide needed local services and complement the University's functions. (Imp 1.4, 2.5, .3.3, 5.11)

#### **ED 2.3**

Establish minimum density requirements and use land banking to secure sites for which market demand may not exist in early phases of development, as specified by Land Use policy. (Imp 2.5)

#### **ED 2.4**

Allow temporary interim uses of land banked sites to offset costs of holding the land for higher intensity uses. (*Imp 2.5*)

#### **ED 2.5**

Seek public investments (from grants, etc.) in amenities and facilities in the Town Center that improve the area and lower costs to prospective builders and tenants. (*Imp* 6.1–6.4)

### **Objective**

#### **ED 3.0**

To blend campus and community uses.

A "soft edge" will be established between the Campus and the adjacent University Community to create the mix and intensity of uses, facilities, and customer base needed to create a successful Town Center and Community. This reliance by the University Campus upon the Community will be essential in the early phases of development when the University-related activity will be the primary source of demand.

#### **Policies**

#### **ED 3.1**

Establish joint development and use of facilities with UC Merced such as performing arts center, parks and recreation facilities, and housing. (Imp 2.5, 3.3)

#### **ED 3.2**

Locate University-serving commercial uses in close proximity to the campus. (*Imp 2.5*)

#### **ED 3.3**

Create transparent roadway and pedestrian access to the UC Merced campus from the Town Center. (Imp 2.4, 2.5, 4.1)

# Objective

#### **ED 4.0**

To establish quality of life amenities for the University Community.

The University and the University Community will attract new residents and businesses to the immediate area and to the County as a whole. In this context, the University itself is the primary amenity. Other amenities such as infrastructure, landscaping, cultural facilities, schools, and recreational opportunities will be created to establish a high quality of life for residents of the University Community.

#### **ED 4.1**

Require development to achieve a high level of design quality that contributes to the Community's vitality, livability, and identity. Pertinent design standards and development guidelines shall be incorporated into each Specific Plan (refer to Land Use policies). (Imp 2.5, 2.9)

#### **ED 4.2**

Coordinate with the local school districts to provide timely and high-quality primary and secondary educational facilities. Linkages between the secondary schools and UC Merced should be promoted (refer to Public Services—Education). (Imp 4.7, 5.8)

#### **ED 4.3**

Achieve a high standard for public landscaping throughout the University Community area and promote artwork in public areas and rights-of-way. (*Imp 2.5*)

#### **ED 4.4**

Include community centers, libraries, and other cultural facilities in the Basic Improvement Program for the University Community. (Imp 2.5, .4.6, 4.8)

#### **ED 4.5**

Ensure adequate provision and funding of public services, establish service-level standards for services such as public safety and recreation, and so on. (*Imp* 6.1–6.4)

# A COMMUNITY THAT COMPLEMENTS ADJOINING LAND USES AND THE CITY OF MERCED

#### Goal

A community that complements existing developed areas.

The University Community should be conceived as a complementary part of the entire Merced County community and not as a separate entity. As such, development programming efforts should seek opportunities to strengthen existing neighborhoods and commercial areas rather then compete with and ultimately weaken them.

### **Objective**

#### **ED 5.0**

To encourage the development of local-serving commercial uses that focus on the needs and demand of University Community residents and the campus' population.

Ensure that retail, entertainment, and business service uses are oriented primarily to serving the campus and University Community. Specialty retail, service, and dining establishments can be blended with larger "chain stores" including a grocery store, book stores, apparel, etc. but opportunities for independent retailers and service businesses will be emphasized within the Town Center.

#### **Policies**

#### **ED 5.1**

Limit the commercial floorspace to the amount needed to serve neighborhood shopping demand of the residents, employees, and students of the Community and campus. (*Imp 2.2, 2.5*)

#### **ED 5.2**

Limit large-scale, community-serving commercial uses to the Town Center and a Residential Village community commercial center in the southern portion of the site (south of Cardella Road). (*Imp 2.2, 2.5*)

#### **ED 5.3**

Establish an outreach program to attract local retailers and service businesses to the Town Center. (Imp 1.4, 5.11)

# Objective

#### **ED 6.0**

To exclude the development of large format regional retail commercial uses in the University Community, sustaining other regional centers in the City of Merced and County.

Large strip development or "power centers" (typically 250,000–500,000 leasable square feet of national and regional anchor stores) will be prohibited in the University Community. This type of development would detract from existing or planned uses elsewhere in the region, may worsen traffic and parking problems, and would detract from the Community's image as pedestrianfriendly and neighborhood oriented.

#### **ED 6.1**

Require application and approval of a special use permit for large (20,000 square feet and above), non-grocery, single tenant retail buildings. Such projects will be evaluated according to their potential impacts on regional commercial centers located in the City of Merced and other County areas. (Imp 2.5, 2.9)

#### **ED 6.2**

Limit commercial designations to the Town Center and Residential Village Centers in the University Community; prohibit the development of commercial uses as continuous linear strips on shallow parcel depths along the major arterial roads within the University Community. (Imp 2.1, 2.5, 3.3)

### ADEQUATE HOUSING TO SUSTAIN **ECONOMIC VITALITY**

#### Goal

A community containing a mix of housing opportunities to meet resident needs.

Achieve social and economic vitality both now and in the future by providing a wide range of housing product types at varied price points. A diversity of housing types will underpin economic development activities by providing for a diverse work force for jobs with UC Merced, in the Community, and throughout the Merced region.

#### **Objective**

#### **ED 7.0**

To provide a diverse mix of convenient and accessible housing to meet the needs of students, faculty, staff, and others induced by the presence of UC Merced.

The University Community will provide a convenient and accessible living environment for students, faculty, and staff. This proximity will reinforce community identity and enhance quality of life through short commuting times. Artists, entrepreneurs, and other small business owners often need flexible work space and may find it efficient to combine their residences with their studios, retail businesses, or offices. Providing flexible housing options fosters a dynamic social and economic environment that benefits the immediate community and the larger region.

Providing a range of affordable housing will be crucial to the long-term success of both the University and the University Community.

#### **Policies**

**Note:** The provision of adequate and affordable housing is an essential contributor to the economic vitality of the University Community. Housing section policies define a comprehensive set of strategies to meet these needs. The following synthesizes a number of the key policies that are integral for successful economic development.

#### **ED 7.1**

Promote and accommodate the development of a mix of housing units to serve the needs of students, faculty, staff, and other residents of the University Community. A component of "high end" executive housing should be developed in each phase to meet campus and regional demand for such housing. The specific mix and types of units accommodated shall be considered at the time of the preparation of Specific Plans and considered in view of buyer preferences, technical innovations, and overall demand. (Imp 2.5, 4.11)





### **ED 7.2**

Focus the development of multi-family housing near the campus, Town Center, and Residential Village Centers. (Imp 2.5, 4.11)

### **ED 7.3**

Permit flexible building standards that encourage mixeduse development combining retail, office, and residential uses, live/work facilities, second units in single-family areas, and other innovative housing types and construction methods. (Imp 2.6)

### **ED 7.4**

Develop a program for the provision of affordable housing, as specified by Policy LU 5.1, which may include the implementation of an affordable housing fee, charged to new commercial and residential development that will contribute to an affordable housing trust fund. Over time, as the University Community matures, this fee may increase or be replaced by an inclusionary housing requirement. (Imp 4.11)

#### **ED 7.5**

Seek partnerships with the University, other public agencies, and non-profit housing developers to secure land and construct affordable housing in the University Community. (Imp 3.3, 3.5, 4.11)

### A FINANCIALLY FEASIBLE COMMUNITY

### Goal

A community whose development and maintenance costs can be borne through private and public investment.

The University Community will not be successfully developed without ensuring the financially feasible of the necessary private investment. Specifically, the real estate value created must be sufficient to cover the costs of required infrastructure and public facilities, after accounting for risk and acceptable return on investment. This is especially important given the large supply of competitively zoned land that exists in the Merced region.

### **Objective**

#### FD 8 0

To optimize real estate value of the University Community with public and private investment

One of the most difficult challenges in developing a master planned community is balancing the need to provide high quality infrastructure and amenities with the need to reduce cost and maximize value. If excessive expenditures and land area are devoted to public amenities and infrastructure (e.g. schools, parks, roads, etc.), the resulting real estate products may be too expensive to succeed in a competitive market environment. Conversely, if public amenities and infrastructure are sacrificed to reduce costs, the University Community may not be able to differentiate itself as a desirable, high quality environment, resulting in a decline in market value.

### Policies

### **ED 8.1**

Provide appropriate flexibility, through the plan amendment process, with regard to development timing, product type, and design in order to respond to changing market conditions. (*Imp 2.5, 2.9*)

#### **ED 8.2**

Secure sites and right-of-way for public improvements and amenities through planning designation, dedication, and acquisition early in the development process. (*Imp 4.1*)

### **ED 8.3**

Coordinate private development with development of the UC Merced campus. (Imp 3.3)

### Objective

### **ED 9.0**

To apply public financing mechanisms and sources for development in the University Community.

A variety of public financing mechanisms and funding sources will be required to pay for the public infrastructure improvements and amenities envisioned for the University Community. Careful planning will be required to ensure that the development, timing, and coordination of all potential funding mechanism is implemented in a skillful and appropriate manner. In general, a comprehensive financing plan should include a mix of state, federal, regional, and private, land-based sources.

### **Policies**

### **ED 9.1**

Allocate a proportional share of infrastructure costs to benefiting entities, including UC Merced and other regional development. (Imp 6.1–6.4)

### **ED 9.2**

Seek grant funding for University Community infrastructure and facilities from outside sources, including state and federal government. (*Imp 1.3, 6.1–6.4*)

### **ED 9.3**

Establish cooperative financing agreements with property owners, UC Merced, and special districts, the City of Merced, and participating developer(s). (Imp 1.3, 2.7, 6.1–6.4)

### **ED 9.4**

Establish special development impact fee ordinance(s) for the Community Plan area that reflect and internalize the net proportional share of infrastructure costs (roads, parks, schools, utilities, etc.) to new development in the Area. (Imp 1.3, 2.5. 2.7)

### **ED 9.5**

In cooperation with private developers, sponsor land secured financing districts and other development-based public financing mechanisms to fund basic infrastructure in the Community. (Imp 1.3, 2.5, 3.4, 3.6)

### Objective

### **ED 10.0**

To optimize the timing and incidence of development costs.

Although the precise development schedule of the University Community is uncertain, buildout is likely to take many years to achieve. As a result, financial feasibility will require that infrastructure investments be closely linked to income generating development both in terms of timing and land use. Specifically, infrastructure investments should be phased so that major costs coincide with the development of value generating uses. In addition, costs should be allocated so that, to the extent possible, those land uses capable of bearing the burden cover a relatively higher share of the costs.

### **Policies**

#### **ED 10.1**

Phase infrastructure investments to match demand and value created as each Specific Plan area (Residential Village and Town Center) develops. (Imp 4.13)

### ED 10.2

Reserve land and development "pads" designated for uses that will be viable in later phases of development, such as a neighborhood commercial center or a business park or research and development (R&D) uses. (*Imp 2.5*)

### **ED 10.3**

Maximize the use of existing facilities in early years, such as schools and certain utilities, which defer major upfront expenditures. (Imp 4.4–4.7)

### Objective

### **ED 11.0**

To create an institutional framework for the efficient governance of the University Community.

Risk and uncertainty are key factors affecting the financial feasibility of the University Community. Currently, a variety of obstacles must be overcome prior to development, including environmental mitigation, infrastructure costing and financing, land assembly, and even the precise location and development schedule of the campus. Early resolution to these uncertainties through regulatory approval, refined cost estimates, and contractual commitments from UC Merced and other entities will greatly increase the attractiveness of the project to potential developers. In addition, land use controls included in the master plan and enforced with development agreements or other mechanisms will also reduce risk and increase project feasibility.

### **Policies**

### ED II.I

Establish agreements with and obtain necessary permits from applicable federal and state regulatory agencies regarding mitigation of habitat loss and impacts upon threatened and endangered species. (Imp 3.3)

### **ED 11.2**

Utilize the University Community Program Environmental Impact Report (EIR) to define and focus subsequent environmental review of Specific Plans and development applications. (Imp 2.3)

### **ED 11.3**

Adopt a Specific Plan Ordinance defining the intent, contents, standards, and procedures for creating and administering site-specific planning and zoning within the Community Plan area. The Specific Plan Ordinance should specify that Specific Plans prepared and adopted pursuant to the Ordinance would be adopted as the zoning ordinance for the specified area. (Imp 2.5, 2.6)

### **ED 11.4**

Assemble standard development conditions applicable to subdivision maps and/or development agreements. These standard conditions will implement Community Plan policy and other regulatory requirements associated with development of the University Community. (Imp 2.8, 2.9)

### **ED 11.5**

Form a Community Services District or similar entity, initially as a dependent district, to coordinate and manage infrastructure development and financing and the provision of municipal services within the University Community. (Imp 3.4, 3.6)

### **ED 11.6**

Seek an amendment to the City of Merced Sphere of Influence, if appropriate, to clarify service delivery, annexation, and fiscal relationships between the County and the City of Merced. (*Imp 3.3*)

# STIMULATE ECONOMIC GROWTH CAPITALIZING UPON THE PRESENCE OF UC MERCED

### Goal

A community that develops economic enterprises that provide new job opportunities for local residents induced by the presence of UC Merced.

The presence of the University will expand and diversify the local job market and will attract new labor force, entrepreneurs, and spin-off businesses. The Campus Community should endeavor to foster the growth of economic clusters and accommodate new business ventures.

### Objective

### **ED 12.0**

To foster an environment for business development in the University Community.

Although the development of high technology and R&D firms are unlikely in the early phases of development, over time conditions favorable to this type of business creation may emerge. Necessary pre-conditions such as a well-educated work force, supportive business environment and services (e.g. hotels, financial institutions, airport), and a critical mass of R&D activity and academic institutions may converge to give rise to new businesses and economic clustering. The University Community should provide real estate options appropriate for this type of business development.

### **Policies**

### **ED 12.1**

Designate land zoned for a business center or research and development (R&D) that can be developed in later phases. Sites located close to UC Merced should be selected in order to promote synergistic momentum with UC Merced and to offer short commuting distances. (Imp 2.5)

### **ED 12.2**

Designate and reserve land for hotels and conference centers that can be developed in later phases as demand arises. (Imp 2.5)

### **ED 12.3**

Institutionalize policies and mechanisms to promote the University Community to the national and regional business community, focusing on opportunities that capitalize on the academic specializations and strengths of UC Merced. (*Imp 1.4, 5.11*)



# **Community Infrastructure** and **Services**

### TRANSPORTATION—ASSURING ACCESS AND MOBILITY FOR THE COMMUNITY'S RESIDENTS

### STATUTORY REQUIREMENTS

tate of California law requires that a circulation element of a General Plan or other similar planning document discuss the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public facilities, all correlated with the land use element of the plan. The requirement for correlation is particularly important, because the two elements should be developed simultaneously. The circulation element describes how transportation services will be provided in the community envisioned by the land use element. At the same time, the layout and capacity of streets and other transportation facilities influence the character of neighborhoods, the location of specific land uses, and the overall form of the community, as described in the land use element. Thus, the two elements are interrelated. The process of developing this University Community Plan (UCP) has allowed ongoing coordination of the goals, policies, and programs specified in both the land use and circulation elements.

### CONTEXT

### EXISTING REGIONAL AND LOCAL ROADWAY NETWORK

he University Community planning area is largely undeveloped, with limited roadway infrastructure in place. The site is accessed by two-lane rural roads, including Bellevue Road and Lake Road. Regional roadways in the vicinity of the University Community are shown in Figure 10 and include:

- Highway 99 is the primary regional facility providing access to San Francisco and Sacramento to the north, and Fresno, Bakersfield, and Los Angeles to the south
- Highway 140 is a major east/west highway providing regional access to Yosemite National Park to the east and extending to Highway 99 and Interstate 5 to the west
- Highway 59 is a north/south facility extending from Route 152 (near Los Banos) to Snelling, a community located north of the City of Merced

Major arterial streets in proximity to the University Community, also shown on Figure 14, include:

- G Street is a north/south road extending from Highway 99 to La Paloma Road
- Olive Avenue is an east/west street providing cross-town travel. West Olive Avenue connects State Route 59 and R, M and G Streets. It primarily serves a commercial corridor but also connects the northern portions of Merced to the City of Atwater, and Castle Air Force Base
- Bellevue Road is a two-lane east/west road extending from Fox Road to its eastern terminus at Lake Road
- Yosemite Avenue is a two-lane east/west road extending from R Street to its eastern terminus at Arboleda Drive
- Lake Road is a two-lane north/south road extending from Yosemite Avenue to its northern terminus at Lake Yosemite

Major capacity expansions are planned for many of the above facilities prior to or during the period of development for the University Community Plan.

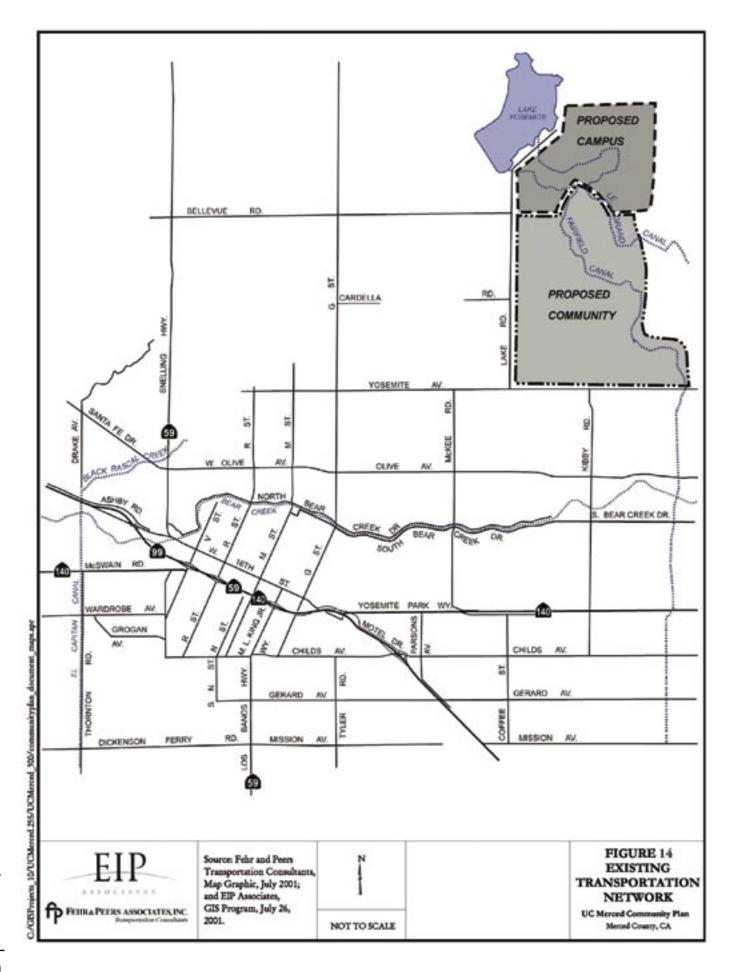
### OTHER TRANSPORTATION MODES BUS

Local transit service is provided by Merced County Transit, which is managed by the transportation division of the Merced County Department of Public Works. Urban transit routes connect downtown Merced, adjacent neighborhoods, and major trip generators such as the Merced Civic Center, hospitals, shopping areas, and Merced College. Rural routes connect outlying cities and communities in Merced County. Fixed route service is supplemented by a dial-a-ride service.

Transit service linking the City of Merced with other parts of the state is provided by private entities, including Greyhound Lines, which provides daily and weekend service from Merced to numerous California locations.

### **NONMOTORIZED MODES**

The City of Merced's bikeway system consists of Class I paths and Class II bicycle lanes along many of the major streets in the City and several of the local creek corridors. Merced County also maintains bike paths along portions of Bear Creek and along Lake Road to Lake Yosemite.



### PASSENGER RAIL

Amtrak provides daily passenger rail service to the San Francisco Bay Area, the San Joaquin Valley, and Yosemite National Park.

#### PLANNED IMPROVEMENTS

The Regional Transportation Plan (RTP), developed by the Merced County Association of Governments (MCAG), outlines long-range transportation improvement plans and objectives in the County. Several of the fully funded improvement projects identified in the 1998 RTP could potentially benefit the University Community; these projects are shown in Figure 15 and are listed below.

- 1. Campus Parkway
- 2. Highway 59, widen to 4 lanes from 16<sup>th</sup> Street to West Olive Avenue
- 3. Highway 59, new interchange at Thornton Road and expressway from Highway 99 to Belcher Avenue
- 4. Highway 140, widen to 4 lanes from Parsons Avenue to Kibby Road
- 5. Improve Highway 99/140 interchange, connect 16<sup>th</sup> Street to Highway 140
- 6. Improve Highway 99 interchanges at V and R Streets, complete 13th and 14th Streets as one-way couplet
- 7. Upgrade Highway 99 to freeway from Merced to Madera County, construct new interchange at Mission Avenue

The City of Merced has formally designated M Street as a "Transitway" or transit corridor. This corridor is a logical location for centralized bus service throughout the entire north/south length of the City. Light rail has been discussed as a possible mode for service along the M Street corridor, although it is unlikely to occur until the later stages of campus and Community development. An enhanced M Street transit corridor with connections to Bellevue Road and the University Community could offer convenient nonauto access to nearly every major destination in Merced.

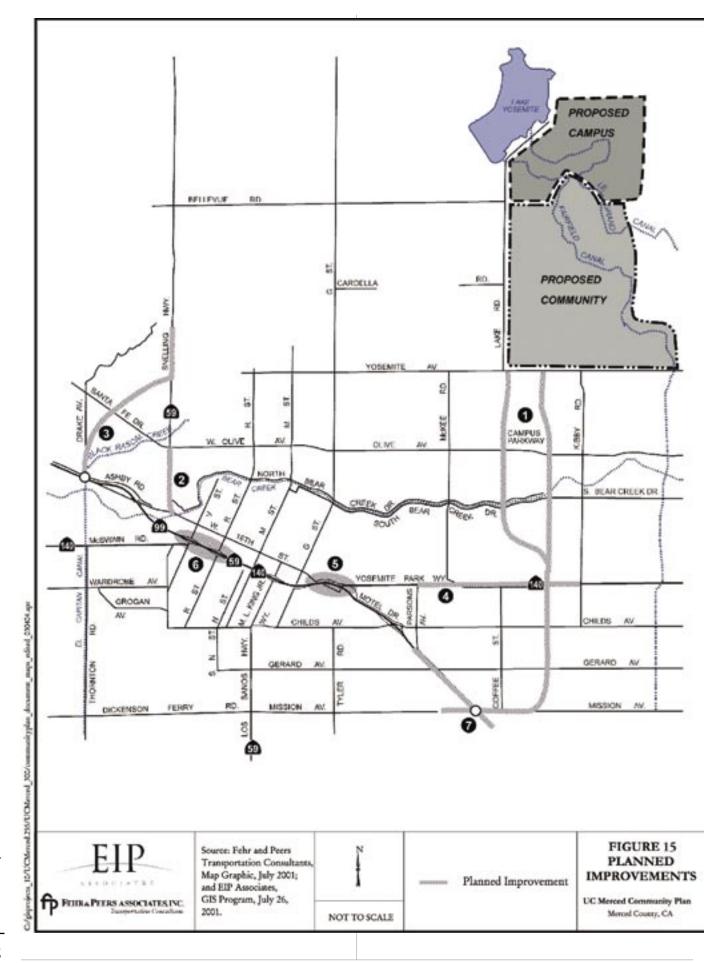
The extensive system of existing and planned bicycle facilities, the nature of University-related travel, and the development opportunities around the campus all point toward a significant component of nonmotorized travel. The Regional Bicycle Plan proposes a complete system of Class I and II bikeways for northern Merced, including Bellevue, Cardella, and Yosemite serving east/west travel, and Lake, Parsons/Gardner, and G Street serving north/south travel. Improvements and extensions are also proposed to the creekside paths along Bear, Rascal, and Fahrens Creeks, which primarily serve recreational travel.

The development of the University Community will present some challenges in terms of transportation infrastructure. The existing roadway system extending to the University Community will require upgrades in some areas, and new regional links must be constructed to serve the level of development anticipated. Given the time lines associated with the environmental review, design, financing, and construction of new infrastructure, very ambitious scheduling will be necessary to provide the basic system for travel to the UC Merced campus and University Community area. At the same time, many of the local improvements necessary for adequate circulation to and from the University Community will be partially or fully funded from sources with uncertain availability. For example, improvements funded partially or completely by new development will be tied to the pace and location of that development. These constraints are not unusual in a development project of this magnitude, but careful planning will be required to make the current goals a reality.

### **OVERVIEW**

lanning for the circulation system of the University Community focuses on integrating land use and transportation to minimize reliance on the automobile and impacts to adjoining land uses, while maintaining high levels of accessibility and personal mobility. There are a number of established policies, trends, and plans that present an opportunity to design a Community that relies less on single-occupant automobile travel than would traditionally occur, and this UCP expands on those opportunities. The success of this theme will derive from transportation planning and programming that establishes a non-motorized, transitoriented "culture" from the earliest stages of Community development, and preserves that culture throughout the evolution of the Campus and Community. Creating this culture will depend on early investment in bicycle, pedestrian, and transit systems and amenities, as well as land use plans that ensure the levels of diversity, density, and design normally associated with pedestrian- and transit-friendly environments.

For the University Community as a whole, the diversity of the land use mix will be one of the primary means of minimizing transportation capacity requirements. The land use element of this Plan includes a healthy mixture of uses, such as academic, residential, retail, office, recreational and cultural. Given the large size of the University Community relative to the City of Merced, any imbalance between campus population and the amount of available nearby housing will translate directly to heightened transportation impacts. The same will be



true of any lack of opportunity to develop needed services, amenities, and university-related spin-off activities such as incubator space for new businesses. The land use and circulation elements of the Plan are mutually supportive.

Secondary, but important, land use factors will be density and design, including population and employment density, density of the transportation network, walkability, transit orientation, and amenities for bicyclists and pedestrians. All of these factors must work together in order to be effective. Communities and university campuses with higher densities, traditional urban design forms, and effective demand management strategies that encourage walking and bicycling have traffic generation levels that are substantially lower than less dense, large-scale developments.

### **GOALS, OBJECTIVES, AND POLICIES**

he following section contains transportation policies that will contribute to the realization of the themes discussed previously.

# A COMPREHENSIVE, MULTI-MODAL TRANSPORATION SYSTEM FOR EFFICIENT TRAVEL

### Goal

A transportation system that allows safe and efficient travel by a variety of modes and promotes the use of alternatives to the single-occupant vehicle, while minimizing impacts on adjoining uses and supporting the land use goals of this University Community Plan.

### **Objective**

#### T 1.0

To ensure that the Community's transportation infrastructure will adequately serve local and regional trips, provide appropriate connectivity, and minimize impacts to the transportation systems in the City of Merced and Merced County.

### **Policies**

#### T 1.1

Designate a functionally classified system of principal transportation facilities that represents the major backbone circulation system needed to serve the Community Plan at acceptable levels of service. A sketch of the proposed backbone system is shown in Figure 16. Definitions of

the street classifications are given in Table 3, and typical cross-sections are shown graphically in Figures 17 and 18. The precise alignment and standards for transportation facilities shall be defined by an Areawide Circulation Master Plan prepared prior to or concurrent with the preparation of the first sub-area Specific Plan. These may modify the elements shown on Figure 3 provided that the underlying goals, objectives, and policies of the UCP for urban form, community character, and mobility are achieved. These include the establishment of a system that:

- Supports the County Campus Parkway and underlying interconnected grid street system
- Provides access to and from UC Merced, that is interconnected with and prevents adverse impacts on the Community's Town Center and Residential Villages
- Promotes the use of public transportation and alternative modes
- Interfaces with the surrounding street network and development (*Imp 2.4, 2.5, 4.1*)

### T 1.2

Develop individual but coordinated master plans to guide design and implementation of the principal circulation infrastructure, including plans that address streets, bikeways, pedestrian ways, transit, and parking. (Imp 2.4, 2.5, 4.1, 4.8)

### T 1.3

Reserve adequate rights-of-way to implement the designated circulation systems and designate access management restrictions for adjoining properties. (*Imp 2.5*, 2.6, 4.1)

### T 1.4

Promote the timely development of the principal circulation system, through phases coordinated with implementation of the land use element and with preparation of sub-area Specific Plans. (Imp 1.2, 4.13)

### T 1.5

Ensure that regional transportation improvement programs keep pace with future needs, through coordination with the County, City, MCAG, and other regional agencies. Work with MCAG to augment the regional travel demand model to reflect the proposed land uses and circulation system within the Community area. The model will be used as a tool for evaluating and monitoring impacts of the Community Plan and future Specific Plans on the regional transportation system. (Imp 4.12)

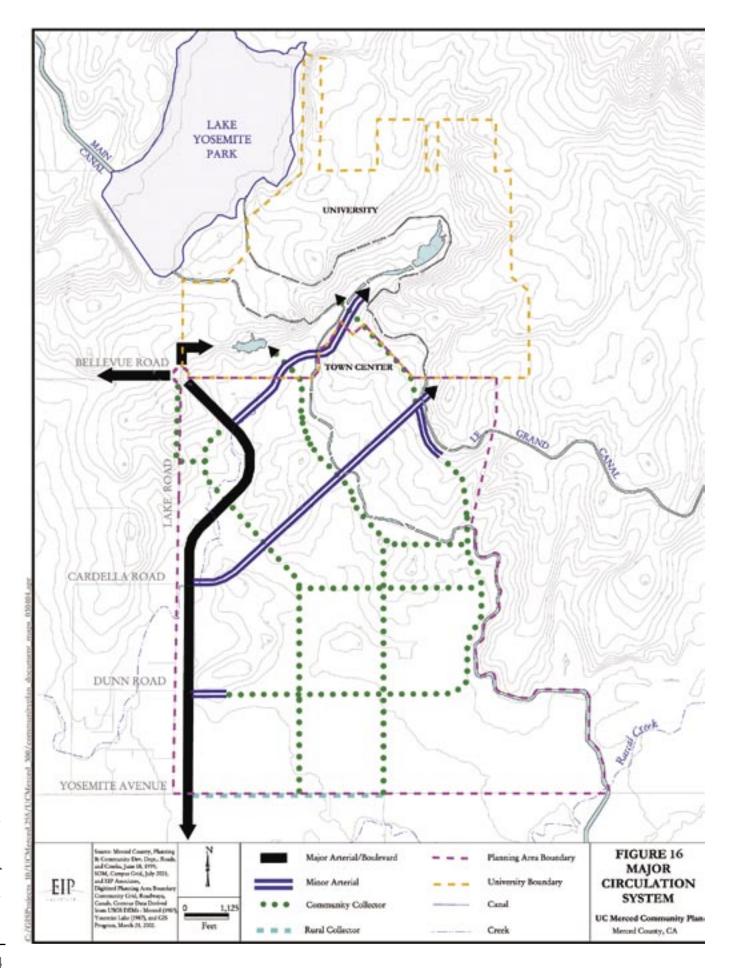
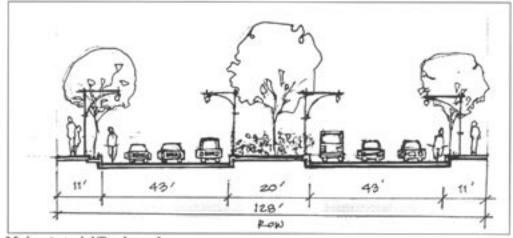
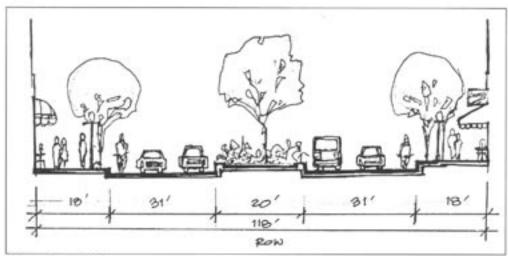


TABLE 3 C	TABLE 3 CLASSIFICATION SYSTEM	STEM FOR PRINCIPAL ROADWAYS IN UNIVERSITY COMMUNITY PLAN AREA	OADWAYS	IN UNIVERSI	TY COM	MUNITY	PLAN ARE	A
Classification	Example of Street in University Community	Type of Adjoining Use	Posted Speed Limit <sup>,</sup>	Intersection Spacing	# of Lanes²	Right-of-Way (ft.)	Paved Width² (ft.)	Right-of-Way Paved Width? Typical Daily (ft.) (ft.)
Major Arterial/ Boulevard	Campus Boulevard	Residential/ commercial Business Center	35–45	/4 mile	9	128	011-001	30–40,000
Minor Arterial	West Commerce Drive (Cardella extension)	Business Center Commercial	25	½ mile +	4	81	80–90	20–30,000
Minor Arterial/ Business Route	East Commerce Drive	Town Center Village Center Parks/ Recreation	25	300 feet	4	110-118	90–95	15–25,000
Rural (Transitional) Collector	Yosemite Ave.	Agricultural Rural Residential	35	½–1/4 mile	3	80	55	5–15,000
Community Collector	Various Village streets	Residential³ School/Parks Village Center	25	300 feet	2–3	70–80	20–60	5–15,000

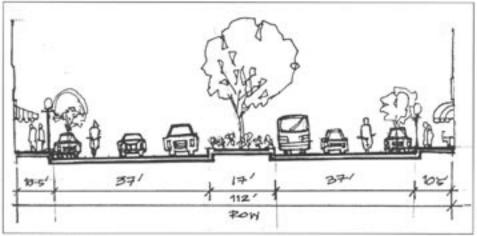
- I. Design speed generally 5–10 mph greater than posted speed limit.
- residential setbacks. In general, all roadway types include a center median and bicycle lanes. Parking would be allowed only on business routes and community collectors. Trucks would be permitted on most roadway types, with local deliveries only in residential areas. 2. Represents size at ultimate buildout; roads may be built in phases with fewer lanes.
  3. On collectors designated for the higher end of volume range (10–15,000), residential development would be limited to higher density housing with consolidated driveways and/or greater



Major Arterial/Boulevard



Minor Arterial

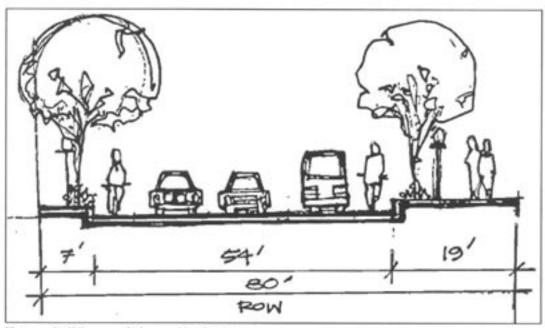


**Business Route** 

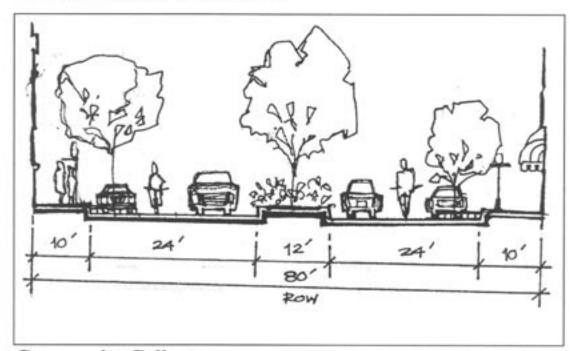


### FIGURE 17 STREET CLASSIFICATION TYPICAL CROSS-SECTIONS

UC Merced Community Plan Merced County, CA



Rural (Transitional) Collector



**Community Collector** 



### FIGURE 18 STREET CLASSIFICATION TYPICAL CROSS-SECTIONS

UC Merced Community Plan Merced County, CA

### **Objective**

### T 2.0

To create a network of secondary streets that provides for multiple routes between various origins and destinations to disperse rather than concentrate traffic, provide full connectivity for bicycles and pedestrians, and reduce emergency response times.

### **Policies**

### T 2.1

Design the Community's street system in a grid (or curvilinear grid) pattern, to disperse traffic throughout the community and provide multiple connections to most destinations. Figure 19 includes an illustrative representation of a grid street pattern, compared with a system based on cul-de-sacs. (*Imp 2.5, 2.7, 4.1*)

### T 2.2

Discourage cul-de-sacs and other non-connecting street types. (Imp 2.5, 2.7)

### STREETS THAT ENHANCE COMMUNITY LIVABILITY

### **Objective**

### T 3.0

To provide attractive streets compatible with adjoining land use activities and designed to serve a broad spectrum of travel modes as well as automobiles.

### **Policies**

#### T 3 I

Define a set of street design standards that minimize paved area while ensuring safe and adequate access to the Community. (Imp 2.4–2.6, 4.1)

### T 3.2

Specify flexible design standards for arterial and primary collector streets to accommodate the mix of travel modes that may develop over time. (*Imp* 2.4–2.6, 2.8, 4.1)

### T 3.3

Design roadways that are compatible with adjacent land uses, through choice of street width, median and landscaping treatment, parking provision, pedestrian/

bicycle accommodation, and access management strategies. The following images illustrate the concept. (Imp 2.5, 2.6, 4.1)

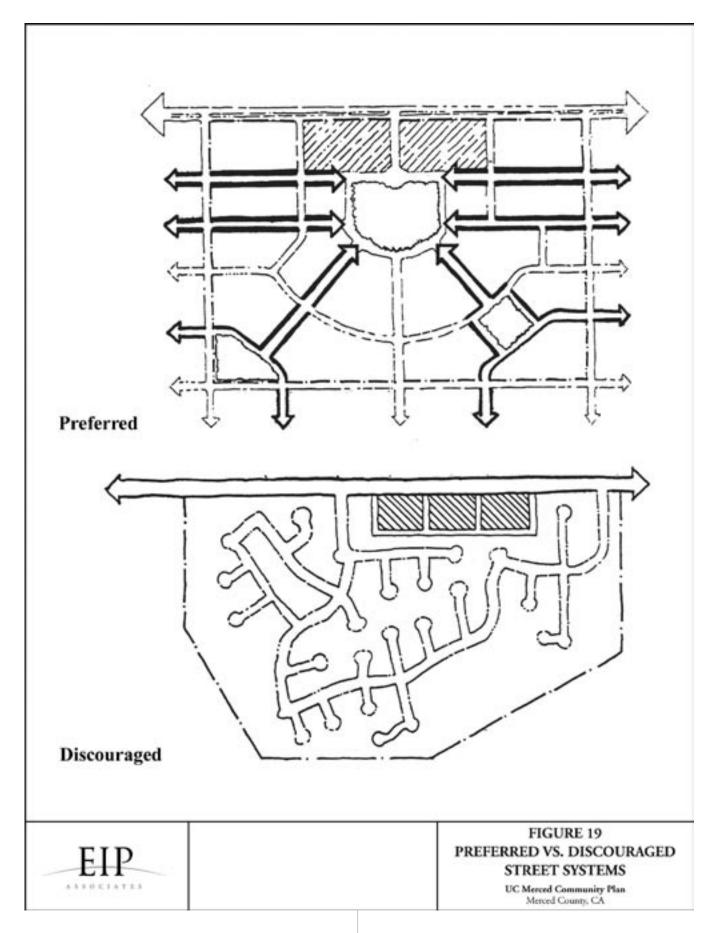






### T 3.4

Accommodate a "transitional" roadway type in places where the Community borders rural areas to minimize conflicts between agricultural and urban users. The following image provides an illustration of this type of roadway. (Imp 2.5, 2.6, 4.1)





### T 3.5

Protect the quality of residential areas by reducing or controlling traffic routing, volumes and speeds on local streets. Integrate traffic calming measures into street design, to enhance livability of neighborhoods. Examples of calming measures may include roundabouts, neckdowns, raised crosswalks, and narrow or curving streets; illustrations of these measures are shown in the following images. (Imp 2.5, 2.6, 5.1)









### T 3.6

In addition to the County's traditional vehicle level of service (LOS) standard, define a "Person LOS" standard to measure the travel characteristics of all modes, and apply it in conjunction with the existing County standard. To maintain fundamental consistency with adopted County General Plan policies, in no case would a roadway be designed to operate below the existing County minimum vehicle LOS standard. However, in those cases where improvements to walk, bicycle, or transit modes could be made without causing the traffic LOS to deteriorate below the County standard, such improvements would increase the Person LOS measure and would be encouraged. (Imp 2.3, 2.6, 2.8)

### A COMMUNITY THAT IS FRIENDLY TO WALKERS AND CYCLISTS

### **Objective**

### T 4.0

To emphasize walking and the use of energy-efficient and low- and non-polluting forms of transportation, including bicycles.

### **Policies**

### T 4.1

Create a complete, interconnected bicycle and pedestrian circulation system that serves both commuter and recreational travel, and provides access to major destinations. (Imp 2.5, 4.1, 4.8)

#### T 4.2

Work with UC Merced to establish convenient pedestrian and bicycle access routes to and through Campus. (Imp 3.3, 4.8)

### T 4.3

Install amenities to serve bicyclists and pedestrians, such as secure and convenient bicycle parking and shaded seating areas at public facilities. (Imp 2.7, 4.1)

### T 4.4

Establish bicycle parking standards for new development. (Imp 2.2, 4.1)

### T 4.5

Work with the transit provider to encourage transitbicycle transfers by installing bike racks on buses. (Imp 3.3, 4.1)

Objectives and policies in the Land Use Element of this Plan dealing with development density, mixture of uses, and design elements also serve to support this objective, as do certain policies associated with circulation objectives T 3.0 and T 7.0.

#### A COMMUNITY THAT USES PUBLIC TRANSIT

### **Objective**

### T 5.0

To encourage transit usage, with emphasis on energy-efficient, low-polluting forms of public transportation.



### **Policies**

### T 5.1

Promote and, where appropriate, participate in the development of high-frequency transit services that seamlessly connect major destinations, including the UC Merced campus. Encourage convenient transfers between transit and other modes of travel. (Imp 3.3, 4.1)

#### T 5 2

Work proactively with local and regional transit providers to coordinate transit service. Work with transit providers, the regional Air Pollution Control District, and public utility providers to encourage actions that reduce pollution from transit vehicles (such as purchasing vehicles that use alternative fuels, and providing fueling/ charging stations). (Imp 3.3)

### T 5.3

Establish a transit hub at the interface between the town center and campus core for timed-transfers between local campus/Community transit service and regional transit connections serving the City of Merced, the rest of Merced County, and major interregional destinations. (Imp 2.5, 3.3, 4.1)

### T 5.4

Work with UC Merced to design a transit fare policy and transit pass system that provides maximum incentives for transit ridership for University students and employees. (Imp 3.3)

### T 5.5

Establish development standards, such as inclusion of handicap-accessible bus stops and shelters, to make transit attractive. Require development to fund its fair share of necessary transit facilities. (Imp 2.5–2.7, 4.1)

### T 5.6

Establish a County/City/University transportation clearinghouse and website that provides information on local transit services and alternative travel options. (*Imp 3.3*, 5.10)

### PARKING THAT SUPPORTS LIVABILTY



### T 6.0

To balance the need for parking with the desire to limit automobile travel, and minimize parking intrusion in residential neighborhoods.

### **Policies**

#### T 6.1

Plan for parking reservoirs at gateways to the Town Center for use by multiple tenants and residents. Discourage development of fragmented parking facilities that serve single parcels. (*Imp 2.5*)

#### T 6.2

Encourage shared parking facilities at the interface between the Town Center and the UC Merced campus. UC Merced and the Community would jointly determine the appropriate parking supply, as well as the control and enforcement of use. Encourage development of parking structures in the Town Center when warranted by employment and residential densities. (*Imp 2.5, 3.3*)

### T 6.3

Develop parking requirements that are consistent with the goals for increased use of alternative transportation modes, and that acknowledge shared parking opportunities. (Imp 2.5, 2.6)

### T 6.4

Encourage use of "intelligent parking systems" such as message signs indicating real-time parking availability by location. (*Imp 4.1*)

### T 6.5

Provide priority parking for vanpools, carpools, and energy-efficient and low-pollution vehicles, including recharge stations for electric vehicles. (*Imp 2.5*)

### T 6.6

Designate residential permit parking areas as needed to protect neighborhoods from parking intrusion from adjacent land uses. (Imp 5.1)

### T 6.7

Enforce permit parking restrictions in residential areas near campus, and parking time limits in town center. (Imp 5.2)

### **REDUCING AUTOMOBILE TRIPS**

### Objective

### T 7.0

To encourage the use of transportation demand management (TDM) strategies to provide attractive, competitive alternatives to single-occupant auto travel and to assist in mitigating traffic impacts and maintaining a desired level of service on the circulation system.

### **Policies**

### T 7.1

Encourage non-residential developments to offer telecommute and flexible work-hour opportunities, and provide employee incentives for using transit, ridesharing, bicycling, and walking. (*Imp 5.1*)

### T 7.2

Locate parking at strategic intercept points to minimize driving into and through central areas of the Community and Campus. Serve remote parking with frequent transit shuttles. (Imp 2.5, 3.3, 4.1)

### T 7.3

Promote ridesharing through public information and outreach. (Imp 5.10)

### T 7.4

Encourage non-residential developments to provide amenities for bicyclists, including showers and changing facilities. (Imp 2.5, 2.7, 5.10)

### **MANAGING TRAFFIC REGIONALLY**



#### T 8.0

To ensure adequate coordination with neighboring jurisdictions and regional agencies to manage traffic growth on a regional level, and coordinate transit, bicycle and pedestrian systems and services.

### **Policies**

### T 8.1

Require all Specific Plans to include traffic and circulation studies that:

- Assess internal circulation system needs and develop a traffic circulation plan for the Specific Plan area
- Demonstrate consistency with the circulation policies of this Community Plan
- Identify regional transportation infrastructure connectivity requirements
- Identify specific traffic impacts related to the Specific Plan and improvement measures to mitigate these impacts (Imp 2.5)

### T 8.2

Circulate all relevant traffic and circulation studies to neighboring jurisdictions that may be affected by the proposed development. (Imp 3.3)

### T 8.3

Establish funding mechanisms to fairly distribute the costs of required new off-site infrastructure. (Imp 6.1–6.4)

### WATER-RELATED INFRASTRUCTURE—AN INTEGRATED AND SUSTAINABLE SYSTEM

### STATUTORY REQUIREMENTS

he state of California does not include Infrastructure among the mandatory elements of a general plan. However, Government Code \$65303 allows local government to adopt any other elements or address any other subjects that in the judgment of the local government relates to the physical development of the community. Once adopted, the non-mandatory elements become a full-fledged part of the general plan with the same legal authority and effect as one of the mandatory elements. It should further be noted, that many of the goals, objectives and policies presented below in the Water-Related Infrastructure Element involve issues typically addressed in one or more of the mandatory elements. For example, the water conservation policies in this element would typically be included in the Conservation Element, some of the storm drainage policies would typically be included in the Safety Element, and a number of policies related to multiple use detention facilities would typically be addressed in the Land Use Element and/or Open Space Element.

### **OVERVIEW**

he University Community Plan envisions an integrated system of water-related infrastructure that meets the needs of future residents and businesses, and that takes advantage of innovative techniques to achieve the highest levels of sustainability. Key characteristics of the University Community water-related infrastructure will include the highest level of water conservation, innovative techniques for wastewater collection, treatment and reuse, and environmentally sensitive stormwater management.

Traditionally, water-related infrastructure has been characterized by:

- 1. Separation of systems for the delivery of potable water, the collection, treatment and disposal of wastewater, and the collection and conveyance of stormwater
- 2. Consideration of potable water as an unlimited resource, to be utilized for all purposes regardless of quality requirements
- Treatment of wastewater as dangerous and harmful, quickly conveying it some distance from the urban area for treatment and disposal

Treatment of stormwater as a flood control problem to be managed through rapid conveyance from developed areas

Development of the University Community provides a unique opportunity for the construction of water-related infrastructure that is based on a more sustainable concept of water and water-related infrastructure, characterized by:

- 1. Integration of water, wastewater, and stormwater infrastructure as a single system of water use and management
- 2. Consideration of potable water as a limited and valuable resource to be used judiciously and conserved to the maximum extent practicable
- 3. Consideration of wastewater as a nutrient-rich resource that, if treated and used appropriately, can bring value to the University Community and reduce the demand for potable water
- Consideration of stormwater as a valuable source of water to meet the needs of University Community residents, businesses, and open spaces

Reflecting these sustainable characteristics, the University Community can be developed based on an integrated water-related infrastructure system that will maximize the conservation of water by using all sources of water and closely matching the quality of water to specific needs in the Community. Consistent with the UCP, an areawide water infrastructure master plan will be developed prior to or concurrent with the first stages of development that will detail specific improvements that meet these goals and objectives.

It is anticipated that groundwater will be the source of potable water in the University Community, however the use of potable water can be minimized to a large degree through the creative use of recycled wastewater and stormwater in a way that will make the University Community an example of water conservation in the region.

Flexibility and innovation in the technologies used for collection and treatment of wastewater is encouraged in the University Community. The most densely developed portions of the University Community can be tied to a wastewater collection system connected to a new wastewater treatment and recycling plant The plant would be a source of high-quality, tertiary-treated recycled water that can be used for non-potable purposes, including landscape irrigation, toilet flushing, and uses that do not involve human contact. The University Community water recycling plant may be connected to a local wastewater treatment plant that would provide treatment and disposal during portions of the year during which the wastewater flow exceeds the demand for recycled water. Alternatively, on-site storage may be provided for treated wastewater in portions of the Community Plan area expected to remain vacant for many years. In less densely developed portions of the University Community, particularly in the Residential Villages, on-site decentralized wastewater treatment systems will be encouraged. These systems provide high levels of filtration and disinfection of wastewater effluent, which is then distributed in subsurface drip irrigation systems for landscaping purposes. The exact portion(s) of the University Community to be served by decentralized wastewater systems will be determined during the preparation of the Areawide Infrastructure Plan and Specific Plans.

In the University Community, stormwater runoff can be managed in a way to maximize the utilization of stormwater as a valuable resource and to minimize the public investment in expensive water conveyance facilities. Building lots can be graded and landscaped areas can be designed to capture and store rain runoff at the lot, reducing peak runoff and the size of stormwater conveyance facilities in the Community. Where conveyance facilities are necessary, they can be designed as natural features to support natural habitat and to serve as visual amenities within park and open spaces of the Community. Where soil conditions allow, stormwater retention and conveyance facilities can be designed to maximize groundwater recharge. To the extent that stormwater must be conveyed from the University Community, the MID Fairfield Canal may be a primary facility for the disposal of stormwater outside of the Community.

As a whole, the University Community water-related infrastructure will be reflective of the goals of the Merced Water Supply Plan (MWSP), jointly sponsored by the Merced Irrigation District and the City of Merced. The MWSP seeks to protect regional water resources and to meet increasing demands by conjunctively using groundwater and surface water to meet agricultural and urban water needs, specifically matching water quality requirements with sources of water.

### GOALS, OBJECTIVES, AND POLICIES

his section outlines the overall issues, goals, objectives, and policies aimed at the development of an integrated, sustainable water infrastructure system that will meet the University Community's needs for potable water, recycled water, wastewater, and stormwater infrastructure. Each section provides information on the issues associated with water, wastewater, and storm drainage. Under each issue, specific goals, objectives, and policies are identified. Generally, several policies are recommended for each issue. Consistent with the concept of an integrated water-related infrastructure system, the goals, objectives, and policies presented herein are appropriately integrated and presented by topic rather than by type of infrastructure. However, to assist the reader, where multiple policies exist they are presented in order to first address potable water, then wastewater treatment and recycling, and finally stormwater management.

### INFRASTRUCTURE THAT IS ADEQUATE AND RELIABLE

Water-related infrastructure in the University Community must be adequate to meet the needs of future development and to avoid adversely affecting adjacent or nearby uses. Systems must be designed to exceed minimum requirements under a variety of operating conditions and emergency situations, including drought, fire, and significant storm events. A key element of ensuring the adequacy and reliability of water infrastructure over the long-term is ensuring the affordability of systems that are designed and planned.

### Goal

Adequate and reliable water-related infrastructure systems.

### Objective

#### IW 1.0

To develop water-related infrastructure systems that are adequate to meet the needs of the University Community.

### **Policies**

### IW 1.1

Ensure the provision of potable water infrastructure (wells and storage) to provide water supply to meet community needs. (Imp 2.4, 2.5, 2.8, 4.2, 5.4)

### IW 1.2

Require that an adequate water supply be demonstrated before approving new development. (Imp 2.8, 5.4)

### IW 1.3

Require that a water distribution system (line pressure, pump stations, pipes, valves, connections, storage facilities, etc.) be designed, constructed, and operated in accordance with applicable standards prior to occupancy. (*Imp 2.4, 2.5, 2.8, 4.2*)

### IW 1.4

Ensure the provision of water systems that match appropriate water quality to water use requirements. (Imp 2.8)

### IW 1.5

Design potable water system to meet federal and state drinking water regulatory standards. (Imp 2.8)

### IW 1.6

Required that water supply wells be developed, constructed, and installed in accordance with the American Water Works Association (AWWA) Standards A-100 for Water Wells and the water well standards presented in applicable California Department of Water Resources Bulletins, or the most current standards at the time of development. (Imp 2.8)

### IW 1.7

Require that new water sources meet or exceed the DHS Title 22 regulation regarding water quality. (Imp 2.8)

### **IW 1.8**

Require that adequate capacity exists to treat the wastewater flows generated by development and that sufficient capacity is available for the treatment and disposal of sludge before approving new development. (Imp 2.4, 2.5, 2.8, 4.2, 5.4)

### IW 1.9

Ensure the provision of adequate stormwater conveyance and storage infrastructure to accommodate planned development. (*Imp 2.4, 2.5, 2.8, 4.2*)

### IW 1.10

Encourage the provision of on-site wastewater treatment and disposal, where feasible. (Imp 2.5, 2.7)

### IW 1.11

Establish as the highest priority the development of on-site storage for treated wastewater that reduces the need for connections to local community wastewater treatment systems and which maximizes the availability of recycled water for appropriate uses in the University Community, where feasible and timely in consideration of its technology, costs, funding, practicality, and permitting requirements and processes. (*Imp 2.5, 2.7*)

### IW 1.12

Require that wastewater flows be minimized through water conservation efforts. (Imp 2.5, 2.7, 5.10)

### IW 1.13

Ensure the provision of stormwater conveyance and storage infrastructure to accommodate planned development. (*Imp 2.5, 2.7, 2.8, 4.2, 5.5*)

### **IW 1.14**

Ensure that the stormwater conveyance and storage system is designed consistent with Merced County standards. (Imp 2.8)

### **IW 1.15**

Require the reservation of right-of-way and easements for designated water-related infrastructure facilities as a condition of project approval. (*Imp 2.5, 2.7*)

### Objective

### **IW 2.0**

To develop water-related infrastructure systems that are reliable.

### **Policies**

### **IW 2.1**

Ensure the provision of water-related infrastructure systems that allow operation under multiple demand scenarios and emergency conditions. (Imp 2.4, 2.5, 2.8, 4.2)

### **IW 2.2**

Ensure the provision of reliable water supply sources to ensure availability during drought conditions. (Imp 2.4, 2.5, 2.8, 4.2)

### IW 2.3

Ensure the provision of water supply, storage, and adequately sized pipelines to provide fire flows at any point within the Community to meet recommendations of the Insurance Services Office (ISO) and/or the County Engineer, while maintaining minimum pressures in accordance with requirements outlined in the California DHS/Waterworks Standards. (Imp 2.5, 2.8, 4.2)

#### IW 2.4

Ensure the provision of reliable water and wastewater treatment processes, with appropriate backup systems. (*Imp 2.4, 2.5, 2.8, 4.2, 5.4*)

### **IW 2.5**

Ensure the provision of a reliable water supply system by requiring adequate water storage to meet the needs of the University Community as follows:

- Diurnal Operational Needs (for meeting peak flows)—25 percent of peak daily demand
- Fire Reserve—provide fire reserve as required by the ISO, California DHS/Waterworks Standards, and the standards of Merced County
- Emergency Storage—25 percent of average daily demand (Imp 2.4, 2.5, 2.8, 4.2)

### Objective

#### IW 3.0

To develop water-related infrastructure systems that are affordable to future residents, homeowners, and businesses.

### **Policies**

#### IW 3.1

Ensure the provision of water-related infrastructure systems that will enhance the affordability of homes and businesses in the University Community at the time of construction and over the long-term. (Imp 2.4, 2.5, 4.2, 4.13)

### IW 3.2

Ensure that water-related infrastructure systems will allow for flexible and phased implementation throughout the buildout of the University Community. (Imp 2.4, 2.5, 4.2)

### INFRASTRUCTURE THAT IS EFFICIENT AND SUSTAINABLE

The water-related infrastructure that will serve the University Community must be efficient and sustainable. The fundamental design of water-related infrastructure systems is central to the ability of those systems to achieve goals for water conservation, energy conservation, cost-efficiency, water quality and enhancement of the natural environment. Achievement of these goals is central to the University Community Vision of a socially and environmentally sustainable community.

### Goal

Efficient water-related infrastructure systems that promote sustainability.

### Objective

### IW 4.0

Water-related infrastructure systems that are integrated in order to achieve efficiency and sustainability.

### **Policies**

### **IW 4.1**

Promote opportunities for habitat and community enhancement through the beneficial reuse of wastewater. (*Imp 2.4, 2.5, 4.2, 4.10*)

### **IW 4.2**

Require multiple use stormwater detention basins, including uses such as stormwater detention, water quality enhancement, recreation, wetland habitat, and species conservation. (*Imp 2.4, 2.5, 4.2, 4.8*)

### **IW 4.3**

Require the creation of recharge basins for stormwater recharge to the aquifer system, where feasible. (Imp 2.4, 2.5, 4.2)

### **IW 4.4**

Encourage the use of recycled water for wildlife habitat and for community enhancement through the creation of water features, including constructed wetlands, ponds, and fountains in the community. (Imp 2.4, 2.5, 4.2, 4.10)

### **IW 4.5**

Encourage the availability of recycled wastewater for agricultural users. (Imp 2.5, 4.2, 4.10, 5.5)

### **IW 4.6**

Require the inclusion of water reuse infrastructure within building systems and landscape irrigation systems, except where inclusion of such infrastructure is irrelevant or infeasible. (Imp 2.5, 2.6, 2.8)

### IW 4.7

Ensure that where recreational uses are included in multiple use detention basins they are designed to avoid inundation of playfields by more than one foot of water during the 10-year storm event, consistent with Merced County standards (as illustrated in Figures 20 and 21). (Imp 2.5, 2.6, 4.8)

### **IW 4.8**

Ensure that the design of multiple use detention basins protects public safety by minimizing hazards. (Imp 2.5, 2.6, 2.8, 4.8)

### Objective

### IW 5.0

To develop water-related infrastructure systems that achieve high levels of water conservation.

### Policies

### IW 5.1

Implement an active water conservation program in the University Community to reduce future water demand to the extent allowed by law by establishing building requirements for new construction, providing educational information through local media sources, and establishing effective rate changes to encourage conservation. (Imp 2.5, 2.6, 5.10, 6.4)

### IW 5.2

Require the use of best available technologies (BAT) for water conservation, including, but not limited to water-conserving toilets, showerheads, faucets, and water-conserving irrigation systems. (Imp 2.5, 2.6)

### IW 5.3

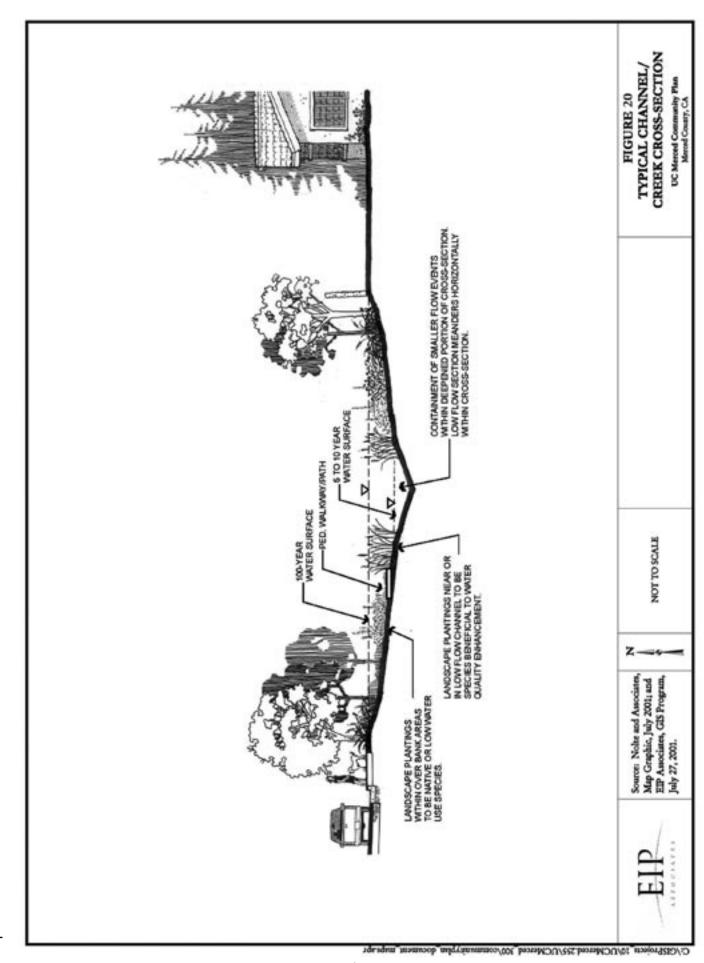
Require meters for all water connections. (Imp 2.5, 2.6)

### **IW 5.4**

Encourage the use of recycled water by industrial, commercial, recreational, and agricultural users through the use of incentives (i.e., differential pricing, uninterrupted supply). (Imp 2.5, 5.1, 5.5)

### IW 5.5

Require the construction of a distribution system for recycled water use that makes recycled water accessible to each developed lot in the University Community. (Imp 2.5, 2.7, 4.2)



Goals, Objectives, and Policies

### **IW 5.6**

Ensure the provision of recycled water at the appropriate quality required for a specific reuse opportunity. (Imp 2.5, 2.7, 4.2)

### IW 5.7

Ensure the construction of stormwater capture, storage and conveyance systems that allow for the productive use of runoff and that decrease demand for groundwater resources. (Imp 2.5, .2.7, 4.2)

### IW 5.8

Ensure the provision of captured stormwater runoff for irrigation of public facilities and/or recharge to aquifer on site to offset use of potable water. (Imp 2.5, 4.2)

### IW 5.9

Require that grading plans are designed to reduce runoff by capturing rain waters on site and that avoid "crowning" techniques that force rain waters into community drainage facilities. (*Imp 2.5, 2.7*)



### IW 5.10

Encourage the inclusion of rainwater "harvesting" (capture and storage) facilities in residential and non-residential development (including open space and recreational uses) through incentives that recognize the value of water conservation and associated reduced stormwater management costs. (Imp 2.5, 2.7)

### **Objective**

### IW 6.0

To develop water-related infrastructure systems that are highly efficient in the use of energy.

### **Policies**

### IW 6.1

Promote reuse at the point of generation (i.e., locate recycled water facilities as close as possible to reuse sites to minimize pumping distances). (*Imp 2.5, 2.7, 4.2*)

### IW 6.2

Ensure the provision of wastewater conveyance and treatment system(s) that minimize energy use. (Imp 2.4, 2.5, 2.8, 4.2)

### IW 6.3

Require the use of water supply and distribution and wastewater conveyance and treatment systems and equipment that at a minimum meets mandates for energy efficiency. (Imp 5.4)

### IW 6.4

Support the use of gravity flow in lieu of pumping in the design of wastewater and stormwater conveyance systems, wherever appropriate (i.e., align wastewater collection system to follow natural contours on site). (*Imp 2.4, 2.6, 4.2*)

### IW 6.5

Support the use of natural systems and rates for treatment of wastewater and stormwater when practical, as opposed to mechanical systems. (*Imp 2.5, 2.6, 4.2*)

### **Objective**

#### IW 7.0

To develop water-related infrastructure systems that are cost efficient over the long-term.

### **Policies**

### IW 7.1

Ensure that water-related infrastructure systems are designed to minimize life-cycle costs, including short-term and long-term costs. (*Imp 2.8, 4.2*)

#### IW 7.2

Conduct first cost and present worth analysis of technical options to identify initial and life cycle costs during infrastructure planning and design. (Imp 2.8, 4.2)

### IW 7.3

Ensure that water-related infrastructure systems are designed to maximize the system's "output" for beneficial use (i.e., maximize use of recycled water, capture and use stormwater, etc.), and consider any such cost savings in calculations of life-cycle costs. (*Imp 2.8, 4.2*)

### **IW 7.4**

Provide feasible alternatives for seasonal discharge of treated effluent, including on-site water storage and/or connection to a local municipal wastewater treatment facility. (Imp 2.5, 2.7, 4.2)

### Objective

### **IW 8.0**

To develop water-related infrastructure systems that protect the quality and quantity of surface and ground waters.

### **Policies**

### **IW 8.1**

Require that groundwater extraction does not result in localized groundwater drawdown that will substantially reduce the production rate of existing nearby wells to a level that would not support existing land uses beyond the reasonable life-cycle expectancy and long-term productivity of those wells in the absence of this project. (Imp 2.8, 4.2)

### IW 8.2

Prohibit direct discharge of treated wastewater to surface waters. (Imp 2.6, 4.2)

### IW 8.3

Ensure that wastewater collection and treatment system(s) are designed and constructed to protect groundwater and surface water from contamination by wastewater. (*Imp 2.8*, 4.2)

### **IW 8.4**

Ensure that wastewater treatment levels meet standards for intended reuse or discharge point. (Imp 2.8)

#### IW 8.5

Prohibit cross-connection of sanitary sewer and storm drain system. (Imp 2.8, 4.2)

### **IW 8.6**

Ensure that stormwater detention and groundwater recharge facilities are designed to avoid adverse impacts to groundwater. (Imp 2.8, 4.2)

### IW 8.7

Ensure that stormwater conveyance and storage facilities are designed and constructed to ensure no net deterioration in stormwater quality. (Imp 2.8, 4.2)

### **IW 8.8**

Ensure that water-related infrastructure is designed to support Merced Irrigation District local and/or regional groundwater recharge program(s). (Imp 2.8, 4.2)

### IW 8.9

Require the application of Best Management Practices (BMPs) for stormwater quality. (Imp 2.6, 4.2)

### IW 8.10

Encourage sensitivity to water pollution through educational and outreach programs aimed at the residential landowner. (Imp 5.10)

### Objective

### IW 9.0

To develop water-related infrastructure systems that enhance the natural environment.

### **Policies**

### IW 9.1

Encourage the design of stormwater conveyance and storage facilities to preserve, enhance, or create natural wetland habitats. (Imp 2.8, 4.2)

### IW 9.2

Encourage the location of stormwater detention basins near existing or re-created stream corridors. (Imp 2.5, 2.7, 4.2)

### IW 9.3

Encourage the design of stormwater conveyance facilities that retain or re-construct portions of natural drainages to maintain stream velocities at or near pre-developed conditions. (*Imp 2.5, 2.7, 4.2*)

### **IW 9.4**

Encourage the preservation of natural floodplains in the design of water-related infrastructure in order to reduce infrastructure construction costs and potential flood hazards to structures. (Imp 2.5, 2.7, 4.2)



### IW 9.5

Encourage the design of stormwater storage facilities that maximize opportunities for intermittent shallow water impoundment during the wet season. (Imp 2.5, 2.7, 4.2)

### IW 9.6

Ensure the design of stormwater storage facilities that promote the growth of native vegetation. (Imp 2.5, 2.7, 4.2)

### IW 9.7

Prohibit development, grading or structural improvements within the 100-year floodplain, except as consistent with Merced County standards. Recreational activities may be permitted within the floodplain. (*Imp 2.7, 4.2, 4.10*)

### IW 9.8

Encourage the inclusion of pedestrian, bicycle and equestrian paths through floodplain corridors to enhance circulation and recreational opportunities. (Imp 2.5, 4.2, 4.10)



### **Objective**

#### IW 10.0

To develop water-related infrastructure that is flexible and incorporates innovative technology.

### **Policies**

### IW 10.1

Ensure that long-term plans for the design and construction of water-related infrastructure include flexibility that allows for changes in technology, funding, and/or management. (Imp 4.2)

### IW 10.2

Ensure that water systems are designed to anticipate changes in the demand for water of different quality parameters. (*Imp 4.2*)

### INFRASTRUCTURE THAT COMPLEMENTS AND IS SUPPORTIVE

The University Community will be developed in unincorporated Merced County, adjacent to the future University of California, Merced, near and potentially connected to the City of Merced infrastructure systems, and within the service area of Merced Irrigation District. The water-related infrastructure systems that serve the University Community will affect infrastructure and land uses in the vicinity, and the presence of the developing university campus presents opportunities for the construction of facilities that will jointly serve both the

community and campus. A key element of the University Community Vision is that the University Community will compliment and support the UC Merced campus, the City of Merced and the region as a whole. As such, it is appropriate that this Plan contains goals, objectives and policies that address the ways that water-related infrastructure will support neighboring uses and systems, and will compliment infrastructure systems in the Merced region.

### Goal

Water-related infrastructure systems that complement and support neighboring uses and jurisdictions.

### Objective

### IW 11.0

To develop water-related infrastructure systems that complement adjacent and nearby systems.

### **Policies**

### **CITY OF MERCED**

### **IW 11.1**

Require that the University Community water supply infrastructure system is consistent with regional water supply plans, particularly the Merced Water Supply Plan. (Imp 3.3, 4.2)

### IW 11.2

Require that groundwater wells are sited consistent with City of Merced operational strategy. (Imp 3.3, 4.2)

### IW 11.3

Require that the University Community water supply strategy conforms to existing protocol for groundwater withdrawal and storage established by Merced Irrigation District and the City of Merced, and reflected in the Merced Water Supply Plan. (*Imp 2.8, 3.3, 4.2*)

### **IW 11.4**

Require that the groundwater well distribution conforms to the City of Merced well grid system. (Imp 3.3, 4.2)

### IW 11.5

Ensure, if necessary, that the wastewater systems include a connection to a municipal wastewater treatment system for discharge of wastewater in excess of amounts recycled and used on site or for other beneficial uses. (Imp 2.6, 3.3, 4.2)

### IW 11.6

Ensure, if necessary, that the opportunity for on-site seasonal storage of treated effluent is provided and consistent with state and local guidelines. (Imp 2.5, 2.6, 3.3, 4.2)

### IW 11.7

Ensure that water systems are designed to conform to local jurisdictional design standards, where such systems may be connected to the local jurisdiction. (Imp 2.8, 3.3, 4.2)

### UNIVERSITY OF CALIFORNIA, MERCED

### 8.11 WI

Ensure the design and construction of facilities that are sized to jointly meet the needs of the University Community and the UC Merced campus where appropriate. (Imp 3.3, 4.2)

### IW 11.9

Encourage the design and construction of joint wastewater treatment and water recycling facilities in collaboration with UC Merced to promote on-site water reuse and cost efficiency. (Imp 3.3, 4.2)

### MERCED IRRIGATION DISTRICT

### IW 11.10

Ensure that the design of proposed stormwater conveyance and storage facilities is compatible with existing capacity restrictions of MID facilities. (Imp 2.8, 3.3, 4.2)

### IW 11.11

Ensure that stormwater systems that discharge to MID facilities are designed consistent with MID requirements and construction standards. (Imp 2.8)

### Objective

### IW 12.0

To develop water-related infrastructure systems that complement neighboring uses.

### **Policies**

### IW 12.1

Require that the design and construction of facilities avoid any interruption of irrigation water delivery to downstream users. (Imp 2.6, 2.8, 4.2)

### IW 12.2

Require that the Fairfield 'A' Canal and associated laterals continue to function to supply users downstream as needed until such time as alternate facilities are provided. (*Imp 2.5, 2.6, 3.3, 4.2*)

### IW 12.3

Require that facilities that detain stormwater runoff are designed and constructed so that no adverse flooding impacts are created downstream. (Imp 2.8, 4.2)

### IW 12.4

Ensure that new development provides stormwater detention sufficient to limit outflow to a level consistent with downstream limitations. (Imp 2.8, 4.2)

### IW 12.5

For discharges to the MID facilities, limit the peak stormwater discharge to the available capacity at the time of discharge. (*Imp 2.8, 4.2*)

### IW 12.6

Require that groundwater extraction does not result in localized groundwater drawdown that will substantially reduce the production rates of existing nearby wells to a level that would not support existing land uses beyond the reasonable life-cycle expectancy and long-term productivity of those wells in the absence of the project. (Imp 2.8)

### IW 12.7

Ensure that water-related infrastructure is designed to support local and/or regional groundwater recharge program(s). (Imp 2.8, 4.2)

### IW 12.8

Locate and design above-ground infrastructure to be compatible with adjoining land uses through the use of screening, landscape, and aesthetic architectural design. (Imp 2.5, 2.8, 2.9, 4.2)

### IW 12.9

Cluster above-ground infrastructure, as feasible, to minimize its visibility and impacts on adjoining land uses. (Imp 2.5, 4.2)

### Objective

### IW 13.0

To develop water-related infrastructure systems that are well managed and operated.

### **Policies**

### IW 13.1

Establish as the highest priority the management and operation of the University Community water-related infrastructure (including all water, wastewater, and storm drainage systems) as a single interrelated system. (Imp 5.4)

### IW 13.2

Ensure the establishment of water-related infrastructure management institutions specifically for the oversight and operation of an integrated water infrastructure system. (*Imp 3.4, 3.6, 5.4*)

### IW 13.3

Require the implementation of monitoring programs to ensure systems consistently comply with applicable potable water regulations. (*Imp 2.10, 5.4*)

### IW 13.4

Maintain an adequate lead time, normally five years, in the planning of needed water-related infrastructure improvements and include identified improvements with the County's Capital Improvement Plan (CIP) and/or any other relevant jurisdictions. (Imp 5.4)

### IW 13.5

Require meters for all water connections. (Imp 2.6)

### IW 13.6

Require compliance with the National Pollution Discharge Elimination System Phase 2 program and monitoring of stormwater. (Imp 2.8)

### IW 13.7

Evaluate groundwater recharge capabilities every five years and ensure adequate long-term protection of groundwater resources. (Imp 2.10, 5.4)

### ENERGY INFRASTRUCTURE—SUSTAINABLE ELECTRICITY AND NATURAL GAS

### STATUTORY REQUIREMENTS

s indicated in the previous section, the state of California does not include Infrastructure among the mandatory elements of a general plan but permits local government to adopt any other elements or address any other subjects that in the judgment of the local government relates to the physical development of the community. While once a given, the provision of electrical and natural gas energy to a new community is of increasing concern. In particular, the identification of strategies that maximize conservation and use of alternative sources warrant careful consideration. This section of the UCP establishes such a program.

### CONTEXT

ith the passage of Assembly Bill 1890 (AB 1890) in 1996, California was the first state to deregulate its energy market. Under the new law, the transmission and distribution of electricity remains the responsibility of regulated utilities, but the generation of electricity is open to competition. The utilities are required to purchase all their electricity needs from the wholesale market. The goal of the legislation was to open the state's energy market to competition, with the expectation that competition would drive down the cost of electricity.



The restructuring law also froze electric rates for residential and small commercial customers of investor-owned utilities at a level 10 percent below where they were in 1996. The frozen rates were expected to be above the utilities' actual costs, thereby giving the utilities a chance to recover their past generation investments while guaranteeing lower rates for consumers.

However, the state experienced a number of problems at the same time the electricity industry was restructured. The demand for electricity grew faster than expected during the 1990s due to the rapid growth in the state's economy and population, spread of computer technology, lack of new power plants construction since the mid 1980s, and lack of widespread conservation due to relatively low electricity costs to consumers.

This was compounded by reductions in supplies available from other western states, particularly the northwest, which also experienced dramatic growth. Because most power plants in California are powered by natural gas, the cost of generating electricity has increased due to dramatic increases in the price of natural gas during 2000. In late 2000 and early 2001, some utilities, including Pacific Gas & Electric (PG&E), began to experience financial problems.

Electric Service Providers (ESPs) are a result of the 1996 restructuring of the California electrical industry and are non-utility retail service providers who buy all of their power from generators and distributors, and sell the electricity to consumers. Because ESPs provide service only through existing transmission lines, the University Community would be able to obtain electricity only through PG&E or MID. After the infrastructure is in place, the University Community could choose to obtain electricity through an ESP.

The energy facilities currently serving the University Community site are not adequate for development of the University Community's uses. New on- and off-site transmission and distribution lines and related facilities are required for electricity and natural gas service for the University Community.

### **OVERVIEW**

n the past, PG&E would have been the de facto provider of electricity and natural gas to the University Community and development would have been powered solely by electricity and natural gas. The restructuring of the electricity market in 1996 not only expanded the choices of providers of electrical power, but the impacts resulting from changes in energy supply and reliability emphasize the necessity for using diverse and alternative sources for the supply of energy. Therefore, policies that address the provision of energy to the University Community focus on the diversification of energy sources such as solar, wind, and fuel cells, in

addition to traditional sources. To be responsive to the advantages of the 21st century, flexibility would be built into the energy systems to take advantage of future technological advances.

Electricity and gas utilities provide the basic energy services necessary to support a highly productive Community. An energy services plan, as well as other policies for adequate, reliable, and redundant energy services, will promote security of daily operations to foster economic and community development. A reliable and conservation-oriented energy supply is encouraged through building-related conservation measures and through a balanced supply of electricity from the grid and from community-based energy production. Sources of distributed electricity generation will include renewable energy sources like wind and photovoltaic cells located on buildings or designated sites.

### **GOALS, OBJECTIVES, AND POLICIES**

he following section presents the goals, objectives, policies, and programs for the provision of energy services to the University Community site. These goals can help ensure that reliable, cost effective, and environmentally sound energy systems are supplied to the University Community. Pertinent policies must be considered for any development activity.

### ENERGYTHAT IS ADEQUATE, RELIABLE, AND SUSTAINABLE



An energy infrastructure that provides an adequate and reliable supply to the Community, reduces consumption, and is environmentally sustainable.

### Objective

### IE 1.0

To establish a coordinated approach for the development of a reliable supply of energy, which is flexible to take advantage of future technological advances.

### **Policies**

### IE I.I

Require that an Energy Services Plan for the entire University Community be developed as a component of the Infrastructure Master Plan and approved either before, or in conjunction with, approval of the first subarea Specific Plan. This Plan shall consider the phasing of the construction of the University Community to ensure that the infrastructure and capacity of the energy systems is able to meet the energy needs. Require that the design of the energy systems for each Specific Plan comply with the provisions of the Energy Services Plan. (Imp 2.5, 3.3, 4.3, 4.13)

### **IE 1.2**

Encourage the development of a diversified energy system that relies on electricity generated from nonrenewable resources and natural gas only when they are the best solution and instead uses renewable resources (e.g., solar and wind) and passive energy systems (e.g., natural light and ventilation) to the extent possible. (Imp 2.5, 3.3, 4.3)

### IE 1.3

Require that sufficient electricity and natural gas distribution facilities be designed, located, and constructed to meet energy demands prior to occupancy. (Imp 2.5, 3.3, 4.3)

### **IE 1.4**

Consider the use of portions of the UCP site and/or nearby properties for the development of alternative energy generation facilities (e.g., solar collectors or wind generators) that would reduce the dependency upon electricity generated from nonrenewable resources or natural gas supply. (*Imp 2.5, 2.7, 3.3, 4.3*)

### **IE 1.5**

The Energy Services Plan shall be flexible and able to take advantage of future technology advances. (Imp 2.5, 3.3, 4.3)

### IE 1.6

Ensure the incorporation of environmental objectives and tradeoffs in decision making about the design and operation of energy supply systems by matching tasks with the appropriate type of energy source and then using that energy as efficiently and cost-effectively as possible. (Imp 2.5, 3.3, 4.3)

### Objective

### **IE 2.0**

To employ a holistic approach in the development of an energy system that would capitalize upon opportunities for combining, some building energy systems; and thereby, reducing the amount of energy needed.

### **Policies**

### **IE 2.1**

Encourage the development of shared utility systems (e.g., centralized heating, air conditioning, and ventilation systems could be used to serve more than one building). (*Imp 2.5, 2.6, 3.3*)

### **Objective**

### IE 3.0

To provide affordable and sustainable energy options through the more efficient use of energy coupled with the use of cost effective renewable sources, such as sun, wind, and biomass.

### **Policies**

### IE 3.1

Encourage buildings that are constructed in the University Community to strive to achieve a 15 percent reduction in energy use below state energy efficiency standards. (*Imp 2.5-2.8*)



### **IE 3.2**

Encourage the use of distributed generation (DG) technology, which generates electricity close to the load it serves, either in the same building or complex. This objective requires innovation in the design and construction of buildings and implementation of the concept that buildings are "systems." For example, construct solar panels on roofs and a fuel cell system when constructing buildings. Lighting choices will influence the costs of cooling a building, and thereby influence the amount of power consumption. The siting, construction and operation of the buildings and residences within

the University Community play a role in the amount of energy resources used. Through the use of an integrative design it is possible to achieve large efficiency gains more cost effectively than small ones. (Imp 2.5)

### **IE 3.3**

Require that the design for each Specific Plan either: (a) produce an energy budget or (b) comply with prescriptive standards developed as part of the Energy Supply Plan. Either of these measures should encourage a 15 percent reduction in total energy use over performance standards contained in California Code of Regulations Title 24, Part 6, and are to be implemented through a Best Practices program. Ensure that the energy system design identifies, and provides for, adequate energy supply for each phase. (Imp 2.5)

### **IE 3.4**

Formulate the Best Practice program as an extension of the state standards, rather than a new format or compliance method to ease implementation. Structures would be assigned a base set of mandatory efficiency measures. The structures must be designed to consume no more energy than specified in the energy budget. The applicant would have the option as to which measures to install or use to meet the energy budget. The prescriptive approach would require that specific measures be installed in addition to the base set of measures. The specific measures can be those that the California Energy Commission has determined will result in the building meeting an energy budget. (Imp 2.5, 2.6)

#### **IE 3.5**

Require energy efficient appliances, fixtures, and systems (e.g., heating, solar or low emission water heaters, air conditioning, and ventilation) within buildings and residences with energy efficient envelopes (e.g. insulation, insulated windows). (Imp 2.5, 2.6)

### **IE 3.6**

Encourage the use of energy sources that are not dependent upon electricity generated from nonrenewable resources or natural gas supplies for public utilities, whenever possible. (*Imp 2.5, 4.3*)

### **IE 3.7**

Require that large-scale commercial and business development provide a comprehensive energy use evaluation that is used to determine energy saving measures to be included in the design of the development. Require developers, at a minimum, to include the energy savings measures if they have a payback period of seven years or less. (Imp 2.7)

### **Objective**

### **IE 4.0**

To optimize passive energy designs in buildings in order to reduce the amount of energy required for the University Community.

### **Policies**

### IE 4.1

Require all new subdivisions to maximize, to the extent feasible, proper orientation of lots with regard to solar utilization. (*Imp 2.5, 2.7, 2.8*)

### **IE 4.2**

Require the use of architectural design elements that support natural heating and cooling of buildings (e.g., overhangs, ventilation by open windows, and light colored materials for roofs and walls). (Imp 2.5, 2.6, 2.8)

### IE 4.3

Design and mass buildings and architectural forms to provide protection from heat, cold, and wind and thereby reduce energy use. (*Imp 2.5, 2.8*)

### **IE 4.4**

Integrate landscape and water elements with building design to provide relief from heat (e.g., plant trees that provide a broad canopy for shade and require that shade trees be planted on the eastern, western, and southern exposures of buildings to reduce energy needs for cooling). (Imp 2.5, 2.8)

### **IE 4.5**

Require that the type, area, and/or placement of windows in buildings ensure maximum natural light without causing a significant heat gain. (Imp 2.5, 2.6)

### **IE 4.6**

Emphasize natural versus mechanical energy systems and those that depend upon, or facilitate the use of, non-fossil energy sources (e.g. solar, wind, geothermal wells, fuel cell technology, and cogeneration). (*Imp 2.5, 2.6*)

### **IE 4.7**

Encourage the use of building materials that incorporate recycled and sustainably harvested or manufactured materials by requiring that construction use a certain percentage of such materials. (Imp 2.5, 2.6)

### ENERGY SYSTEMS THAT COMPLEMENT THEIR SETTING

### Goal

Energy systems that are integrated into the natural and built environment so that they become unobtrusive.

### Objective

### IE 5.0

To visually integrate the energy systems into the natural and built environment.

### Policies

### IE 5.1

Energy systems are required to be visually integrated into the natural and built environment to the extent possible. (*Imp 2.5, 2.7, 4.3*)

### **IE 5.2**

Preclude the use of above ground wiring, unless there is no feasible alternative. (Imp 2.5, 2.7, 4.3)

### IE 5.3

Screen utility facilities, such as electrical substations, with dense vegetation or architectural features. (Imp 2.5, 2.7, 4.3)

## TELECOMMUNICATIONS INFRASTRUCTURE—CONNECTING IN THE DIGITAL WORLD

#### STATUTORY REQUIREMENTS

s indicated previously, an Infrastructure Element is not statutorily required as a part of a community's General Plan but local government are permitted to adopt any other elements or address any other subjects that in the judgment of the local government relates to the physical development of the community.

#### CONTEXT

usinesses and residents of the University Community will expect and require the most current telecommunication available services. Over the past decades, the technology has changed dramatically. Communities have been connected with hard wire and fiber optic systems to provide access to telephone, cable television, Internet, and similar services. Wireless communication systems are the newest form of telecommunication infrastructure. These systems currently involve cellular phone service, Enhanced Specialized Mobile Radio (ESMR), Personal Communication Services (PCSs) and paging systems.

The existing telecommunications infrastructure could not be expected to adequately serve the University Community. Businesses, residents, and public uses will necessitate the construction of new facilities, whether linear systems that connect a user with a transmission or reception source (wire and fiber optic) or wireless systems (transmitters, antenna, receivers/dishes, and other). Each technology has implications regarding its compatibility and "fit" with the Community's development, landscape, and aesthetic quality. Cell towers have been the subject of debate in numerous communities. The pace of technology suggests the continuing evolution and changing physical characteristics of telecommunications for which the University Community must be prepared to adapt.

#### **OVERVIEW**

ecause of the number and different types of commercial providers for wireless communication, there is the potential for numerous facilities within the University Community. Providers are prompted to increase their number of transmission sites in order to gain coverage and calling capacity, and the resulting market share. Exacerbating the problem, wireless communications require numerous

antennas to be mounted at various heights throughout the landscape. In order to site them at the necessary height, these antennas are sometimes mounted on towers, poles, and other structures, resulting in concerns about the visual impacts of these facilities. Unless designed and sited properly, telecommunication facilities, such as antennas, could negatively impact the aesthetic quality of the surrounding neighborhood. Therefore, the telecommunication policies focus on integrating the facilities into the built and natural environment to the extent possible. Similar to the provision of energy to the University Community, the policies for the provision of telecommunication facilities should be flexible in order to take advantage of future technological advances.

The University Community provides an opportunity to create a sense of interconnection within the Community and with the UC Merced campus, through policies that require the provision of a community wide digital system to connect the occupants to each other. A voice, data, and video communications network could be developed that links the residential, commercial, educational, utility, and civic uses of the University Community. The system could also link the University to the Community Plan area, thereby providing access to the educational and cultural resources of the campus. Similar to the provision of energy and telecommunications to the University Community, the policies for the provision of digital facilities should be flexible in order to take advantage of future technological advances.

#### **GOALS, OBJECTIVES, AND POLICIES**

he following section presents the goals, objectives, policies, and programs for the provision of telecommunication services to the University Community site. These goals can help ensure that reliable, cost effective, and environmentally sound systems are supplied. Pertinent policies must be considered for any development activity.

# TELECOMMUNICATIONS FACILITIES THAT SUPPORT AND COMPLEMENT THE COMMUNITY

### Goal

A telecommunications system that fosters the dynamic economic and social development of the University Community while lessening the impacts resulting from multiple providers.

## Objective

#### IT 1.0

To creatively integrate the telecommunication facilities into the natural and built environment and to minimize the number of telecommunication facilities.

#### **Policies**

#### IT I.I

Develop design guidelines for wireless communication systems to visually integrate the systems into the natural and built environment. (*Imp 2.5, 2.8, 3.3, 4.3*)

#### IT 1.2

Encourage the minimization of the number of facilities through the shared use of sites and antennas by multiple providers. (*Imp 2.5, 3.3, 4.3*)

#### IT 1.3

Encourage telecommunication providers to locate facilities on structures within the University Community and design the facilities to be compatible with the structure's architectural character. (Imp 2.5, 3.3, 4.3)

#### IT 1.4

Require that any freestanding towers or antenna used for telecommunications be designed at a high level of architectural quality that complements the Community's buildings and landscapes. (Imp 2.5, 2.8, 3.3, 4.3)

## Objective

#### IT 2.0

To ensure objective standards for the provision of telecommunication services and require that the plan be flexible and able to take advantage of future technological advances.

#### **Policies**

#### IT 2.1

Establish standards and guidelines for the accommodation of communication facilities that are flexible to account for the rapidly changing nature of the industry. (Imp 2.5, 3.3, 4.3)

#### IT 2.2

Ensure the timely and proper removal of unused telecommunication facilities. (Imp 2.7, 3.3, 5.1)

#### CONNECTING THE COMMUNITY

## Goal

A voice, data, and video communications network that serves the residential, commercial, educational, utility, and civic needs of the University Community that facilitates the sense of community and helps shape it by allowing occupants to electronically communicate with one another, UC Merced, University Community businesses, merchants, and civic and cultural institutions, and the world.

## Objective

#### IT 3.0

To ensure that all Community neighborhoods and districts are connected by digital infrastructure.

#### Policies

#### IT 3.1

Install a telecommunications network that interconnects all residents with each other, the Internet, local schools, UC Merced, libraries, government, health facilities, and other institutions to provide opportunities for communication, education, cultural enrichment, recreation, information, and socialization. (Imp 2.5, 3.3, 4.3)

#### IT 3.2

Require new homes and businesses to incorporate conduits using state-of-the-art technology to provide easy telecommunications access and adequate capacity to allow for efficient retrofitting. (Imp 2.5, 2.6)

### **Objective**

#### IT 4.0

Through the application of long-term planning and priorities to the communication and information systems, a coordinated approach can be developed for the supply of these services to the University Community and would lessen the impacts resulting from numerous providers trying to gain market share.

#### **Policies**

#### IT 4.1

Establish standards and guidelines for the accommodation of digital facilities that are flexible to account for the rapidly changing nature of the industry. (*Imp 2.5, 3.3, 4.3*)

#### IT 4.2

Ensure the timely and proper removal of unused digital facilities. (Imp 2.7, 3.3, 5.1)

#### SOLID WASTE—SOURCE REDUCTION AND RECYCLING

#### STATUTORY REQUIREMENTS

he purpose of this chapter is to define policies that ensure the healthy, safe, economical, and sustainable collection and disposal of solid waste. The state of California does not include solid waste collection and disposal as a mandatory element or a component of a mandatory element of a general plan. However, Government Code \$65303 allows local government to adopt any other elements or address any other subjects that in the judgment of the local government relates to the physical development of the community. Once adopted, non-mandatory elements become a full-fledged part of the general plan with the same legal authority and effect as one of the mandatory elements.

#### **CONTEXT**

olid waste from the University Community would be collected by the County and disposed of at the Highway 59 Landfill, approximately three miles from the Community. The Highway 59 Landfill has recently undergone an expansion and has a lifespan of approximately 30 years. The County is continuing to take efforts to ensure compliance with state mandated reductions in solid waste generation established in the *California Integrated Waste Management Act of 1989* (AB 939). As part of this effort, the Merced County Solid Waste Regional Agency adopted a Countywide Integrated Waste Management Plan in 1995.

#### **OVERVIEW**

central theme in sustainable development involves the minimization of the waste stream. The following goals, objectives and policies provide guidance to ensure that the future University Community is a model of source reduction and waste minimization through the implementation of effective programs, recycling efforts, and public education. The following goals, objectives and policies are intended to reflect the goals of the Countywide Integrated Waste Management Plan and to support the County's commitment to sustainable development in the University Community.

#### **GOALS, OBJECTIVES, AND POLICIES**

## Goal

An adequate and orderly system for the collection and disposal of solid waste.

## Objective

#### **ISW 1.0**

To provide an adequate and orderly system for the collection services and adequate pre-collection storage facilities and disposal of solid waste to meet the demands of the University Community.

## Policies

#### ISW I.I

Require that adequate solid waste collection be provided for commercial, industrial, and residential uses in accordance with state law. (Imp 2.7)

#### **ISW 1.2**

Provide for the installation and maintenance of trash and recycling receptacles along streets in commercial areas and along major arterials; design receptacles to be aesthetically compatible with the district in which they are located. (Imp 2.5, 2.6)

#### **ISW 1.3**

Investigate the feasibility of implementation of joint solid waste collection with UC Merced. (Imp 3.3)

### Goal

A high level of source reduction and waste minimization.

## Objective

#### **ISW 2.0**

To sustain source reduction, waste minimization, recycling and composting programs that meet or exceed the statemandated levels reduction established in the *California Integrated Waste Management Act of 1989* (AB 939).

#### **Policies**

#### **ISW 2.1**

Ensure that future developments are consistent with the requirements of the Merced County Integrated Waste Management Summary Plan. (Imp 2.7, 5.1)

#### **ISW 2.2**

Encourage the development of recycling programs for solid wastes from non-residential uses in the University Community and ensure that they are recycled at an approved materials recycling facility. (Imp 2.7, 5.1)

#### **ISW 2.3**

Maximize curbside recycling opportunities for yard wastes and other recyclables. (Imp 5.10)

#### **ISW 2.4**

Support programs that promote home composting. (*Imp 5.10*)

#### **ISW 2.5**

Collaborate with UC Merced in the implementation of recycling, composting, and source reduction programs. (Imp 3.3)

#### **ISW 2.6**

Promote community awareness of recycling and composting program activities and services in coordination with the County of Merced, City of Merced, Merced County Association of Governments (MCAG), and UC Merced. (*Imp 5.10*)

#### **ISW 2.7**

Require that developers work with the Solid Waste Division of Merced County to implement recycling programs for construction materials to reduce the amount of waste disposed of at the landfill. (*Imp 2.7*)



## **Public Services**

#### STATUTORY REQUIREMENTS

he state of California does not include Public Services among the mandatory elements of a general plan. However, Government Code \$65303 allows local government to adopt any other elements or address any other subjects that in the judgment of the local government relates to the physical development of the community. Once adopted, the nonmandatory elements become a full-fledged part of the general plan with the same legal authority and effect as one of the mandatory elements. The provision of adequate public services for a newly developing community is considered crucial in establishing its vitality, livability, and health. The qualities of a community's schools, parks, libraries, youth and seniors programs, and health facilities are often cited as key determinants in a person's decision-making for a future residence. The development of a superior infrastructure of public services is essential to enable UC Merced to attract a high quality of students and faculty to the new campus.

#### CONTEXT

s an undeveloped property, the University Community planning area does not contain any of the key public service facilities that are essential to support the well-being of its future residents. As the Community grows, schools, parks, libraries, health, police, fire, health, and seniors, youth, and other social programs will have to be provided. These can expand from the existing service infrastructure that is provided to County of Merced and City of Merced residents. In some cases, new facilities will have to be developed in the Community, in others, services may be provided from centralized facilities in the City or another location. It is possible that wholly new service providers may be established to specifically serve the needs of the University Community's residents and businesses.

#### **OVERVIEW**

he social well-being of a population is nurtured and sustained by access to a full range of services that educate, enrich the lives, and meet basic human needs for health, safety, and quality of life. To reach these goals, the community will provide adequate educational and cultural services through schools, libraries, a range of cultural facilities, public safety services, health care, social programs, and programs for youth and seniors.

The policies will support the development of school facilities to meet the basic educational needs of the residents. They will also support opportunities for enhanced roles as centerpieces of community identity and integrated

elements of the Merced area school districts for funding purposes. School will be located within village centers and within close proximity of parks, libraries, recreation facilities and day care centers to allow joint use of space. The new school building will use a sustainable approach in construction and maintenance to promote shared and mixed-use facilities, reduce energy consumption, avoid indoor air pollution causing materials. A partnership between UC Merced, the state, and Community will be encouraged to enrich educational programs and develop a "university laboratory school" on the campus for grade-school Community students.

Library facilities shared with schools and the campus will provide high quality library services to residents. Libraries will be integrated with multi-purpose community/ cultural facilities, thereby creating community civic centers. High quality cultural facilities will be encouraged to provide amenities of the quality desired by faculty and staff. Cultural facilities will be sited in the Town Center and distributed within each community center.

Adequate fast-response police and fire protection services are essential to the long-term social and economic sustainability of the Community. Polices establish the ratio of law enforcement personnel to residents, accommodating population growth, development characteristics, and coordination with the campus police programs. Neighborhood crime watch and prevention programs will be encouraged, as well as site design measures to provide maximum safety through well-lit open pubic spaces. Fire services and personnel will be expanded to keep pace with the community growth, including addition of fire suppression infrastructure. Fire protection measures will include coordination with the campus fire services and programs to prevent encroachment of wildland fires into the Community.

Appropriate and high quality health care, social services, and programs for youth and seniors promote the social vitality of residents in the Community. High quality services will be achieved through collaboration with existing County and City services and the planned campus services. Services will be sited at the community centers, allowing for expansion with growth and use of nearby commercial buildings to support these services (i.e., to house medical offices). Programs will focus on enriching the lives of residents and promoting social interactions, such as establishing community gardens (particularly for seniors), providing intergenerational facilities for youth and seniors, and offering programs for developmentally disabled youth, a variety of recreational programs for youth to promote hobbies, environmental awareness, sports, volunteerism, and the arts. Seniors programs will encourage fitness and nutrition, recreation, and volunteer opportunities as docents or greeters.

#### SCHOOLS—EDUCATING COMMUNITY RESIDENTS

### PROJECTED SCHOOL NEEDS

he University Community will generate a demand for elementary, middle, and high schools during its build-out (6,968 singlefamily and 4,645 multi-family units). As phased development of the University Community occurs, various levels of school facilities and services will be required. In addition, the generation of students within the University Community Plan area will require the expansion of local school district support facilities, including but not limited to administrative facilities, technology facilities, warehouse, maintenance and food service facilities, and transportation facilities that serve the jurisdictional areas of the school districts. The number of schools and the required support facilities that will ultimately be needed to support the University Community will depend upon its residents' demographics and the design and operational standards and requirements of the local school districts.

Experience in comparable campus-oriented communities with a large number of college students living in proximity to a campus, such as Davis, Santa Cruz, and Chico, suggests that fewer public school-age children are generated and the number of required classrooms are less in comparison with typical residential communities. Additionally, there are trends throughout the state to develop efficient sites by the joint use and sharing of school facilities and other public facilities as a means to reduce costs in this era of limited financial resources. These trends, coupled with opportunities to develop facilities within UC Merced, may enhance the efficiency of utilizing land and constructing facilities that may be required in compliance with the standards and requirements currently used by the Merced area school districts.

## **GOALS, OBJECTIVES, AND POLICIES**

oals, objectives, and policies for the education of K–12 University Community students and residents are intended to provide adequate facilities to meet population needs, ensure that facilities are available concurrently with the development phasing of the Community, ensure that they are integrated into the fabric of the Community to enhance its livability, and provide programs that support and nurture the residents through all ages of their lives.

## SCHOOL FACILITIES THAT ENRICH THE COMMUNITY

Goal

Adequate school facilities to meet needs of population.

Objective

#### **PE I.0**

To provide sufficient school facilities within the University Community for its residents, in accordance with Merced City School District and Merced Union High School District standards.



**Policies** 

#### **PE I.I**

Designate sufficient lands for school sites within the University Community planning area to meet local population demands. (Imp 2.5)

#### **PE 1.2**

Require that developers consult with applicable school districts during the formulation of a sub-area Specific Plan to mutually confirm the number of public school age children to be generated by the proposed development, school site and facility needs, and a program and responsibilities for site acquisition, facility development, and funding. The program shall be incorporated into the sub-area Specific Plans and Development Agreements, which shall be reviewed and approved by the County. (Imp 2.5, 2.7)

#### PE 1.3

Cooperate and coordinate with the Merced area school districts in the County's administrative and legislative actions to ensure that elementary, middle and high school sites and facilities adequately serve the needs and requirements of the University Community residents consistent with the standards and requirements of the school districts and within the authorities and limits prescribed by state legislation. (Imp 4.7, 5.8)

#### PE 1.4

Condition the approval of new development within the University Community upon the requirement that school impact fees shall be paid to the applicable school districts consistent with state law, or as may be voluntarily negotiated by project developers with the school districts. (*Imp 4.7, 5.8, 6.4*)

#### **PE 1.5**

Encourage landowners and developers to enter into voluntary agreements with school districts where statemandated fees may be insufficient to meet the full costs of school and facility development, to supplement funding or provide other support for the acquisition and construction of school facilities needed for the planned development. (*Imp 4.7, 5.8, 6.4*)

#### PE 1.6

Promote the use of creative financing methods to fund the construction of schools and associated community facilities where possible, such as access to federal grants, partnerships with corporate commercial developers and private foundations, and comparable techniques. (*Imp 5.8*, 6.1–6.4)

#### PE 1.7

Promote the development of a magnate high school within the University Community to serve the local residents and the greater region. (Imp 2.5, 4.7, 5.8)

#### **PE 1.8**

Phase development within the University Community concurrently with the funding and/or availability of school facilities required to serve the development needs and requirements of the residents within the Community, or as otherwise agreed upon by the County and school districts in an approved sub-area Specific Plan and implementing Development Agreements. (Imp 2.5, 2.7)

#### **Objective**

#### **PE 2.0**

To support the development of UC Merced.

#### **Policies**

#### **PE 2.1**

Support and, as appropriate, cooperate with UC Merced in administering community educational programs. (*Imp 3.3*)

#### **PE 2.2**

Encourage the development of a "university laboratory school" on the UC campus for University Community students. (Imp 3.3)

#### **PE 2.3**

Encourage local industry and businesses to donate services or funds towards programs and/or scholarships for local youth for UC Merced. (*Imp 5.10*)

# SCHOOL FACILITIES THAT ARE THE CENTERPIECE OF THE COMMUNITY AND ENVIRONMENTALLY SUSTAINABLE

## Goal

Educational campuses/sites for elementary, middle, and high schools that function as centerpieces of community identity and activity.

## Objective

#### PE 3.0

Establish schools as focal points of neighborhood identity.

### **Policies**

#### PE 3.1

Work with the school districts to establish a process for coordination with developers in the planning for the location and design of schools to be integrated with and serve as the focal point of neighborhood activity and identity, consistent with UCP urban form objectives and policies. Schools should become a multi-purpose gathering place for local residents for education, events, and socialization. As generally depicted on the illustrative

land use concepts (Figures 4 and 5), the schools should be integrated with uses that serve both students and neighborhood residents including public parks, multipurpose facilities, libraries, auditoriums, gymnasiums/ athletic facilities, and similar uses. These may be physically sited on a common site, where facilities are shared, or in proximity to one another. The design, size, and configuration of schools shall be in accordance with the standards and requirements of the local school districts. Should these conflict with the urban design intentions for the Community, as specified in this Plan, the County shall work with the applicable school district to identify how these differences shall be resolved in accordance with procedures specified for the resolution of disputes and differences that shall be incorporated into each sub-area Specific Plan. (Imp 2.5, 4.7, 5.8)



#### **PE 3.2**

Locate preschool and day-care facilities in appropriate areas within neighborhood villages, possibly within or directly adjacent to local commercial facilities. (Imp 2.5)

#### **PE 3.3**

Encourage the school districts to site buildings and design the campuses to promote continuity with the development fabric of the adjacent residential uses. Avoid the establishment of an isolated, "walled" school environment. (*Imp 2.5, 4.7, 5.8*)

#### **PE 3.4**

Establish walkways, bicycle paths, greenways, and other elements that link school sites with surrounding uses. (*Imp 2.5, 4.1, 4.8*)

#### Goal

Community schools that sustain natural environmental resources.

## Objective

#### **PE 4.0**

To create a sustainable approach to new building construction and maintenance.

#### **Policies**

#### PE 4.1

Promote the establishment of energy-efficient standards for school facilities. (Imp 5.8)

#### PE 4.2

Encourage the implementation of Bright Schools program for energy efficiency. The Bright Schools Program is sponsored by the California Energy Commission and offers specific services for new schools construction in designing cost-effective energy-efficient systems. Bright Schools can provide design consultation, identify energy saving measures, compare technologies, and other services (application process required). (*Imp 5.8*)

#### PE 4.3

Promote the School Districts' use of mixed-use facilities on school campuses in the University Community such as buildings that serve as two or more of the following: cafeteria, auditorium, library, community, and multipleuse rooms. (*Imp 5.8*)

#### **PE 4.4**

Encourage the School Districts to construct buildings that are reusable, recyclable, and adaptable over time. (*Imp 5.8*)

#### **NURTURING LIFE-LONG LEARNING**

## Goal

Quality long-term educational opportunities for all stages of life.

## Objective

#### PE 5.0

To support life-long educational opportunities for the University Community's residents through UC Merced, Merced College, Cal State Stanislaus, and other institutions and private entities.

#### **Policies**

#### PE 5.1

Support and cooperate, where appropriate, with UC, Merced Community College and Cal State Stanislaus in developing courses and educational programs that support the life-long educational needs of the University Community's residents including classes conducted on their campuses, in the Community, or through electronic media. (*Imp 3.3, 5.8*)

#### PE 5.2

Support UC Merced, other educational institutions, and local industries in the development of programs that enhance the educational skills of local residents to enable them to take advantage of new job opportunities that may emerge due to UC Merced' academic and research programs. (Imp 3.3, 3.5, 5.8, 5.10)

#### PE 5.3

Encourage UC Merced and Merced Community College to establish or expand existing mentoring programs to serve the youth of the University Community. (Imp 3.3, 5.8)

#### PE 5.4

Promote the use of enriched academic and support programs to promote student retention and academic success by local educational institutions. (*Imp 3.3, 5.8*)

#### PE 5.5

Encourage local industry and businesses to participate in internship, mentoring, teaching, job training, and other programs that increase the opportunity for residents to be employed locally. (Imp 3.5, 5.10)

#### **EDUCATION IN THE DIGITAL WORLD**

### **Objective**

#### **PE 6.0**

To enable the University Community to benefit from the latest technological advances for education and bringing information to its residents.

#### **Policies**

#### PE 6.1

Promote the development of a telecommunications network that interconnects all residents with the Internet, local schools, UC Merced, libraries, government, health facilities, and other institutions to provide opportunities for education and communication (refer to Telecommunications Infrastructure policies). (Imp 2.5, 3.3, 4.3)



#### PE 6.2

Consider the establishment of a local community Intranet to facilitate e-education opportunities. (*Imp 2.5, 3.3, 4.3*)

#### PE 6.3

Work with the school districts, colleges, and universities to establish distance education programs for web-based education training for all Merced residents. (Imp 3.3, 5.8)

#### LIBRARIES AND CULTURAL FACILITIES

#### CONTEXT

he Merced County Library system currently serves Merced's residents. However, reduced funding has resulted in the scaling back of services including programs, hours, and staff. Development in the University Community will need to creatively address the provision of this important service.

There are no cultural facilities located in the University Community, though there are numerous organizations and events that serve the City and region today. Among these are the Merced County Arts Center & Arbor Gallery, Multi-Cultural Arts Center, Merced Center for Performing Arts, Merced Open Air Theater in Applegate Park, Merced Symphony Orchestra, fun runs, county fairs, antique shows, farmers markets, and local school plays and performances.

#### **GOALS, OBJECTIVES, AND POLICIES**

ommunity Plan goals, objectives, and policies provide for the development of library and cultural facilities to serve the University Community.

## LIBRARIES AS CENTERPIECES OF LEARNING AND COMMUNITY IDENTITY

Goal

High quality library services for University Community residents.

Objective

#### PLC I.0

To develop library facilities to serve the needs of the University Community's residents.

**Policies** 

#### PLC I.I

Establish standards for the development of Community libraries that recognize opportunities for joint use with UC Merced, other institutions, and opportunities imposed by digital communication. (Imp 2.5, 4.6, 5.7)

#### **PLC 1.2**

Develop library facilities that serve the University Community, as identified in sub-area Specific Plans, which may include:

- One or more freestanding facilities for library services
- Shared library facilities with area schools
- Library facilities integrated with multi-purpose community/cultural facilities
- Shared library facilities with UC Merced
- Library facilities incorporated within commercial/retail development (Imp 2.5, 4.6, 5.7)\

#### **PLC 1.3**

Encourage libraries to be consolidated with other public facilities in the Town Center and Residential Village Centers near transit facilities, bike paths, and pedestrian paths, to serve as a contributing use that fosters activity and identity. (Imp 2.5, 4.6, 5.7)

## Objective

#### **PLC 2.0**

To capitalize upon the opportunity to integrate and share library facilities with related educational, cultural, and other Community institutions.

#### **Policies**

#### **PLC 2.1**

Encourage the development of library facilities that can be jointly used by public schools and community residents. (*Imp 2.5, 4.6, 5.7, 5.8*)

#### **PLC 2.2**

Work with UC library system to explore opportunities for the sharing/linkage of library resources including facilities, staffing, and circulation materials. Promote access to the UC library system by Merced's residents. (Imp 3.3)

#### **Objective**

#### **PLC 3.0**

To utilize technology to expand and enhance library services for residents.

#### **Policies**

#### **PLC 3.1**

Install new technology, such as a fiber optic network, for telecommunication services to connect University Community housing and other neighborhood facilities with local libraries and, as feasible, the UC library system. (*Imp 2.5, 4.3, 5.7*)

#### **PLC 3.2**

Encourage the development of "information access" in public facilities and buildings (computer terminals or kiosks in public facilities). (Imp 2.5, 2.6, 4.6, 5.7, 5.10)

#### **PLC 3.3**

Support innovative methods (as they emerge) of delivering library services at the neighborhood level to promote community education and provide a focus for community activity and cultural development. (Imp 5.7)

## CULTURAL PROGRAMS AND COMMUNITY EVENTS THAT ENHANCE LIVABILITY

#### Goal

A diversity of cultural opportunities for University Community residents and visitors.

### **Objective**

#### **PLC 4.0**

To celebrate the University Community through programming of community events.

#### **Policies**

#### **PLC 4.1**

Promote local community groups to establish and support a regular calendar of events that bring local residents together such as book fairs, festivals, neighborhood celebrations, athletic competitions, picnics/food preparation, and so on. (Imp 3.5)



#### **PLC 4.2**

Work with UC Merced in the scheduling of events and activities that serve both campus and Community. (Imp 3.3)

#### **PLC 4.3**

Encourage local artists to contribute artistically to the design of Community facilities and public art. (Imp 3.5)

#### **Objective**

#### **PLC 5.0**

To develop a wide range of cultural facilities to serve the University Community.

#### **Policies**

#### **PLC 5.1**

Work closely with civic groups to identify opportunities for the development of cultural facilities within the University Community. (Imp 3.5)

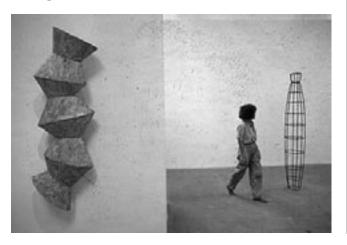


#### **PLC 5.2**

Promote and support the development of "satellite" facilities of existing Merced cultural organizations, such as an arts or historical center, in the University Community. (*Imp 3.5*)

#### **PLC 5.3**

Promote the development of a museum or educational facility that documents the history, culture, and landscape of the Merced region, including the agricultural industry and critical plant and animal resources. This may be accomplished in collaboration with UC Merced. (Imp 3.5)



#### **PLC 5.4**

Work closely with UC Merced to develop community relationships with on-campus cultural facilities in terms of community participation and facility/event programming. (Imp 3.3)

#### **PLC 5.5**

Promote the development of cultural facilities in the Town Center, as the first priority locations, with possible facilities in the Residential Village Centers. (Imp 2.5, 3.5)

## POLICE AND FIRE—ASSURING THE SAFETY OF THE COMMUNITY'S RESIDENTS

#### CONTEXT

he University Community site is served by the Merced County Sheriff's Department, which operates out of City of Merced police facilities. Development in the University Community could necessitate the development of a local facility.

The Merced County Fire Department provides fire, rescue and emergency medical services to the University Community area and all unincorporated areas within the County. McKee Station #85 is the closest facility to the University Community area. Development of the University Community would likely necessitate the development of new facilities to assure levels of service and response times.

### **GOALS, OBJECTIVES, AND POLICIES**

#### A SAFE AND SECURE COMMUNITY

Goal

A high level of police protection for University Community residents, visitors, and businesses.



#### **PS 1.0**

To coordinate land development activities with police and sheriff's departments in order to ensure that adequate facilities and services are development to provide service in the university community.

#### **Policies**

#### **PS 1.1**

Increase law enforcement personnel by approximately 40 personnel in order to accommodate the estimated 30,000 university community residents, based on the City of Merced Standard of 1.32 officers per 1,000 residents for urban services. This increase in personnel could differ if based on Merced County standards. (Imp 4.4, 5.2)

#### **PS 1.2**

Identify sites for police facility location(s) in subsequent Specific Plans for development in the University Community, based on need, phasing, and timing. The Town Center would be a priority candidate site. (Imp 2.5)

#### **PS 1.3**

Coordinate development of public safety programs and personnel to serve the University Community with the UC Merced police programs, finding shared opportunities, where appropriate such as mutual response programs. (*Imp 3.3, 5.2*)

#### **PS 1.4**

Work with appropriate policing authorities to establish community and neighborhood safety and crime prevention programs (e.g. neighborhood watch). (Imp 5.2)

#### **PS 1.5**

Work closely with UC Merced towards crime prevention specific to student/community conflicts. (Imp 3.3, 5.2)

## **O**bjective

#### **PS 2.0**

To create a land use and development configuration and site design standards to minimize crime

#### **Policies**

#### **PS 2.1**

Require that Specific Plans incorporate site designs that help ensure maximum visibility and security for entrances, pathways, streets and sidewalks, corridors, public and private open space, and parking lots and structures. (Imp 4.5, 5.3)

#### **PS 2.2**

Require the incorporation of appropriate lighting that provides adequate exterior illumination around commercial, business center, public, parking, and multifamily structures. (Imp 2.5, 2.8)

#### Goal

A high level of fire protection service for University Community residents, visitors, and businesses.

### Objective

#### **PS 3.0**

To ensure that fire department facilities, personnel, and equipment needs keep pace with growth of the University Community.

#### **Policies**

#### **PS 3.1**

Ensure that fire facilities and personnel are expanded to serve the needs of the estimated 30,000 residents of the University Community and to maintain a five minute response time. (Imp 4.5, 5.3)

#### **PS 3.2**

Include appropriate fire facility location(s) in subsequent Specific Plans for development in the University Community, based on need, phasing, and timing. (Imp 2.5)

#### **PS 3.3**

Provide an adequate level of water-related infrastructure in development for use in event of fire. (Imp 2.5, 4.2)

#### **PS 3.4**

Coordinate development of fire personnel and facilities with the UC fire protection programs, finding shared opportunities when possible. (Imp 3.3, 5.3)

#### **PS 3.5**

Implement brush clearing and other fire suppressing programs in adjacent lands, thereby reducing the possibility for the encroachment of wildland fires onto inhabited areas (in consideration of maintenance programs for important plant and animal habitats). (Imp 5.1, 5.10)

#### **HEALTH CARE AND SOCIAL PROGRAMS**

#### CONTEXT

everal hospitals and health care services facilities are located within the City of Merced and the surrounding region including Mercy Medical Center Merced Community Campus, Mercy Urgent Care, Olive Avenue Urgent Care, and various specialty clinics and medical groups.

There are a number of facilities providing social services within the City of Merced and the surrounding region. Examples of existing service providers include: family planning and birth control clinics, a blood bank, two mental health clinics, and home care, and hospice services.

#### **GOALS, OBJECTIVES, AND POLICIES**

#### A HEALTHY POPULATION



A community that provides high quality health care for its residents.

## Objective

#### **PHS 1.0**

To provide adequate and convenient health facilities for University Community residents.

#### **Policies**

#### PHS I.I

Work with local health providers to ensure that adequate health services are provided for University Community residents. This may involve the development of new facilities within the Community and/or expansion of existing facilities outside of the Community. (*Imp 3.5*)

#### **PHS 1.2**

Locate any health care facilities that are developed in the Community in the Town Center and, secondarily, in the Residential Village Centers to maximize access by local residents and interface with other public uses. (Imp 2.5)

#### **PHS 1.3**

Identify and commit the appropriate location(s) for health care facilities in subsequent sub-area Specific Plans, based on need, phasing, and timing. (*Imp 2.5*)

#### **PHS 1.4**

Work with local health providers to ensure that information is provided to new residents of the University Community regarding available health services and programs. (*Imp 3.5, 5.10*)

## Goal

A community that provides high quality social programs that nurture and support its residents.

## Objective

#### **PHS 2.0**

To provide social programs to meet University Comnity residents' diverse needs.

## Policies

#### **PHS 2.1**

Collaborate with local area social service providers to provide services to meet the needs of University Community residents. (Imp 3.5)

#### **PHS 2.2**

Locate social provider facilities in the Town Center and, secondarily, in the Residential Village Centers to maximize access by local residents and interface with other public facilities. (Imp 3.5)

#### **PHS 2.3**

Work closely with the UC in order to develop community relationships with on-campus social service programs. (*Imp 3.3*)

#### **PHS 2.4**

Promote the development of programs to enrich the lives of residents and promote social interaction, such as the establishment of community gardens. (*Imp 3.5, 5.10*)

#### YOUTH AND SENIORS

#### CONTEXT

urrently, there are a number of facilities that serve youth and seniors within the City of Merced and programs offered other public and private entities.

#### **GOALS, OBJECTIVES, AND POLICIES**

## SUSTAINING THE COMMUNITY'S YOUTH AND SENIORS

#### Goal

A community that contains a broad base of facilities and programs that support the special needs of its youth and seniors.

## Objective

#### **PYS 1.0**

To develop adequate facilities to serve the Community's youth and seniors.

#### **Policies**

#### PYS I.I

Work with youth and senior program providers to develop facilities within the University Community. These should be located in the Town Center and Residential Village Centers to maximize access by local residents and benefit from the presence of other public and community uses. Opportunities to consolidate or share facilities with other service providers, schools, parks, and other organizations should be pursued for efficiency and to minimize costs. (Imp 2.5, 3.5)

#### **PYS 1.2**

Consider the development of an intergenerational facility for youth and senior activities. (*Imp 2.5, 3.5, 4.8*)

#### **PYS 1.3**

Encourage the development of special facilities to serve the needs of seniors in Community parks. (Imp 2.5, 3.5, 4.8)

#### **PYS 1.4**

Design youth and senior facilities to be accessible to persons of all ages and abilities. (Imp 4.8)

#### **PYS 1.5**

Encourage major employers in the University Community to provide day care facilities on site or in a location that is conveniently accessible by their employees. (Imp 3.5, 5.10)

#### **PYS 1.6**

Promote the development of day-care facilities in the Town Center and Residential Village Centers. (Imp 2.5, 3.5, 5.10)

## Objective

#### **PYS 2.0**

To provide a diversity of high quality programs for the University Community's youth.

#### Policies

#### **PYS 2.1**

Monitor the needs of the Community's youth population and work with local agencies, youth groups, teen centers, and other service entities to provide social, recreation, after school, summer, educational, cultural, and other programs to meet these needs. (*Imp 3.5, 5.1*)

#### **PYS 2.2**

Work with UC Merced to develop collaborative programs with Community service providers to implement programs that serve campus and Community youth and create youth/UCM student mentoring programs. (Imp 3.3)

#### **PYS 2.3**

Encourage the development of programs to serve youth with developmental disabilities. (Imp 3.5, 5.1)

## Objective

#### **PYS 3.0**

To provide a variety of high quality programs for the University Community's seniors.

#### **Policies**

#### **PYS 3.1**

Monitor the needs of the Community's seniors population and work with local agencies and organizations to ensure that a full range of programs, and services are provided to meet their needs. This may include social, nutrition, recreational, therapeutic, financial, health, and similar programs. (Imp 3.5, 5.1)

#### **PYS 3.2**

Work with UC Merced to develop cultural, educational, recreational, health, and other programs and services for the University Community's seniors. Encourage the establishment of a program to use area seniors as volunteers, docents, or greeters for University events and/or programs. Seniors may also serve as in supporting staff roles. (Imp 3.3, 3.5)

#### PARKS AND RECREATION

#### CONTEXT

wo existing recreation facilities are located on or directly adjacent to the University Community planning area. One site, the Merced Hills Golf Course, will be removed and replaced with the UC campus and portions of the University Community. Lake Yosemite Park, located in-between the University Community and Lake Yosemite, is an existing important recreational resource. Policies associated with the future development of this recreational resource are addressed separately in the Area Plan section of this document.

As the University Community Plan area is undeveloped, there are no existing recreation facilities. Development of the Community will generate the need for both active and passive recreation facilities for all age levels. The provision of these facilities will largely be the responsibility of Merced County. There are also opportunities for the sharing of recreational facilities with UC Merced as these are developed on campus to serve student needs.

#### **GOALS, OBJECTIVES, AND POLICIES**

## PARKS THAT MEET THE RECREATIONAL NEEDS OF COMMUNITY RESIDENTS



A community of quality parks for its residents and visitors.



#### PP 1.0

To establish neighborhood and community park facilities to meet the diverse needs of University Community residents.

#### **Policies**

#### **PP 1.1**

Provide sufficient parkland to meet the recreational needs of the University Community's residents, based on a standard of five acres per thousand residents, in accordance with Policy LU 9.4. Of this, a minimum of three acres per thousand residents shall be developed as community and/or neighborhood parks that contain sports fields and facilities, picnic areas, swimming pools, multi-purpose gymnasiums/buildings, picnic areas, and similar improvements that meet the active recreational needs of the residents. The balance of acreage may be used for passive recreational activities such as hiking and nature observation. (Imp 2.5, 2.7, 4.8)

#### **PP 1.2**

Require that a comprehensive parks and recreation component be defined in each sub-area Specific Plan that reflects concepts depicted on the Illustrative Open Space Concept (Land Use, Figure 9) and:

- Defines service standards, park types, design guidelines, landscape standards, and appropriate programming for park facilities based on user demand assessments and community input
- Identifies mini, neighborhood, and community park sites in accordance with service standards
- Integrates neighborhood parks with neighborhood centers and schools
- Links park facilities through an integrated trail network
- Defines programming needs for park sites consistent with demographic trends in the University Community (Imp 2.5)





#### **PP 1.3**

Require the dedication of neighborhood and community park sites in future phases of development, concurrent with the review and approval of Tentative Maps. (Imp 2.7)

#### PP 1.4

Require that planned sites for park facilities be developed as part of an interconnected open space system (refer to LU 9.4). (*Imp 2.4, 2.5, 2.7, 4.8*)

#### PP 1.5

Require that neighborhood and community parks are sited, programmed, and developed in an environmentally sensitive fashion that is consistent with overarching principles of the University Community development. Park landscape should emphasize the use of native and drought-tolerant species. Treated wastewater and water captured and detained on site from rainfall should be used as primary sources of irrigation and on-site water amenity. Park structures should be constructed with recycled materials, to the extent practical. (Imp 2.5, 2.9, 4.8)

#### PP 1.6

Provide park facilities programmed with active recreational facilities, including athletic facilities, such as multi-purpose fields, ball fields, multi-purpose courts, and other facilities oriented towards youth leagues and team sports in order that the existing highest recreational need in the Community is addressed. (*Imp 2.5, 4.8*)

#### **Objective**

#### **PP 2.0**

To establish open space and park facilities alongside and integrated with development.

#### **Policies**

#### PP 2.1

Require that large-scale commercial developments, such as the proposed Town Centers and Business Centers, integrate common recreational or open space facilities on site. (Imp 2.5–2.7)



#### **PP 2.2**

Support the creation of community gardens as one of several elements of the University Community's open space system, provided that they are compatible with and do not adversely impact adjoining land uses. (Imp 2.5, 5.10)

## PARKLANDS THAT ENHANCE ENVIRONMENTAL QUALITY

#### Goal

A community that is structured by high quality passive and natural open spaces for Community residents and visitors.

### **Objective**

#### **PP 3.0**

To establish a system of greenways/conservation corridors throughout the University Community and are linked to UC Merced.

#### **Policies**

#### PP 3.1

Create a continuous system of connected open space and recreation areas throughout the University Community. This will integrate active and passive parklands with preserved and restored natural habitats, detention basins, trails, and other open spaces. The precise location of this system shall be defined by each sub-area Specific Plan, in accordance with concepts on the Illustrative Land Use Diagram (refer to Land Use policies). (Imp 2.4, 2.5, 2.7, 4.8, 4.10)

#### **Objective**

#### **PP 4.0**

Protect and preserve natural resources through designated passive open space areas.

#### **Policies**

#### **PP 4.1**

Develop open space corridors alongside watercourses and valued natural resource areas, as an integral element of the continuous community park system (as defined in Policy PP 3.1). (Imp 2.4, 2.5, 2.7, 4.8, 4.10)



#### **PP 4.2**

Provide open space buffers in areas where urban development abuts sensitive natural resource areas (wetlands, vernal pools, and grasslands) and agricultural lands. (Imp 2.4, 2.5, 2.7, 4.10)

## MAXIMIZING PARK OPPORTUNITIES THROUGH JOINT USE

#### Goal

Efficient use of parklands and open spaces, through multiple use.

### Objective

#### **PP 5.0**

Take advantage of opportunities for the multiple use of parklands, open spaces, and other public facilities.

#### **Policies**

#### PP 5.1

Require the siting of park facilities in proximity to school facilities. Sites shall be defined by the sub-area Specific Plans. (Imp 2.5, 4.8, 5.6, 5.8)

#### PP 5.2

Require use agreements between school jurisdiction and park jurisdictions, addressing time and nature of use for recreation facilities, liabilities, and other issues. (Imp 5.6, 5.8)

#### PP 5.3

Design storm drainage basins to accommodate both passive and active recreational uses during the dry periods (refer to Water-Related Infrastructure policies). (Imp 2.5, 4.2, 4.8)

#### **PP 5.4**

Develop passive recreational facilities in natural resource conservation areas, e.g., nature interpretation, bird watching information, and similar amenities. (Imp 2.5, 4.10)

#### **PP 5.5**

Integrate community facilities, such as community centers, auditoriums, day care centers, seniors facilities, and other uses into park facilities. (Imp 2.5, 4.8)

#### **PP 5.6**

Encourage opportunities for the shared use of recreation facilities located on the UC Merced campus (Refer to Area-plan policy). (Imp 3.3)

#### **COMMUNITY CONNECTIONS**

#### Goal

A comprehensive and interconnected system of public pathways and bikeways.

#### **Objective**

#### **PP 6.0**

Create a trail system that provides residents with safe, useable, and attractive bicycle and pedestrian trails.

#### **Policies**

#### PP 6.1

Require that a comprehensive network of pedestrian paths be established linking each portion of the University Community, including the Town Center, UC Merced, Residential Village neighborhoods and centers, schools, and parks. (Imp 2.4, 2.5, 4.8)

#### **PP 6.2**

Require each phase of new development in the University Community to connect with and expand upon existing trail facilities. Locations and improvements shall be defined in the sub-area Specific Plans. (*Imp 2.5*)



#### PP 6.3

Encourage infrastructure rights-of-way or easements to be designed and developed to accommodate trails where feasible and where compatible with the intended primary use. (*Imp 2.5, 4.2, 4.3, 4.8, 4.10*)

#### **PP 6.4**

Encourage the development of trail facilities in greenway or conservation corridor areas. (*Imp 2.5, 4.10*)

#### **PP 6.5**

Require new that new trail facilities provide connections with existing and planned regional trail facilities and those planned by the UC on the university campus. (*Imp 2.5, 3.3, 4.8*)

## CORRELATING COMMUNITY PARKS WITH RESIDENT NEEDS AND OBJECTIVES

#### Goal

Recreational facilities and programs that meet the needs of the University Community's residents.

## Objective

#### **PP 7.0**

To meet the recreation needs of the range of residents in the University Community, as they evolve over time.

#### **Policies**

#### **PP 7.1**

Conduct a detailed recreation demand analysis in order to match park siting and program characteristics with the needs of Community residents. (Imp 4.8)

#### **PP 7.2**

Create park facilities programmed with facilities for all age groups, including children and youth, teens, university students, and adults. (*Imp 4.8*)

#### **PP 7.3**

Consider training and using local residents as volunteers to maintain and administer park programs (sports director, event organizers, property clean-up, and other) to enhance their ownership of the park, where appropriate. (*Imp 5.6, 5.10*)



**Environmental Resources** 

he natural resources of the Community Plan area are native plants and animals, topographic character, viewsheds, geology, soils, agriculture, air quality, surface water, and ground water. These resources represent essential factors for the physical, mental, and spiritual well-being of the populace, providing a sense of beauty and support to the economic base of the community at large. The policies aim to preserve, protect, and/or mitigate the loss of resources, promote the long-term sustainability and vitality of these resources within the larger regional context. These resources will be maintained within the Community Area for as long as possible and to the extent feasible. Surface and ground water policies are located in Utility Infrastructure: Water-Related Infrastructure.

#### **PLANT AND ANIMAL RESOURCES**

#### STATUTORY REQUIREMENTS

tate of California Law does not provide that a Biological Resources Element, per se, be prepared as a part of a County's General Plan (Government Code §65302). However, Government Code §65302(d) requires the inclusion of a Conservation Element that addresses natural resources issues, as described below:

A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.

#### CONTEXT

he eastern Merced County region is part of the largest block of relatively undisturbed, high-density vernal pool grasslands remaining in California. In addition to the high density of vernal pools, these grasslands support a diversity of wildlife and plant life including rare, threatened, and endangered species. The University Community Plan area lies on the western edge of the region.

Habitats of the University Community have been altered through agricultural practices. A majority of the University Community is currently in row crop production and provides little wildlife value. Approximately twenty percent of the University Community planning area remains in a semi-natural condition and supports annual grassland habitat interspersed with vernal pools (vernal pool grassland) and other wetland habitats. Development of the Community Plan will result in loss of annual grassland and associated wetland habitats. Habitats more compatible with the University Community Plan can be developed that will provide ecological value.

#### **OVERVIEW**

erced County is committed to the preservation of important natural resources that occur within its boundaries. This commitment is articulated in the Conservation Element of the County General Plan. This section of the University Community Plan responds to the presence of valuable and legally protected species and habitats within and near the University Community. The following goals, objectives, and policies provide guidance to ensure that future development within the Community Plan area supports the County's commitment to resource conservation through avoidance, minimization, compensatory mitigation, and sensitive design of open spaces and edges of the Community.

The UCP focuses on preserving and sustaining the vitality of the rich and diverse natural wetlands and annual grasslands of eastern Merced County as well as maximizing the ecological value of the Community Plan. Environmentally sensitive project siting and design will seek to protect adjacent vernal pools, wetlands, and grasslands from community development. Consultation with the relevant agencies will guide the approach and define the constraints and procedures to implement this policy. This will include measures such as buffer zones, seasonal construction prohibitions in sensitive areas, signage, and monitoring. A buffer zone will be established to minimize the effects of developments on contiguous wetland resources, including barrier requirements, activity restrictions, and signage requirements. Where necessary, a wetland mitigation plan and a habitat mitigation plan will provide off-site compensation for the loss of wetlands and grasslands.

Open space corridors and open water features will be incorporated to allow movement of wildlife through the community. The use of native vegetation in local landscaping will offer wildlife value. The public will be encouraged to participate in wildlife protection through pet leash laws and environmental education programs.

### **GOALS, OBJECTIVES, AND POLICIES**

## VALUING THE COMMUNITY'S WETLANDS AND GRASSLANDS

#### Goal

Preservation and protection of the rich and diverse natural wetland resources of eastern Merced County.

## **Objective**

#### **PA 1.0**

To protect the wetland resources of the eastern Merced region by ensuring that there is *no net loss of wetland functions and values* (including vernal pools and other wetland habitats for special status species) due to the development of the University Community.

#### **Policies**

#### **PA 1.1**

Require that direct and indirect effects to wetland habitats be minimized through the promotion of environmentally sensitive project siting and design, to the maximum extent practicable. (*Imp 2.5, 4.10*)



#### **PA 1.2**

Obtain the appropriate regulatory approvals prior to the initiation of project construction. (*Imp 3.3*)

#### **PA 1.3**

Ensure protection of on-site avoided, created, or restored permanent wetlands. (*Imp 2.5, 2.10*)

#### **PA 1.4**

Ensure the protection of off-site adjacent wetland habitats, including those with hydrological connections to off-site wetland resources, through the implementation of measures that will protect the quality and quantity of source waters and will avoid disturbance of wetland habitats by human activity including domestic pets. (Imp 2.7, 4.10)

#### **PA 1.5**

Require monitoring, cleanup, and maintenance of preserved wetland habitats within and adjacent to the University Community, as necessary. (Imp 2.10)

#### PA 1.6

Require the development of a habitat mitigation plan for each sub-area Specific Plan, acceptable to the USACOE, USFWS, and CDFG, that achieves *no net loss of wetland function and values* by meeting established ratios for wetland enhancement/restoration and on- and off-site compensation for the loss of wetland functions and values., (Imp 2.5, 2.7, 4.10)

## Objective

#### **PA 2.0**

To protect and enhance annual grassland habitat functions and values, including habitats for special status species.



#### **Policies**

#### **PA 2.1**

Encourage the retention of annual grasslands to the maximum extent feasible through the promotion of environmentally sensitive project siting and design. (Imp 2.5, 4.10)

#### **PA 2.2**

Incorporate open space corridors into the Community Plan that allow the movement of wildlife through the Community Plan Area, to the extent feasible. (Imp 2.4, 2.5)

#### **PA 2.3**

Ensure the development of a habitat mitigation plan to provide off-site compensation for the loss of annual grassland functions within the University Community that is acceptable to the USFWS, CDFG and other relevant agencies. (Imp 2.5, 2.7, 4.10)

## INTEGRATING RESOURCES WITH DEVELOPMENT

### Objective

#### **PA 3.0**

Well planned open spaces and landscaping that results in a high degree of ecological value in the University Community.

#### **Policies**

#### PA 3.1

Incorporate large interconnected open space corridors throughout the Community Plan area. (Imp 2.4, 2.5, 4.10)

#### **PA 3.2**

Utilize native vegetation in local landscaping to the maximum extent feasible. (Imp 2.5)

#### **PA 3.3**

Create open water park features, where feasible, to provide resting areas for migrating waterfowl and shorebirds. (Imp 2.5)

#### **PA 3.4**

Ensure the protection of wildlife through establishment of programs to control feral pet populations. (*Imp 5.1*)

#### **PA 3.5**

Provide public environmental educational programs to inform the public about the natural resources of the region, including information about cohabitation with wildlife populations that are common in urban areas. (*Imp 5.10*)

#### **PA 3.6**

Conduct botanical surveys to establish baseline conditions for Specific Plan applications consistent with the prevailing *CNPS Botanical Survey Guidelines*. (Imp 2.5, 4.10)

#### **AGRICULTURE**

#### STATUTORY REQUIREMENTS

he state of California does include Agriculture, per se, among the mandatory elements of a general plan. However, Government Code \$65302 requires the preparation of an open space element that defines policy for "open space used for the managed production of resources, including...agricultural lands and areas of economic importance for the production of food or fiber... "One of the central themes of the Merced County General Plan is the conservation of important agricultural lands and the protection and enhancement of the County's important agricultural industry. A reflection of this commitment is the presence of an Agricultural Element as a distinct element in the County General Plan. This section of the University Community Plan responds to the presence of designated prime agricultural lands and productive agricultural activities within the University Community planning area.

#### CONTEXT

evelopment of the University Community Plan (UCP) area will result in the loss of productive agricultural lands. The northern portion of the site is actively used for grazing cattle and the southern portion is used for the production of tomatoes and corn rotated with oats and wheat. Lands to the south and southeast of the University Community are rich farmland soils planted in crops such as almonds, walnuts, cotton, tomatoes, and corn. In addition to the loss of agricultural lands within the University Community, its urbanization could induce economic pressures for the premature conversion of surrounding agricultural lands for comparable uses. Given the importance and value that Merced County places on the preservation and conservation of farmland and agricultural productivity, all reasonable efforts should be taken to avoid adverse effects on nearby farmland or agricultural productivity.

#### **OVERVIEW**

griculture represents a vital element of the economic base and a valued way of life in Merced County. The sustainability of the agricultural sector is strengthened through County policies that protect and enhance agricultural activity. The Community represents a large area where the land use will change from agricultural to urban. Policies emphasize the transition of land uses to prolong agricultural activity within the Community area as long as possible and to protect continued agricultural uses on adjacent lands.

Nonagricultural residents of the Community will be informed of the right-to-farm ordinance and what that means in terms of local agricultural operations, practices, and the potential agriculture-related impacts (e.g., noise, odors, dust). Brochures and pamphlets will be issued upon in the signing of rental and title agreements to inform residents of the effects of agricultural activities, such as plowing, spraying and burning, and the use of chemicals (e.g., fertilizers, pesticides). An adequate buffer space will be established to minimize agricultural and urban land use conflicts.

#### **GOALS, OBJECTIVES, AND POLICIES**

he following goals, objectives, and policies provide guidance to ensure that the future development of the University Community reflects the County's commitment to farmland conservation and enhancement of agricultural productivity through phasing, compensatory mitigation, and sensitive design of the edges of the Community.





## A COMMUNITY THAT VALUES CONTINUED AGRICULTURAL PRODUCTION

Goal

Continued agricultural productivity within the University Community planning area prior to development.

Objective

A 1.0

To maximize use of productive agricultural soils within the University Community planning area.

**Policies** 

**A** I.I

Encourage agricultural production to occur within the University Community planning area, for as long as possible, during development of the site. (Imp 2.5,)



#### A 1.2

Enforce the County of Merced's Right-to-Farm Ordinance for the University Community that requires nonagricultural residents be made aware of local agricultural operations, their practices, and the potential agriculturally related impacts. This may be accomplished through its inclusion in the distribution of annual property tax bills, escrow papers upon sale or lease execution, Title Reports issued at the time of close of any escrow, Department of Real Estate White Papers, or similar documents. (Imp 2.5, 5.1)

#### A 1.3

Provide materials such as brochures and pamphlets to all future residents of the University Community informing them about the effects of agricultural activities that states residents within the University Community may be subject to inconveniences or discomfort arising from the use of agricultural chemicals, such as fertilizers and pesticides; and from the pursuit of agricultural operations including but not limited to, plowing, spraying, and burning which occasionally may generate dust, smoke, noise and odor. (Imp 5.10)

## MITIGATING FOR THE LOSS OF AGRICULTURAL LANDS

#### Goal

Compensate for the loss of productive agricultural land due to development of the University Community area.

## Objective

#### A 2.0

To mitigate for the loss of productive farmland within the University Community area.

#### **Policies**

#### A 2.1

Participate in a program, if adopted, that may be established by the County of Merced and the City of Merced for the full mitigation of the loss of agricultural lands in the north Merced area. In the event that such a program is not adopted prior to approval of any subarea specific plan, require implementation of such measures that would achieve the equivalent protection of comparable farmland at a ratio of 1:1 for Important Farmland converted with the subject specific plan area; examples of measures include acquisition of conservation easements, payment of in-lieu fees to the County (or an appropriate third party designated by the County) that would protect such lands through fee title, easement, or other measures. (Imp 2.5, 2.7)

## COMPATIBILITY OF AGRICULTURE AND URBAN USES

#### Goal

Reduce the potential for agricultural and urban land use conflicts.

## Objective

#### A 3.0

To minimize agricultural and urban land use conflicts.

#### Policies

#### A 3.1

Establish an adequate open space buffer along the edges of the University Community planning area abutting agricultural lands. This buffer may accommodate passive uses such as open space, parks, certified organic farming, natural preserves, or treated wastewater storage. (Imp 2.4, 2.5)

#### **CULTURAL RESOURCES**

#### CONTEXT

artial site surveys and literature research indicate that no archaeological sites, prehistoric cultural resources, or historic structures have been found in the University Community planning area. A representative of the Native American Heritage Commission indicates: "a search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate UCP area." An evaluation of the Le Grand and Fairfield Canals concludes that, "neither of the canals appears to meet the criteria for listing in the National Register or State Register because they are not significant historically or for their engineering, and because they lack integrity to their periods of significance."

#### **GOALS, OBJECTIVES, AND POLICIES**

#### Goal

Protection of any archaeological, prehistoric, historic, Native American, or other cultural site or structure and paleontological resources that may be found in the University Community.

## Objective

#### C 1.0

To establish a process for the identification and protection of archaeological resources.

#### **Policies**

#### C 1.1

Require that an appropriate archaeological survey of the University Community planning area and locations to be developed for off-site infrastructure be conducted concurrent with the preparation of sub-area Specific Plans in accordance with CEQA Section 15064.5. (Imp 2.5)

#### C 1.2

Require that, prior to ground disturbance, developers shall notify contractors that they are required to watch for potential archaeological sites and artifacts and to notify the County of Merced immediately upon any find. Evidence of potential archaeological sites and artifacts includes, but is not limited to, aboriginal or historic

skeletal remains, chipped stone, groundstone, shell and bone artifacts, concentrations of fire cracked rock, shell, bone and historic features such as privies, trash pits or concentrations, and building foundations. (*Imp 2.7*)

#### C 1.3

Require that, should a previously unidentified cultural resource be discovered during grading, trenching, or other on-site earthwork, construction activity be stopped within 100 feet of the identified materials until a professional archaeologist certified by the Registry of Professional Archaeologists RDA), and the County of Merced evaluates the significance of the find and suggest appropriate mitigation(s), as determined necessary. (Imp 2.7)

### Objective

#### C 2.0

To establish a process for the identification and protection of paleontological resources.

#### **Policies**

#### C 2.1

Require that, prior to construction, construction personnel shall be informed of the potential for encountering significant paleontological resources. All construction personnel shall be informed of the need to stop work in the vicinity of a potential discovery until a qualified paleontologist has been provide the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed of the requirement that unauthorized collection of fossil resources is prohibited. (*Imp 2.7*)

#### TOPOGRAPHY

#### CONTEXT

he University Community planning area is characterized by gently sloping lands from the northeast to the southwest that exhibit little topographic form. The maximum elevation change across the property is approximately 60 feet. As a consequence, there is little inherent opportunity to use the site's topography to distinctively shape development patterns or the urban form.



The Le Grand Canal, along the eastern portion of the Community site acts as a distinct barrier differentiating the flatlands from the more variable and rolling topography to the east. The northern portion of the University Community site is separated from the UC Merced campus site by an ephemeral drainage corridor, Cottonwood Creek.

Within the site, Cottonwood Creek and several smaller drainages define a number gently sloping mesas and mounds. These are subtle changes in topography that are not readily apparent when viewed at any distance. But, on site, they provide physical relief and character.

#### **OVERVIEW**

he objective of the policies is to create an urban form that recognizes the site's topography and establishes a distinct sense of place, quality, and character. The Community's physical development will reflect the nature of its topography, retaining basic forms, contours, and elevations while eliminating the use of extensive flat pads and cut-and-fill slopes. Natural drainage channels will be retained for multiple uses including stormwater control, wildlife value, and recreation.

#### Goal

A community whose form respects the site's natural topography, creating a distinct sense of place, quality, and character.

## USING TOPOGRAPHY TO SHAPE COMMUNITY CHARACTER

## Objective

#### TO 1.0

Locate and design development in consideration of the site's subtle topography.

#### **Policies**

#### TO 1.1

Require that the development of the University Community site reflect the character of its underlying topography, retaining basic forms, contours, and elevations.

#### TO 1.2

Require that the University Community site be graded to ensure appropriate and continuous transitions with adjoining properties. Abrupt changes of topography and the use of retaining walls shall be discouraged. (*Imp 2.7*)

#### TO 1.3

Require that development be located and designed to mimic the natural topography in areas characterized by topographic diversity and preclude the use of extensive flat pads and cut-and-fill slopes, providing that this does not result in extraordinary costs that impact financial feasibility. (Imp 2.5, 2.7)

#### TO 1.4

Retain natural drainages for storm drainage, detention, recreation, and open space, except where modifications may be necessary to accommodate cohesive transportation and utility infrastructure. (Imp 2.5, 2.7)

#### **VIEWSHEDS**

#### CONTEXT

s indicated previously, the University Community planning area is characterized by gently sloping lands from the northeast to the southwest with little elevation change. They transition from the rolling grasslands in the northeast to the flat agricultural lands to the west and south. As such, viewsheds from the site are short-distanced and, primarily, of surrounding properties. Views to the Sierra Nevada to the northeast are possible, due to their height and visual dominance.



The elevation change between the Golf Course, in particular the location of the proposed initial phase campus buildings, and the Community offer opportunities to establish viewing corridors from the Community (in the vicinity of the proposed Town Center and north-south open space corridor) to the proposed campus core.

Viewsheds and the visual quality of the University Community are also affected by the ambient lighting conditions. The lack of development on and in proximity to the site, offers opportunities for dramatic views of stars in the nighttime sky and low levels of illumination for existing rural housing. Development of urban uses in the Community will substantially increase ambient levels of illumination and glare during the evening, changing the area's character.

#### **OVERVIEW**

olicies provide for the creation of viewing corridors of the Sierra and proposed campus core. These view opportunities will be strengthened through siting and design requirements for transportation corridors, plazas, and squares. The

creation of urban viewsheds of the Town center, campus, and landmark buildings enhance the sense of place and visual connectivity of the Community.

Additionally, policies provide for the use of lighting elements that minimize ambient illumination and glare during nighttime hours.

## A COMMUNITY THAT VALUES IMPORTANT VIEWSHEDS

#### Goal

A community that recognizes its location through the maintenance of viewsheds of the Sierra, adjoining open spaces, and key landmarks within its urban development.

## Objective

#### V I.0

To develop a pattern of urban development, transportation corridors, and open spaces that provides high quality views.

#### **Policies**

#### V I.I

Locate and design principal transportation corridors to provide public views of the Sierra Nevada and, where appropriate, the UC Merced campus core. (*Imp 2.4, 2.5*)

#### V 1.2

Incorporate plazas and squares at the confluence and termination of streets and pedestrian paths, in the principal Community activity centers (Town Center and Residential Village Neighborhood Centers), and other public places and design them to provide views of the Sierra Nevada, surrounding grasslands, and, where appropriate, the UC Merced campus core. (Imp 2.5)

#### V 1.3

Locate and design sites and buildings to serve as visual landmarks within the University Community (e.g., siting of buildings and parks as visual termini of streets, neighborhood areas, etc.; use of towers and other architectural elements; and so on). (Imp 2.5)

#### V 1.4

Design principal entry corridors to the University Community as landscaped amenities that provide view of the Town Center, UC Merced campus core, Sierra Nevada, and other visual assets. (Imp 2.4, 2.5)

## MAINTAINING LEVELS OF ILLUMINATION THAT ENHANCE COMMUNITY CHARACTER

#### Goal

Levels of nighttime illumination that enhance Community quality, while maintaining public safety.

### **Objective**

#### V 2.0

To control levels of nighttime illumination and glare to sustain opportunities for night-sky viewing and the region's rural character, without sacrificing public safety.

#### **Policies**

#### V 2.1

Require that outdoor lighting fixtures be located and designed to minimize ambient levels of illumination and glare, while providing adequate illumination for public safety. (Imp 2.5)

#### V 2.2

Require that outdoor lighting fixtures be located and designed to prevent spillover and impacts on adjoining properties (e.g., use of fixtures that cast their illumination downward and in a contained area). (Imp 2.5, 2.8)

#### V 2.3

Require that buildings in the University Community minimize the use of surface materials and glazing that are highly reflective of sunlight and nighttime outdoor lighting and/or place such materials in locations that will not impact adjoining uses. (Imp 2.5, 2.8)

#### V 2.4

Establish standards to minimize the levels of illumination of outdoor signs in the University Community. (*Imp 2.5*)

## **AIR QUALITY**

### STATUTORY REQUIREMENTS

he California Government Code does not mandate air quality issues be addressed by local planning efforts. As such, the existing Merced County General Plan includes only one Open Space/ Conservation goal related to air quality: "...to properly manage air resources." Regionwide air quality planning efforts are conducted under the Health and Safety Code (\$\$40910–40930) by the local air quality management district (San Joaquin Valley Unified Air Pollution Control District, or SJVUAPCD) in conjunction with transportation planning agencies. Congestion management programs are required by the Government Code (\$65089) to address air quality consequences of regional transportation planning efforts.

Merced County is encouraged by the SJVUAPCD to use its land use and transportation planning authority to help achieve region-wide air quality goals. The *Air Quality Guidelines for General Plans*, published in 1994 by the SJVUAPCD, provides assistance for developing policies and implementation strategies at the local level

that will be consistent with regional efforts to manage air quality. These guidelines recommend incorporating air quality considerations when developing land use and transportation plans. Examples of this would be considering transportation demand (and motor vehicle emissions) that would be associated with land use patterns or considering land use compatibility of agricultural and industrial uses with uses that would be "sensitive" to localized air quality conditions. These guidelines provide the basis for the air quality components of the University Community Plan.

#### **OVERVIEW**

erced County recognizes that land use planning, and the associated transportation and energy demand, affects management of air resources. This chapter of the UCP identifies policies to improve coordination and planning for air resources. To the extent that compact development and efficient infrastructure can be encouraged, indirect air quality benefits may be realized through implementation of the UCP. Opportunities to integrate land use and transportation planning are especially relevant in reducing trip lengths and improving the potential for transit service, thereby reducing the reliance on the automobile and emissions from motor vehicle use. Goals and strategies recommended by the San Joaquin Valley Unified Air Pollution Control District and included in the UCP are used to align the UCP with regional air quality planning efforts through land use and transportation planning. Additionally, strategies are identified for managing other specific activities that cause air pollution (e.g., energy use, wood-burning appliances, and agricultural activities).

#### **GOALS, OBJECTIVES, AND POLICIES**

## A COMMUNITY THAT VALUES ITS HEALTHY AIR QUALITY



Effective communication, cooperation, and coordination for the development and operation of community and regional air quality programs.

## Objective

#### **AQ 1.0**

To coordinate air quality management efforts for the University Community with regional programs and those of neighboring jurisdictions, especially the City of Merced.

#### **Policies**

#### AQ I.I

Determine air quality effects of projects using analysis methods and significance criteria recommended by the SJVUAPCD. This would help to ensure impacts identified during CEQA review are consistently and fairly mitigated with feasible, implementable, and cost effective strategies. (Imp 2.3, 3.3)

#### **AQ 1.2**

Work with the City of Merced and other jurisdictions and agencies to address cross-jurisdictional and regional transportation and air quality issues. Encourage staff planners to participate in activities of neighboring jurisdictions and regional agencies. The aim would be to examine congestion in other jurisdictions caused by University Community projects, effects of projects on viability of regional transit and pedestrian-oriented projects, progress of jurisdictions to construct segments of regional bikeway plans, proposed land use or circulation changes that would alter traffic flow or increase urban sprawl in jurisdictions. (*Imp 3.3*)

## Goal

Improve air quality through land use patterns that minimize the generation of pollutants and reduce vehicle trips.

## Objective

#### **AQ 2.0**

To integrate air quality goals with proper land use and transportation planning and management.

### Policies

#### **AQ 2.1**

Integrate planning efforts by considering air quality when planning land use and transportation systems and considering air quality and mobility when reviewing any proposed change to the land use pattern. (Imp 2.4, 2.5, 2.3)

#### **AQ 2.2**

Develop a congestion management plan to reduce motor vehicle trips, as defined by the UCP's transportation policies (T 7.1 to 7.4). These include policies for (a) the provision of grid streets and "flexible corridors" that provide travel-mode options and future capacity and (b) street design standards for bicyclists, pedestrians, and traffic calming. (Imp 2.5, 4.1)

#### **AQ 2.3**

Establish land use pattern, densities, and pedestrianenhanced infrastructure, in accordance with Land Use policies, to encourage the use of alternative transportation modes and reduce the length and number of motor vehicle trips. These encompass policies to manage the density and intensity of development; develop a planned "heart" of the community, parklands, pedestrianoriented mixed use districts, neighborhood convenience commercial, neighborhood schools, and centralized large-scale commercial and office uses in village centers with appropriate transportation services; as well as compact and orderly outward expansion of contiguous development and infrastructure through "land use phasing" and urban limit lines. (*Imp 2.4, 2.5*)

#### **AQ 2.4**

Design streetscapes, housing, and village centers to improve access by pedestrians and bicyclists. Land Use policies provide a structure that maximizes pedestrian activity and transit use. (*Imp 2.5*)

#### **AQ 2.5**

Implement a transportation infrastructure that provides opportunity for reduced trip lengths and minimized new trips while anticipating a multi-modal system in accordance with Transportation policies. This should include internal and regional public transit systems, supporting transit infrastructure and amenities (shelters, benches, bus turnouts, route signs, park and ride lots, and so on), multi-modal connections to regional transportation system (airports and passenger rail facilities), a comprehensive system of bikeways, required bicycle storage and parking at appropriate sites, and infrastructure for telecommunication facilities. (*Imp 2.4*, 2.5, 4.1)

#### **AQ 2.6**

Require the installation of electrical outlets in residential, commercial, and industrial buildings to support the use of low emission landscape and property maintenance equipment. (Imp 2.5, 2.6)

#### **AQ 2.7**

Comply with SJVUAPCD published guidelines and mitigation measures for analyzing and mitigating air quality impacts related to development of the University Community. (Imp 2.3, 3.3)

## Objective

#### **AQ 3.0**

To properly manage land use to minimize health risks from air contaminants and exposure to airborne nuisances, such as odors and dust.

#### **Policies**

#### **AQ 3.1**

Adequately separate or buffer sensitive uses from sources of odors and dust. Require new point sources of pollution, including sources of odors and dust, to be located an adequate distance from sensitive receptors. (*Imp 2.3, 2.5*)

## Objective

#### **AQ 4.0**

To minimize air pollutants from energy generation and consumption.

#### **Policies**

#### **AQ 4.1**

Implement energy conservation policies defined in the Energy policy section of the University Community Plan. (Imp 2.5, 2.7)

## Objective

#### **AQ 5.0**

To minimize air emissions attributable to construction activities.

#### **Policies**

#### **AQ 5.1**

Implement measures to reduce dust and particulates created during construction activities including limiting traffic on unpaved roads, installing erosion control measures to prevent silt runoff onto public roads, use of wheel washers for construction vehicles, installation of windbreaks, suspension of excavation and grading during high winds, and similar techniques. (Imp 2.7, 2.10)

#### **AQ 5.2**

Promote the use of alternative fuel construction equipment, where feasible, and the use of low emission on-site stationary equipment. (Imp 2.7)

#### **AQ 5.3**

Limit the hours of operation of heavy-duty construction equipment and the amount of construction equipment in use at any time. (Imp 2.7)

#### **AQ 5.4**

Curtail construction activities during periods of high ambient air pollution concentration. (Imp 2.7)



#### **AQ 6.0**

To minimize particulate matter, toxic air contaminants, and other pollutants resulting from wood-burning appliances in residential development.

#### **Policies**

#### **AQ 6.1**

Require the installation of low emitting, EPA-certified wood-burning appliances, natural gas fireplaces, or pellet stoves in residential developments when such heating units are incorporated in any development. (Imp 2.6)

## Objective

#### **AQ 7.0**

To improve air quality by the procurement and operation of low emission vehicles.

#### **Policies**

#### **AQ 7.1**

Identify opportunities for and encourage the procurement and use of alternative fuel vehicle fleets by large employers in the University Community and UC Merced. Collaborate with UC Merced on an alternative fuel vehicle shuttle system servicing the campus, the University Community, and the City of Merced. (Imp 4.9)

### SURFACE WATER AND GROUNDWATER QUALITY

#### CONTEXT

urface and ground water quality is affected by the discharges into the water body from storm drainage, urban and agricultural run-off, the re-use of treated wastewater, water recharge programs, and urban use activities (e.g., pollutants from industrial manufacturing). Water quality standards are imposed by regional, state, and federal agencies.

The comprehensive policies for the development of an integrated water infrastructure system (potable, wastewater, and stormwater) have been drafted with the objective for compliance with applicable standards.

### **GOALS, OBJECTIVES, AND POLICIES**



Surface and groundwater that meets or exceeds regional, state, and federal water quality standards.

## Objective

#### W I.0

To manage urban development, infrastructure, and agricultural uses in the University Community to assure compliance with surface and ground water quality standards.

#### **Policies**

#### W 1.1

Implement Integrated Water Infrastructure policies for the management of stormwater, urban, and agricultural runoff, manufacturing and other urban use pollutants, the re-use of treated wastewater, urban and agricultural pesticides, construction practices, and other functions of the University Community that do not substantially reduce the quantity or quality of surface waters or the groundwater supply and meet regional, state, and federal standards.



**Public Safety** 

#### **PUBLIC SAFETY**

#### STATUTORY REQUIREMENTS

tate of California law requires that a safety element be prepared as part of a General Plan. Government Code §65302(g) stipulates that (excerpts):

A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction and other seismic hazards..., and other geologic hazards known to the legislative body; flooding; and wild land and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peak load water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards.

To the extent that a county's safety element is sufficiently detailed and contains appropriate policies and programs for adoption by a city, a city may adopt that portion of the county's safety element that pertains to the city's planning area in satisfaction of the requirement imposed by this subdivision.

[**Note**: This provision also applies to Community Plans embedded in a countywide General Plan.]

#### CONTEXT

he University Community planning area is not generally prone to seismic hazards, and the probability of ground shaking in the region is low. Geologic hazards associated with unstable soils, such as ground subsidence, liquefaction potential, unstable slopes, and expansive soils are considered in building design requirements and site preparation permits, many of which are based on requirements of the California Building Code (Title 24, CCR).

Soil conditions throughout the University Community planning area are not consistent. As development in the University Community planning area continues over time, geologic and soil conditions can vary significantly due to an alteration of topography, an increase of impervious surfaces creating new drainage paths, increased groundwater withdrawal or reduced recharge, unknown seismic faults, and the simple presence of additional people and structures.

The University Community planning area is not prone to hazards associated with 100-year flood plains. However, significant development and construction activity associated with the proposed University Community will be occurring around the Fairfield and Le Grand Canals, which would increase the potential for structural damage to the canals. In addition, development throughout the University Community planning area will create additional impervious surfaces, potentially exacerbating flooding situations.

The University Community planning area has historically been used for agricultural purposes, and there is the potential that the environmental quality of the University Community planning area has been adversely affected by ongoing pesticide and herbicide application or unknown hazardous materials disposal. Soil and/or groundwater at the University Community planning area may be contaminated as a result of past activities, which could create a health hazard during site construction. Hazardous materials and hazardous wastes are regulated at various levels of federal, state, and local governments by numerous agencies.

The University Community planning area is located in a fire environment described by the California Division of Forestry as mixed interface, and is within a State Responsibility Area (SRA), indicating that fire protection responsibilities are through CDF and the Merced County Fire Department. Because the University Community planning area is located within an SRA, in accordance with Public Resources Code 4291, development in the area would be required to comply with fire defensibility measures, such as fire breaks around structures, clearance of combustible vegetation, and roadway standards to ensure emergency access and egress.

#### **OVERVIEW**

ocial sustainability demands a baseline level of public safety to prevent injury to the physical well-being of a population by seismic activity, geologic instability, flooding, or exposure to hazardous materials. Measures to provide public safety for the protection of the community from unreasonable risks will be implemented on hazards, such as seismic, geologic, flooding, and hazardous materials. Geological and seismic hazards will be mitigated through sites studies to determine the characteristics of soils and geology and engineering design of structures in response to these. Flooding policies address the integrity of levees

along Fairfield and Le Grand Canals to protect the new Community by strengthening the levees if necessary and by respecting existing MID easements along the canals.

Because public safety risks could be related to historical use of hazardous agricultural chemicals, a preliminary site investigation and construction observation measures will seek to identify and remediate any residual chemicals if present in the soil. A Hazardous Materials Management Plan will identify measures to reduce incidences exposing residents and workers for various land uses and transportation conditions. The Plan will reflect federal and state law and conform to the County's existing environmental health policies programs. Adequate hazardous materials policies will be adopted to ensure protection of residents.

#### **GOALS, OBJECTIVES, AND POLICIES**

he following section presents the goals, objectives, policies, and implementation programs for seismic, geologic, flooding, and hazardous materials concerns at the University Community planning area.

## PROTECTING THE COMMUNITY FROM GEOLOGIC AND SOILS RISKS

#### Goal

Ensure that the University Community complies with, at minimum, the soil investigation and building design requirements of the California Building Standards Code (California Code of Regulations, Title 24), and follows a common grading plan that will conserve soils resources and not affect off-site resources.

#### Objective

#### S 1.0

Ensure that on-site geotechnical investigations are performed prior to development, this information is available to the public, and used in the design of the project.

#### **Policies**

#### **S** 1.1

Require that a site-specific soil and geotechnical investigation be performed prior to development for individual construction projects to determine the classification and engineering capabilities and constraints of the soil at each building site. The standards used

during the site investigation shall be, at minimum, the California Building Standards Code, and any other applicable professional standards and Uniform Codes. (Imp 2.5, 2.7, 2.8)

#### S 1.2

Require development applications to include a report detailing the types of soil and locations, erosion potential or soil engineering constraints/opportunities, and erosion control options. Mitigation plans must address methods to be used during all phases of site development, implementation, and operation. (Imp 2.5, 2.7, 2.8)

#### S 1.3

Make site-specific soil and geotechnical information available to the public, developers, and consultants. (*Imp 2.7, 2.8*)

## PROTECTING THE COMMUNITY FROM FLOOD HAZARDS

#### Goal

Protection of the University Community from potential flood hazards associated with the Fairfield Canals and Grand Canals.

#### Objective

#### S 2.0

To protect the University Community from levee failure and flooding through reinforcement of the canals and establishing a development setback.

#### **Policies**

#### S 2.1

Ensure that the structural integrity of the on-site irrigation canals is adequate to support projected water flows within the canals. If necessary, concrete liners can be installed in the canals, or the banks of the canal can be fortified or raised. A qualified engineer should perform structural stability investigations, and make recommendations regarding reinforcement options. This should be completed in concert with the stormwater drainage system design. (*Imp 2.8, 3.3*)

#### S 2.2

Development at the University Community should not occur within an agreed-upon distance (County and Merced Irrigation District to decide) from the toe of the canal's levee in order to protect the structural integrity of the canal system. MID currently maintains a 150-foot-wide easement along the Le Grand Canal, a 100-foot-wide easement along the Fairfield Canal, and a 60-foot-wide easement along the Fairfield Lateral "A" and the Dunn Lateral. (Imp 2.5, 2.8, 3.3)

#### S 2.3

Work with MID to identify appropriate landscape and development plans for MID canal corridors through the University Community, in order to ensure the long-term operational viability of the canals as irrigation water conveyance facilities. In particular, ensure that trees and other landscaping do not diminish the structural integrity of the canal levees and do not interfere with regular operation and maintenance. (*Imp 2.5, 2.8, 3.3*)

## PROTECTING THE COMMUNITY FROM HAZARDOUS MATERIALS

#### Goal

Mitigation of any unknown hazardous materials that would be a hazard to public health and safety and the environment.

#### Objective

#### S 3.0

To identify the potential for soil or groundwater contamination at the University Community area.

#### **Policies**

#### S 3.1

Conduct a preliminary site investigation in accordance with ASTM Standard Practice E 1527-00 (or the most current site assessment standard) by an environmental professional to determine the potential for on- and offsite hazardous materials contamination, prior to site preparation and construction activities. (Imp 2.7, 2.8)

#### S 3.2

If, during the preliminary site investigation, or during construction activities following completion of the site investigation, evidence of hazardous materials contamination is observed or suspected through either obvious or implied measures (i.e., stained or odorous soil, or oily or discolored water), construction activities shall cease in the affected area and an environmental professional shall assess the situation. If necessary, the

environmental professional shall prepare a sampling plan to collect soil and/or groundwater samples to determine whether or not the site has been adversely affected by past activities. The samples shall be analyzed for the contaminants determined to be a potential health concern by the environmental professional. Depending on the nature of the contamination (if any), the Merced County Division of Environmental Health and appropriate federal and state agencies shall be notified. (*Imp* 2.7, 2.8)

#### Goal

The proper use, transport, storage, and disposal of hazardous materials and wastes in accordance with federal, state, and County regulations.

#### Objective

#### S 4.0

To provide the residents of the University Community with information necessary to safety manage hazardous materials.

#### **Policies**

#### S 4.1

Prepare a "Hazardous Materials Management Plan" to provide residential, commercial, and industrial properties with necessary information regarding the use, transportation, storage, and disposal of hazardous materials and hazardous wastes within the University Community and Merced County. (Imp 5.1)

#### S 4.2

Require that all projects within the University Community comply with the Hazardous Materials Management Plan and the programs established by the Merced County Division of Environmental Health. (Imp 2.5, 2.7)

## PROTECTING THE COMMUNITY FROM WILDLAND FIRE RISKS

The Merced County General Plan in its wildland fire policy section (Public Safety Chapter, Goal 5) incorporates policies to minimize the risk of injury and property damage resulting from wildland and urban fires. These policies include establishing water supplies for firefighting, installing sprinkler systems where applicable, providing adequate access to rural areas, and maintaining "clear zones" around new and existing residential structures. These shall be applicable to the University Community.

#### Goal

A Community that is protected from the risks of wildland fires.

### Objective

#### S 5.0

To establish programs for brush clearance, use of building materials and landscape, and other techniques to reduce the risks of wildland fires.

#### **Policies**

#### S 5.1

Implement brush clearing and other fire suppression programs in adjacent lands, thereby reducing the possibility for the encroachment of wildland fires onto inhabited areas (consistent with maintenance programs for important plant and animal habitats). (Imp 2.5, 2.7, 5.1, 5.3)

#### S 5.2

Encourage the use of non-combustible roofing materials within 200 feet from an area designated a very high hazard severity zone. (*Imp 2.5, 2.6*)

#### S 5.3

Prohibit the planting of "highly combustible" landscape materials, such as pines or eucalyptus trees, along the University Community's border within a very high severity zone for brush fires. (*Imp 2.5, 2.7*)

#### **NOISE**

#### STATUTORY REQUIREMENTS

alifornia Government Code (§65302(f)) mandates that each General Plan include a noise element as follows [**Note**: Excerpts only; noise sources not applicable to the planning area have been deleted such as railroads and airports]:

A noise element that shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable...current and projected noise levels for...highways and freeways, primary arterials and major local streets, local industrial plants, including, but not limited to, railroad classification yards, and other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

Noise contours shall be shown for all of these sources... The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise. The noise element shall

include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state's noise insulation standards.

The County General Plan includes a Noise Chapter that identifies current and projected noise levels for the noise sources in Merced County as specified by the Government Code. The Noise Chapter is the planning document that provides goals, objectives, and policies to ensure that future noise and land use conflicts are minimized through application of land use compatibility criteria and participation in the discretionary review process. The Land Use Compatibility Guidelines (Figure IV-2 of the Noise Chapter) identify the noise levels that would be acceptable for planned land uses and specify the level of analysis necessary to identify noise reduction requirements. These guidelines would be applied on a project-by-project basis through discretionary review. The established and adopted goals, objectives, policies, and implementation strategies of the Noise Chapter are the basis for the components of the University Community Plan.

#### CONTEXT

he University Community is a rural agricultural environment characterized by very low ambient noise levels. Its development will introduce urban uses that will significantly change the noise environment. Major noise sources will include transportation vehicles (automobiles, trucks, and transit), entertainment venues, manufacturing, human activity (recreation and sports competitions, community events, etc.), and construction activity. Figure 22 depicts the noise levels attributable to vehicular use on buildout of the Community Plan.

It is expected that the general ambient noise levels in the University Community will be higher than those of urbanized Merced as there will be a higher intensity of development densities and intermixing of housing with commercial and office uses to promote pedestrian activity and "livable" residential neighborhoods. Inherently, the higher densities and compact forms of development are inconsistent with existing County noise policies, which call for extensive property setbacks. The benefits from the proposed land use pattern in community quality and the reduction of vehicular impacts, however, off set this issue.

#### **OVERVIEW**

ocial sustainability demands a baseline level of public safety to prevent injury to the physical and psychological well-being of a population by exposure to excessive noise. Measures to protect the community from the unreasonable risks of noise will be implemented. Generally, these include controls on uses and activities to limit/contain their generated noise and prevent impacts on adjoining uses, mitigation of noise impacts on housing and other "sensitive" uses through building placement and insulation, and management of construction activities.

#### **GOALS, OBJECTIVES, AND POLICIES**

#### MAINTAINING A NOISE ENVIRONMENT THAT CONTRIBUTES TO COMMUNITY LIVABILITY AND SAFETY



All citizens of the University Community free from the harmful effects of excessive noise.

#### Objective

#### N 1.0

To control noise sources to prevent impacts on housing, schools, hospitals, and other "sensitive" uses.

#### **Policies**

#### N 1.1

Design and construct new noise-generating land uses in a manner that does not cause excessive noise on any location of nearby residential properties. The noise standard of 65 dBA  $L_{dn}$  shall not be exceeded by stationary noise generating land uses at any existing or planned residential land use. Noise reduction features shall be included in the design of any land use that has noise sources affecting residential land uses. (Imp 2.3, 2.5, 2.6)

#### N 1.2

Minimize transportation noise by the development of a grid street pattern with "flexible corridors" that disperses local traffic and minimizes the need for major corridors carrying high volumes of traffic at high speeds and by integrating traffic calming measures into neighborhood street design. (*Imp 2.4, 2.5, 4.1*)

#### Objective

#### N 2.0

To protect housing, schools, hospitals, and other "sensitive" uses from the impacts of noise in areas of high noise exposure.

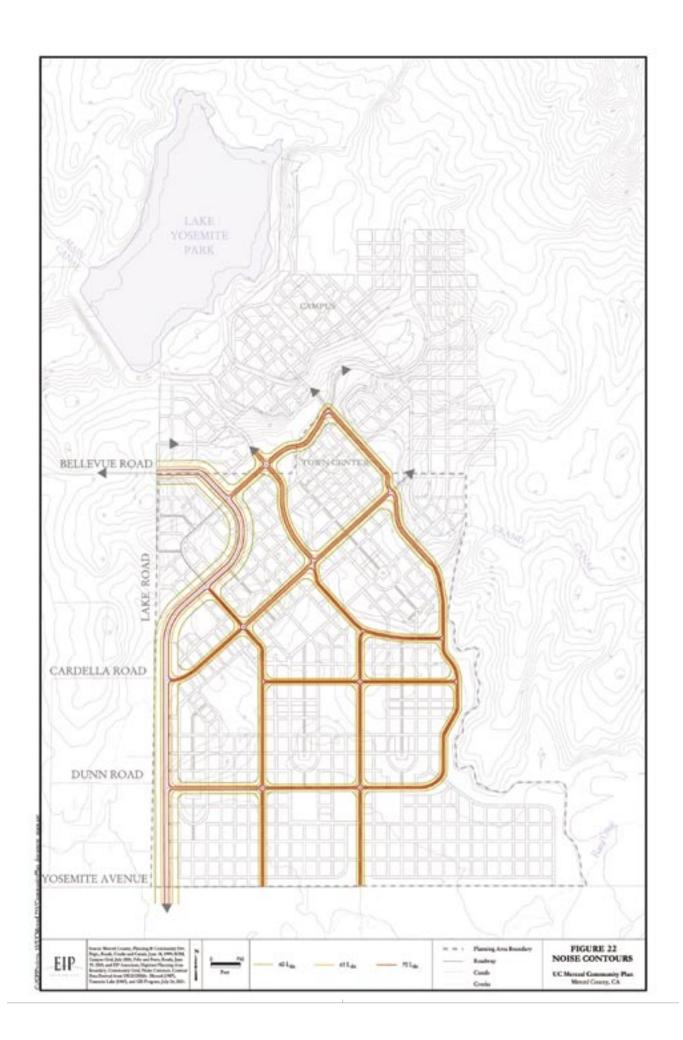
#### **Policies**

#### N 2.1

Use the Land Use Compatibility Guidelines of the County of Merced General Plan Noise Chapter (Figure IV-2) to characterize the acceptability of a noise environment for proposed residential uses and specify the level of analysis and design features necessary to provide appropriate noise insulation. (Imp 2.3, 2.5, 2.6)

#### N 2.2

Require that residential uses located in noise environments above 65 dBA  $L_{\rm dn}$  mitigate the interior noise level to a 45 dBA  $L_{\rm dn}$  through adequate noise mitigation techniques (insulation, double pane window, and so on). (Imp 2.3, 2.5, 2.9)



#### N 2.3

Reduce noise exposure 65 dBA  $L_{dn}$  for large outdoor recreational spaces that are a part of housing developments as feasible through insulation, landscape, berms, and other techniques. (Imp 2.3, 2.5, 2.9)

#### N 2.4

Provide noise protection for residences in mixed use projects that integrate housing with retail, office, or other non-residential use, including the use of construction techniques that prevent adverse noise transmission between differing uses or tenants located in the same structure or site. (*Imp 2.3, 2.5, 2.6, 2.9*)

#### N 2.5

Identify a County agency or department for the coordination of noise control efforts. (Imp 5.1)

#### N 2.6

Manage noise from construction activities by:

- Limiting the hours of construction activities that generate noise, when adjacent to housing and other "sensitive" uses. Typically, construction is limited to the hours of 7:00 A.M. to 10:00 P.M., weekdays and Saturday, and prohibited on Sundays and holidays.
- Requiring that all construction vehicles or equipment, fixed or stationary, be equipped with properly operating and maintained mufflers
- Requiring that construction vehicle staging areas be located as far as practical from existing residential uses
- Requiring that construction vehicle trips be routed as far as practical from existing residential uses (Imp 2.5, 2.7, 2.10)

#### N 2.7

Evaluate the noise impacts of the adjacent airstrip on the University Community's land uses during the formulation of each Specific Plan and mitigate potential impacts through the siting and design of buildings, use of insulation, and/or working with the airstrip owner to control hours of operation and/or modify flight patterns, as feasible. (Imp 2.3, 2.5)

#### Goal

Noise generating land uses and facilities important to the economic health of the University Community and County are not adversely affected by the development of incompatible land uses.

#### **Objective**

#### N 3.0

To site and design land uses to protect the functions and activities of important Community uses characterized by high levels of noise.

#### **Policies**

#### N 3.1

Locate and design new noise-sensitive land uses to minimize impacts by recreational activities at Lake Yosemite. (Imp 2.5)

#### N 3.2

Require that educational, recreational, commercial, and industrial land uses (including educational campuses, parks, stadiums, and public event facilities) be designed in such a manner that:

- Vehicle access points are located away from noise sensitive uses
- Loading and shipping facilities and noise generating equipment are concealed or located away from noise sensitive uses
- Parking areas and structures are located away from noise sensitive uses
- Structural building materials are incorporated to mitigate sound transmission
- Use of outside speakers and amplifiers is minimized
- Interior spaces are configured to minimize sound amplification and transmission (Imp 2.5, 2.9)

#### N 3.3

Require that facilities used for active recreation in the University Community that are likely to draw cheering crowds, elicit loud play, or have amplified game announcements be located in parks or at locations away from noise-sensitive uses. (*Imp 2.3, 2.5, 2.7, 2.9*)

#### N 3.4

Locate uses in the vicinity of the UC Merced campus that are consistent with the noise levels generated by campus recreational, central plant, or other noise-generating uses. (*Imp 2.5*)

#### **AVIATION SAFETY**

#### CONTEXT

small private airstrip is located east and adjacent to the southeast portion of the University Community planning area on the east side of the Fairfield Canal. The airstrip is primarily used by nearby farmers to operate "crop-dusting" planes and helicopters. The crop-dusting airplanes using the airstrip to apply dry materials, such as fertilizers and seed, and the helicopters to apply wet materials, such as pesticides and herbicides. During the past several years during the agriculture season, the airport sustains approximately five to six flights per day, but has experienced up to 50 flights per day under peak conditions in the past. Night flights occur only in times of potential frost.

#### STATUTORY REQUIREMENTS

Aviation Administration (FAA) regulations codified in Title 14 of the CFR are administered at the state level by the Caltrans Division of Aeronautics; however, Caltrans does not specifically regulate agricultural airports. Agricultural aircraft operations are codified in 14 CFR, Part 137. Neither the FAA nor Caltrans regulate land use adjacent to private airports; however, Part 77 of 14 CFR regulations requires FAA agency notification when there is a change in land use that would involve the development of structures and roadways adjacent to the facility. The criterion for notification depends on the height of proposed structures relative to the location of the runway. Upon request of an airstrip property owner, the FAA will conduct an airspace safety review to ensure that building height to distance from airstrip runway ratios comply with FAA and Caltrans safety requirements.

State regulations (CCR Title 21, Division 2.5, Chapter 2) pertaining to personal-use airports contains the following minimum standards, found in Article 5, §3560: the runway length and width must be adequate to enable aircraft to operate safely, considering airport location and the performance data of the most demanding aircraft to utilize the airport; the ends of each runway be at least 200 feet from the airport property line; and the distance from the runway centerline to the property line

of another owner must be at least 50 feet. In addition, Article 2, §3532 of Chapter 2, presents the permit requirements for maintaining and using an agricultural airport. These permit requirements include requirements for both airplanes and helicopters, and include distance requirements for operation of airstrips within boundaries of K–12 public and private schools.

#### **GOALS, OBJECTIVES, AND POLICIES**



Community compatibility and safety with the adjacent private airstrip.



#### **AS 1.0**

To define standards and procedures to ensure the compatibility of the University Community's urban development with adjoining airstrips.

#### Policies

#### AS I.I

Require that development in the University Community maintains airspace safety and distance ratio requirements established by the Federal Aviation Administration and the Caltrans Division of Aeronautics as long as the airstrip adjacent to the University Community remains operational. (Imp 2.5, 2.7)

evelopment of the University of California Merced and associated University Community introduces an urban function and uses into an area historically committed by the County of Merced for agriculture, open space, and low density rural uses that serve as a transition between the urbanized City of Merced and surrounding agricultural production. This area also serves as a primary recreational amenity for the region, centered on Lake Yosemite Park. Inherently, these important characteristics and functions will be significantly affected by the development of the campus and community.

The economic, social, and cultural benefits accruing from the development of UC Merced and the Community are of considerable significance and, as such, are fully supported by the County of Merced. The policies for the development of the University Community, as presented in earlier sections of this Plan, and the adopted Long Range Development Plan (LRDP) for the campus provide for development that, while urbanized, considers the region's agriculture, open spaces, and historic patterns of development.

While supporting the campus and community, the County of Merced recognizes the long-standing imperative to preserve its agricultural lands, assure an appropriate transition between urbanized lands and agriculture, and protect Lake Yosemite Regional Park as an asset for its residents. To this end, the University Community Plan expands upon its core policies for the development of lands within the defined limits of the planning area by the establishment of goals and policies in this section of the Plan to address these critical values in relationship to how they affect surrounding lands. In general, these pertain to lands within two miles of the University Community.

#### AGRICULTURE—SUSTAINING THE REGION'S PARAMOUNT RESOURCE

#### **OVERVIEW**

ne of the central themes of the Merced County General Plan is the conservation of important agricultural lands and the protection and enhancement of the County's important agricultural industry. A reflection of this commitment is the presence of an Agricultural Element as a distinct element in the County General Plan. This section of the University Community Plan responds to (1) the presence of designated prime agricultural lands and productive agricultural activities in areas south and southeast of the University Community planning area, and (2) concerns that development of the University Community or related infrastructure could adversely affect the long-term viability of this area as a key component of the County's agricultural industry. The following goals, objectives, and policies provide guidance to ensure that the future development of the University Community reflects the County's commitment to farmland conservation and enhancement of agricultural productivity through strengthening the linkages between the County's urban areas and its agricultural industry, targeted voluntary preservation strategies, and limitations on infrastructure capacity.

#### GOALS, OBJECTIVES, AND POLICIES

Goal

Strengthen economic and social linkages between the University Community's urban consumers and regional small-scale farms.

Objective

**AA I.0** 

Support agriculture by encouraging farmers to deliver agricultural products directly to consumers.

Policies

AA I.I

Encourage the development of agricultural retail businesses by promoting local agricultural events and other direct marketing programs by advertising for them through regional media. (Imp 1.4, 3.5)

**AA 1.2** 

Facilitate a farmers' market in the University Community, in coordination with the Merced County Agricultural Commissioner's Office, by providing a suitable low-cost site in a central location and other resources to develop and promote it. (Imp 1.4, 3.5)

#### **AA 1.3**

Encourage the use of local agricultural goods for use in local restaurants, schools, and grocery stores, when possible. (*Imp 3.5, 5.10*)

### Goal

Preservation of important farmlands south and east of the University Community.

## Objective

#### **AA 2.0**

Protect land located south of the University Community boundary and immediately east of the City of Merced.

#### **Policies**

#### **AA 2.1**

Establish the University Community boundary as an urban limit line, outside of which no urban uses will be permitted in agricultural areas (refer to Policies LU 2.4 to LU 2.6). (Imp 2.1)

#### **AA 2.2**

Design and develop infrastructure to serve development within the University Community boundary, except where necessary for joint use by the Community and UC Merced and to provide connections to regional systems. (Imp 2.4, 4.13)

## LAKEYOSEMITE REGIONAL PARK—SUSTAINING MERCED'S MOST IMPORTANT RECREATIONAL ASSET

#### **OVERVIEW**

he general underlying themes in the University Community Area Plan relative to recreation include the importance of Lake Yosemite Regional Park to Merced County, the nature and amount of increased demand for recreational facilities caused by the new population generated by the University Community and the UC Merced campus, and the roles of Merced County, UC Merced and the University Community in providing recreational facilities sufficient to meet potential demand.

The goals and policies presented below assume, and seek to address, future demands on regional recreational facilities, especially Lake Yosemite Regional Park. These policies also establish a framework for future individual and collective action by Merced County, the University Community and UC Merced to respond effectively over time to the recreational needs of a growing population in eastern Merced County.

#### **GOALS, OBJECTIVES, AND POLICIES**



Joint use of the University of California, Merced recreation facilities, and Lake Yosemite Regional Park.

#### Objective

#### **ALY 1.0**

To meet the recreational needs of UC Merced students, staff and faculty, as well as University Community residents.

#### Policies

#### ALY I.I

Work with UC Merced for the shared use of its oncampus recreational, parking and sports facilities with the Merced community, especially with regards to campus parking in areas bordering Lake Yosemite Regional Park. Such cooperative programming may diminish impacts on the existing Park by providing additional recreational opportunities and shared parking for Park users. (Imp 3.3, 5.6)

#### **ALY 1.2**

Encourage UC Merced to provide students, staff, and faculty with active recreational and sports facilities and programs on campus that meet or exceed any recommended standards for the anticipated campus population, concurrent with increases in campus population. (Imp 3.3, 5.6)

#### **ALY 1.3**

Cooperate with UC Merced, to the maximum extent possible, to initiate and maintain a cooperative campusrun, water-related program on Lake Yosemite that combines academic programs with student and public recreational water sports activities year round. (Imp 3.3, 5.6)

#### Goal

Expansion and Improvement of Lake Yosemite Regional Park.

#### Objective

#### **ALY 2.0**

To assure the continued capacity of Lake Yosemite Regional Park to serve the recreational needs of County residents.

#### **Policies**

#### **ALY 2.1**

Require that, prior to the transfer of title for any land that is currently or planned to be a part of Lake Yosemite Regional Park, UC Merced develop mechanisms for the acquisition of additional property to replace any parkland lost or impacted by the conversion for campus uses consistent with state and federal grant requirements. Eligible lands include, but are not limited to, lands contiguous with the existing developed Park and property on the Lake itself, subject to approval of the Board of Supervisors. (Imp 3.3, 5.6)

#### **ALY 2.2**

Developers of the University Community and UC Merced shall participate in the development of additional parkland adjacent to Lake Yosemite to be included within the Lake Yosemite Regional Park in cooperation with UC Merced in order to meet the needs of the University Community and campus populations at a standard of 0.88 acres for each 1,000 residents, which may be satisfied by the payment of in-lieu fees. (Imp 4.8, 5.6)

#### **ALY 2.3**

Work with the City of Merced and UC Merced to expand Lake Yosemite Regional Park in response to impacts associated with buildout of the University Community and UC Merced. (Imp 3.3, 5.6)

#### **ALY 2.4**

Encourage UC Merced to designate the County-owned property currently designated for Park expansion as an appropriate buffer for Lake Yosemite Regional Park, including, but not limited to, such lower intensity oncampus uses as athletic fields. (Imp 3.3)

#### **ALY 2.5**

Monitor the use of Lake Yosemite Regional Park associated with increased population and assess those impacts related to the build out of the University Community and UC Merced. The County, UC Merced, and developers shall work cooperatively with the University to assure that development adjacent to Lake Yosemite does not result in a net increase in costs to the County or decrease in service level. (Imp 3.3, 5.6)

#### **ALY 2.6**

Initiate, in coordination with UC Merced, the development and implementation of a Lake Yosemite Regional Park Master Plan to determine the potential uses, necessary facilities, design standards, and funding strategies for public parkland surrounding Lake Yosemite. The Master Plan shall address active and passive recreation including playing fields, recreational equipment design and placement, a pedestrian, bicycle, and equestrian recreational trail system around the Lake and connecting to existing or planned trails, parking and landscape planning and design. (Imp 4.8, 5.6)

#### Goal

Meeting the Recreational Needs of Eastern Merced County.

#### Objective

#### **ALY 3.0**

To establish a planning framework and identify resources to support recreation planning for Eastern Merced County

#### **Policies**

#### **ALY 3.1**

Work with UC Merced to create a joint task force to meet regularly in a public setting to achieve cooperative goals for recreation and open space planning, parkland and resource acquisition, and the provision of adequate active and passive recreation, parks and open spaces to meet the needs of the population of eastern Merced County and UC Merced. (Imp 3.3, 5.6)

#### **ALY 3.2**

Work with the City of Merced to establish recreation fees to apply to all new development, including the University Community, to support the expansion of Lake Yosemite Regional Park. (Imp 3.3, 5.6)

#### **ALY 3.3**

Encourage development of a public golf course in the vicinity of the University Community, UC Merced, and Lake Yosemite, as warranted by demand for such a facility. (Imp 1.4, 5.6, 5.11)

#### RELATIONSHIP TO THE CITY OF MERCED

#### CONTEXT

n 1997, the County and City entered into an agreement for the sharing of revenue for newly annexed areas to the City of Merced. Such a Revenue Sharing Agreement is required prior to the processing and approval of an annexation application to the City of Merced by the Merced County Local Agency Formation Commission (LAFCO). The Revenue Sharing Agreement contains provisions governing County land use within the City's Growth Area (SUDP) Sphere of Influence, and the Rural Residential Centers that exist in the vicinity of the City of Merced. Under the current terms of the agreement, the County is limited within this RRC to residential land uses at a density no greater than one unit per net acre, even though County zoning provisions allow a greater density and certain institutional uses.

The proposed site of the University Community SUDP Plan Area is located adjacent to the City's SUDP. In addition, Bellevue Road is designated by the City of Merced as a future transit corridor that would connect the University Community and campus with downtown Merced (via "M" Street). Cumulatively, these factors suggest that the intervening lands between the City and Community SUDP's Plan Area, currently designated for rural uses, be reconsidered for higher density development comparable to those uses permitted on adjoining lands. This could create a continuous pattern of urban uses of comparable density between the City and University Community. While this may be viewed as a benefit, it may also be perceived as a detriment. Arguably, one-acre lot development is urban in character and, in many communities, is the density of upscale housing neighborhoods. The lack of a clearly defined transitional area could negatively impact the ability to establish the identity of a distinct community that may be necessary to attract the involvement of a high quality master developer.

This issue, along with the potential growth inducement associated with development of the University Community SUDP Plan Area and Campus Parkway, begs

fundamental questions about the long-term urban growth boundaries for the City and protection of agricultural lands. Such issues cannot be resolved independently and require collaborative efforts that build upon the history of collaborative planning fostered by the Revenue Sharing Agreement. A number of ancillary issues emerging from the development of the campus and Community, such as their impacts on the use of Lake Yosemite Regional Park, would also benefit from a collaborative approach.

#### **GOALS, OBJECTIVES, AND POLICIES**

#### Goal

Development on lands between the University Community and City of Merced that is complementary and compatible reflects the area's characteristics and natural resources.

#### Objective

#### **ARM 1.0**

To establish a process and policy, standards, and regulations for the development of lands between the University Community and City of Merced to ensure their compatibility with the University Community, UC Merced campus, and City of Merced.

#### **Policies**

#### ARM I.I

Confer with the City of Merced in the joint planning of lands located between the University Community and City SUDP (location to be mutually determined by the County and City) that may designate land uses to be accommodated, development and design standards, transportation and infrastructure improvements, public services (schools, parklands, etc.), open spaces, resource management strategies, and governance. This would be accomplished through a Memorandum of Understanding, which builds upon the spirit of cooperation in the existing Revenue Sharing Agreement. (Imp 3.3)

#### **ARM 1.2**

Assure that development in the area between the City and University Community SUDPs urban limit boundaries complements (in type, density/intensity, and design) and does not adversely impact uses in these areas. In particular, control uses located at key entries and edges to ensure that their quality is reflective of the campus and Community. (Imp 2.1, 3.3)

#### **ARM 1.3**

Plan for the development of cohesive transportation (roadways, transit, bikeway, and pedestrian) and infrastructure (water, wastewater, storm drainage, telecommunications, and energy) systems that link the University Community, campus, unincorporated Rural Residential Center, and City, where needed and appropriate. (Imp 2.1, 2.4, 3.3)

#### **ARM 1.4**

As part of the joint planning of lands located between the University Community and the City of Merced SUDP, the County and the City should evaluate the long-term viability of rural water and wastewater infrastructure, and should consider the potential for provision of urban water and wastewater infrastructure to this area. (*Imp 2.1, 2.4, 3.3*)

#### Goal

A long-term growth and development strategy for the greater Merced urban area, including the University Community, which recognizes the importance of preserving opportunities for agricultural uses.

#### Objective

#### **ARM 2.0**

To establish a process and policy, standards, and regulations for the management of agricultural lands.

#### **Policies**

#### **ARM 2.1**

Collaborate with the City of Merced in establishing a strategy for the long-term growth and management/protection of agricultural lands on properties east of the City, extending to and beyond the proposed Campus Parkway. (Imp 2.1, 3.3,)

#### **ARM 2.2**

Collaborate with the City of Merced in implementing agricultural protection policies defined in the Area Plan—Agriculture (preceding section). (Imp 3.3,)

#### Goal

Maintenance and enhancement of Lake Yosemite Regional Park as a recreational amenity serving residents of the County, City of Merced, and greater region.

#### Objective

#### **ARM 3.0**

To establish a process and policy, standards, and procedures for the long term use, management, improvement, and funding of Lake Yosemite Regional Park.

#### Policy

#### **ARM 3.1**

Identify community recreational needs and potential funding sources for the Lake Yosemite Regional Park in cooperation with the City of Merced and other jurisdictions that benefit from the Park's use. While the Park is under the authority of the County, the City and all jurisdictions whose constituencies use that Park should seek to identify how they can contribute to the Park's maintenance, enhancement, and programs (refer to policy ALY 3.2). (Imp 3.3, 4.8, 5.6)

#### Goal

Provision of adequate public services to the University Community throughout its development life.

#### Objective

#### **ARM 4.0**

To engage the City of Merced as a partner in providing adequate urban services to the University Community in the early years of development.

#### Policy

#### **ARM 4.1**

Enter into agreements with the City of Merced to provide interim police, fire, library, and other services to the University Community during the initial stages of development and sufficient resource capacities are created to support local services. (Imp 3.3)

Clearly understood linkages to City and County destinations.

#### **Objective**

#### **ARM 5.0**

To develop a system of information, visual elements, and transportation that integrate the County, City, and University Community into a cohesive community fabric.

#### **Policies**

#### **ARM 5.1**

Work with the City of Merced to develop a well-designed street signage and monuments/ landmarks program that will be commonly used throughout the University Community, City of Merced, and adjoining areas that provides clear information regarding major destinations and travel routes ("wayfinding"). (Imp 3.3)

#### **ARM 5.2**

Work with the City of Merced in establishing a unified transit system that connects the University Community with key destinations in the City. (Imp 3.3, 4.1)

#### **RELATIONSHIP TO ADJACENT USES**

#### **CONTEXT**

he University Community planning area divides both the Flying "M" property being acquired by the Virginia Smith Trust/UC Merced LLC and Hunt Farms. The lands west of the Fairfield and Le Grand Canals within the UCP are designated for urban uses. Lands east of these canals have a rural designation of "Agriculture" in the County General Plan. As lands within the University Community and UC Merced campus are developed over time, it may be appropriate to consider how the use of these adjoining properties inter-relate and fit. The area north of the Le Grand Canal is highly constrained, as it is near some of the most valuable and sensitive wetlands and endangered species habitat in the region. The lands south of the Le Grand Canal are currently irrigated pastureland, crop land, and non-irrigated pasture. The use of such lands would have to be carefully evaluated for its impacts on the region's agricultural productivity, natural resource enhancement opportunities, and continuity with the University Community and UC Merced campus.

#### **GOALS, OBJECTIVES, AND POLICIES**

Goal

Long-term use of the land east of the University Community that reflects the site's natural resources, contribution to agricultural productivity, continuity with the University Community, and role as a definable urban limit.

#### Objective

#### **AV 1.0**

To provide a process for the consideration of the appropriate long-term use of lands east of the University Community Boundary.

#### **Policies**

#### **AV 1.1**

Evaluate the appropriate long-term use of the lands east of the University Community including consideration of, but not limited to, development, agriculture, habitat preservation, or habitat restoration. (*Imp 2.1, 5.1*)

#### **AV 1.2**

Evaluations of the lands east of the University Community shall consider the site's soils, agricultural uses, and productivity; the existing presence of wetlands and significant plant and animal species, as well as habitat enhancement or restoration opportunities; relationship and ability to fit with the University Community's land uses and infrastructure and UC Merced; and relationships to adjoining agriculture and open spaces. (Imp 2.1, 2.3, 5.1)

# Area Plan

## AREA PLAN—RELATIONSHIP TO UC MERCED CAMPUS LONG RANGE DEVELOPMENT PLAN (LRDP)

#### CONTEXT

he design and development of the UC Merced campus is guided by the campus Long Range Development Plan (LRDP.) The LRDP describes the development of a Main Campus of 910 acres, a Campus Land Reserve of 340 acres, and a Campus Natural Reserve of 750 acres. Development within the main campus is proposed to consist of an Academic Core (157 acres); Student Services (23 acres); Student Housing (250 acres); Faculty Housing (90 acres); Campus Support (56 acres); Athletic and Recreation (148 acres); Parking (147 acres) and On-campus Research (39 acres). The LRDP was approved by the Regents in January 2002.

The University Community Plan has been prepared to address the growth that will occur as a result of the development of UC Merced. The County and University planning teams have closely coordinated throughout the preparation of the UCP and LRDP. This coordination has resulted in the Plans being compatible and mutually supportive. As these plans are administered and future amendments considered, this coordination between the County and UC will become even more critical, to ensure the continued compatibility of these plans. The integrity of these plans must also be retained to respect the representations in each plan that each one achieves its goals with minimum environmental impact. In recognition that the development of UC Merced as prescribed by the LRDP will change over time in consideration of evolving academic and research programs and financial resources, it will be essential to periodically review and amend where necessary the UCP to ensure the consistency of development within the University Community.

Because the University and University Community are being developed on vacant lands, the unique coordination of the University and County in developing and implementing their plans will avoid the historical experience of land use conflicts in other campus host communities.

#### **GOALS, OBJECTIVES, AND POLICIES**



Maintain the compatibility of the University Community Plan and Campus Long Range Development Plan, and the integrity of each plan, as these plans are administered and implemented by the County and the University. Ensure through development agreements and other measures that if presently unanticipated University campus uses outside the boundaries of the LRDP adopted in January 2002 are proposed within the UCP area, such uses will conform to and not frustrate the provisions of the Merced County General Plan and the University Community Plan.



#### ARUC 1.0

To provide a process during the administrative and public review of Specific Plans for the University Community that ensures coordination between the County and University in the implementation and administration of the UCP and LRDP, and maintains the integrity of each plan.

#### **Policies**

#### ARUC I.I

The County shall, consistent with state statutes, make available drafts of specific plans for public review and comment, which shall include the opportunity for UC Merced to comment regarding their compatibility with the campus LRDP.

#### ARUC 1.2

Amendments to the UCP shall not frustrate the goals, objectives, policies, and programs of the campus LRDP.

#### ARUC 1.3

The County shall review proposed amendments to the LRDP, prior to consideration by the Board of Regents, to ensure their compatibility with the University Community Plan goals, objectives, policies, and programs.

#### ARUC 1.4

The County shall secure the cooperation of UC Merced to assure that any amendments to the UC Merced LRDP not frustrate the goals, objectives, policies, and programs of the University Community Plan.

#### ARUC 1.5

In recognition of possible significant changes in UC Merced's academic and research programs, the County shall periodically review the UCP in response to changes to the UC Merced LRDP.

# Implementation Plan

## IMPLEMENTATION PLAN

his chapter of the Community Plan outlines the Implementation Program of the Merced County University Community and Area Plans. These describe the comprehensive set of actions, procedures, and relationships necessary to carry out the Plans. While some of the programs are described in considerable detail, they do not necessarily address all policy requirements presented in the preceding sections of the UCP. Consequently, all Plan policies need to be referred to in carrying out these programs.

Each of the policies contained in the preceding sections of the UCP shall be implemented by one or more of the following programs. Applicable implementation programs are referenced for each policy by the notation: (Imp \_\_\_). Over the course of the buildout of University Community's land uses, it can be expected that the implementation programs may change due to state and federal legislation, court decisions, and funding sources and other unforeseen events. Consequently, the programs defined in this chapter should be reviewed annually and modified as necessary to reflect pertinent changes.

#### **OVERVIEW**

he Implementation Plan describes the institutional actions and mechanisms necessary for carrying-out the University Community and Area Plans. In reality implementation of the Community Plan will be an on-going process with future stakeholders and residents building on the actions and decisions made in earlier planning phases. Thus, the Implementation Plan establishes a framework for this process by outlining the individual programs and actions needed to develop and maintain the University Community, consistent with the Community and Area Plan goals and policies.

Implementation covers a wide range of topics including (a) how development will be organized and pursued by the private sector, (b) how the public (the County) will manage the planning and development effort over time, (c) how governance will be established to provide infrastructure and services; and (d) how public facilities and services will be financed and constructed. Of course, these four areas are interdependent and need to be coordinated both initially and as time moves forward.

A key aspect of implementation of the University Community Plan will be the large amount of negotiation that will be necessary. There are many parties-of-interest who each must be satisfied that their interests or obligations are achieved. A variety of "inter-agency agreements" will need to be negotiated between the County and other jurisdictions that will serve the Community. An agreement will need to be reached with UC Merced on a range of topics including infrastructure cost sharing. Property owners and prospective developers will be involved in negotiating aspects of any "master developer" role. State and federal regulating agencies will define mitigation requirements that will need to be met.

#### IMPLEMENTATION PROGRAMS

he following implementation programs, as acted upon, will achieve the goals and policies set forth in the Community Plan and Area Plan. The numbering system used below to identify each implementation program is referenced by applicable UCP policies.

#### I.0 MASTER DEVELOPMENT PROCESS

he University Community Plan area is currently held by property owners who it is assumed will sell or transfer their land to private real estate developers who will undertake the actual development process. The general outline of this process will need to be specified, to the degree possible, and coordinated with other aspects of the planning effort. The Master Development Process will be managed by the property owners, pursuant to County goals and policies expressed in the UCP. The County may have a coordinating role in the Process. The following key steps are likely to be required:

#### IMP 1.1 PUBLIC/PRIVATE FINANCING STRATEGY

Since the development of the University Community will rely on both public and private funds, the coordination and allocation of private and public sector responsibilities will be an essential part of the implementation program. In this regard, the Master Developer will need to play a key role in developing financing strategy, as discussed further below.

## IMP 1.2 ECONOMIC DEVELOPMENT PROGRAM

The Master Developer(s) must be actively engaged in marketing and economic development activity, a role that will be specified in the Contract Terms and Conditions described above. This activity will include typical marketing and tenant attraction as well as coordination with the University and local government-sponsored economic development efforts. For example, the Master Developer(s) will likely assist in the development of an Economic Development Strategy that will include targeted outreach to business sectors that will enhance academic-professional linkages between the Community and UC Merced.

#### 2.0 DEVELOPMENT MANAGEMENT SYSTEM

he Development Management System describes the role, relationship, and sequencing of key policy documents associated with the University Community Plan. The Development Management System is basically how Merced County will regulate development of the University Community over time. Because of the unique nature of this area a special set of programs must be established, rather than relying solely upon the County's normal procedures that apply throughout the rest of the unincorporated County. These include:

#### IMP 2.1 MERCED COUNTY GENERAL PLAN

The University Community Plan shall be adopted as an integral chapter of the County of Merced General Plan, consistent with the California Government Code §65300 et seq. The UCP's policies are intended to supplement and be consistent with countywide General Plan goals, objectives, policies, and programs that are applicable to the University Community. Adoption of the UCP will

modify the County General Plan Land Use Diagram by applying a "Multiple Use—Urban Development" to the University Community planning area, as depicted on Figure 3. Existing land use zoning shall be retained in these areas until such time that Specific Plans, Development Agreements, and, where needed, County General Plan amendments are approved by the County Board of Supervisors in accordance with State Planning Law and the *California Environmental Quality Act*.

Implementation of the Area Plan goals, objectives, and policies may involve the reconsideration of the County General Plan's land use policies and designations and resource conservation strategies for lands adjoining the University Community. Should changes be proposed by the County, they shall be considered as amendments to the County General Plan, subject to *California Environmental Quality Act* review and public hearings by the Planning Commission and Board of Supervisors.

Any future amendments to the Merced County General Plan shall be evaluated for their applicability to the University Community to ensure that the unique role of the University Community is recognized and not in conflict with the amendment. Updates of the County General Plan Housing Element's Five Year Action Plan shall consider the appropriate contribution of the University Community in meeting Countywide fair share housing obligations for that time period. These shall reflect provisions for affordable housing made in any Specific Plan and/or Development Agreement approved for the University Community.

#### **IMP 2.2 UNIVERSITY COMMUNITY PLAN**

All land development, infrastructure improvements, public services, capital budgeting, and resource conservation programs in the University Community shall be consistent with the UCP. Specific land use entitlements and actions shall be defined in Specific Plans to be prepared for the Community's planning sub-areas (see below), which must be found to be consistent with the UCP.

In accordance with \$65400 of the Government Code, the Board of Supervisors shall provide, as a part of its mandatory review of the County General Plan, an annual report to the State of California Office of Planning and Research and the Department of Housing and Community Development on the status of the Community Plan (and implementing Specific Plans) and progress in meeting the County's share of regional housing needs.

The County Board of Supervisors may amend the UCP a maximum of four times during any calendar year in accordance with Government Code §65358. This limitation does not apply to amendments for a single development of residential units for which at least 25 percent of the total units will be occupied by or available to persons and families of low or moderate income.

At a minimum, the County shall undertake a comprehensive review of the UCP at least once each 10 years to ensure that it accounts for prevailing physical, market and fiscal economic, and social conditions and issues, the needs and visions of community residents, legislation and court decisions, and state-of-the-art planning, design, and community development processes. This review should assess the effectiveness, feasibility, and continued relevance of the Plan's existing goals, objectives, policies, and implementation programs. Those that remain valid should be retained and supplemented where necessary. The UCP should also be comprehensively reviewed concurrent with any substantive revisions of the UC Merced UCP.

Any UCP amendments would be subject to public input and environmental review.

## IMP 2.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A Program Environmental Impact Report (EIR) has been prepared and will be certified for the University Community Plan in accordance with the procedural and substantive requirements of the California Environmental Quality Act (CEQA). This document describes (1) the proposed project (the UCP); the University Community's existing environmental setting; (2) the environmental impacts that would occur on implementation of the UCP, including cumulative impacts resulting from other know future projects including development of UC Merced; (3) measures that must be implemented to reduce these impacts below a level of significance; (4) impacts that cannot be reduced below a level of significance; (5) alternatives to the proposed project; and (6) the environmentally superior alternative. A companion document, the Mitigation Monitoring Program, defines the process for the monitoring of the implementation of prescribed mitigation measures and evaluation of their effectiveness in reducing impacts. Most of the measures that have been identified to mitigate the impacts of the development of the University Community are incorporated as policies of the UCP.

The Program EIR is written to the level of specificity of the UCP's goals, objectives, policies, and programs. It shall be used as the basis for the preparation of CEQA-required environmental documents for subsequent sub-area Specific Plans, in which the analyses would be tiered from those defined in the Program EIR. Following the certification of an environmental document for a Specific Plan, any residential development project in the University Community that is consistent with the adopted Specific Plan shall be exempt from further CEQA review, as specified in California Government Code §65457.

## IMP 2.4 COMMUNITY MASTER PLANS OR FACILITY PLANS

Prior to or concurrent with the formulation of sub-area Specific Plans, it will be necessary to establish the precise locations, development standards, and implementation procedures (governance, funding, etc.) for the backbone elements of UCP infrastructure and public services that will serve all planning sub-areas and to which the land uses and improvements of the sub-areas must connect. This may be accomplished through the preparation and adoption of Community-wide master plans that would include:

- 1. Areawide public improvements plans—roadways, bicycle paths, transit corridors, and other transportation elements, integrated water systems (sanitary sewers, water distribution and storage, and storm drainage), energy, and telecommunications (refer to *Imp 4.0*).
- 2. Areawide open space network including parks, trails, and passive open spaces.
- 3. Urban design and streetscape improvements that unify the entirety of the University Community.

## IMP 2.5 PLANNING SUB-AREA SPECIFIC PLANS

Separate Specific Plans shall be prepared for the University Community Town Center and Residential Villages as generally depicted on Figure 6, in accordance with California Government Code §65450 et seq. These boundaries may be modified to reflect site conditions and land use development market projections at the time of the preparation of the Specific Plan, provided that the UCP's intentions for urban form and development character are achieved. The number of Residential Villages shown on Figure 6 is correlated with the number of K-6 schools that are estimated to be required to support the Community's population. Should this be modified, the number of Villages may be adjusted accordingly. Specific Plan boundaries shall be confirmed by the County in consideration of objectives for the development of cohesive and integrated neighborhoods and districts. Specific Plan land use designations and development guidelines and standards shall serve as the zoning regulation of the area within the Specific Plan boundary.

UCP Specific Plans will be prepared by the landowners and/or Master Developer(s) in cooperation and pursuant to County of Merced adopted policy and procedures. Accordingly, the County shall adopt a University District Specific Plan Ordinance that specifies the content and procedures whereby Specific Plans within the UCP shall be adopted by the County of Merced, consistent with the description provided in this section. The public shall be provided the opportunity to have input during the preparation of the Specific Plans, as well as during formal hearings to be conducted by the Planning Commission and Board of Supervisors, in accordance with state statutory requirements (California Government Code Sections 65453 and 65351). Environmental documents shall be prepared for the Specific Plans in accordance with CEQA (see above).

## CONSISTENCY WITH UNIVERSITY COMMUNITY PLAN

The Specific Plans shall implement and be consistent with the policies contained in the UCP. They are intended to achieve distinctly identifiable places that integrate a mix of uses into a cohesive district or neighborhood and are integrated with and support the functions and uses of UC Merced.

The mix and amount of uses to be accommodated in a Specific Plan area shall be consistent with Table 2, which prescribes development capacity limits for the Town Center and Residential Villages. The amount of development in any planning sub-area may be transferred to another, provided that the Plan's policies for urban form and community character are achieved and the cumulative development capacity for the Community is not exceeded, nor reduced to a level that jeopardizes the ability to adequate fund infrastructure, public services, and environmental mitigation. The prescribed mix of single and multi-family housing units may be varied to reflect market conditions prevailing at the time of the Specific Plans' preparation, provided that there is a commitment to provide sufficient units affordable to meet the needs of the Community's population (see below). Any variation of use and/or density shall be determined in consultation with the County and supported by market, fiscal impact, affordability needs, and other analyses that justify such a variation.

## CONSULTATION WITH UC MERCED FOR TOWN CENTER/CAMPUS CORE EDGE

The Town Center Specific Plan shall be prepared in consultation with UC Merced to ensure the UCP's objectives for the interface and sharing of uses and continuity of streets, sidewalks/pedestrian paths, bikeways, infrastructure, open space amenities, and other elements are achieved.

#### RESPONSIBILITY FOR PREPARATION

Preparation of the Specific Plans may be prepared by one of the following methods:

- 1. On the initiation by and full funding by a property owner and/or developer, with preference given to one or more master developers, with County input, review, and approval
- 2. On initiation by the County upon the formation of an assessment district to fund the plan's preparation
- 3. On the initiation by the county using General Funds or other sources with reimbursement by subsequent developers; or

4. A collaborative partnership of the County and UC Merced for the Town Center and campus core edge

#### SPECIFIC PLAN STUDIES AND CONTENT

Additional background data pertaining to the planning sub-area's conditions and constraints shall be compiled to supplement the UCP's database and as necessary to support the preparation of the Specific Plan. This may include, but not be limited to:

- 1. Soils and geotechnical analyses—type, stability, expansiveness, permeability, and so on
- 2. Archaeological, cultural artifact, and paleon to logical surveys
- 3. Hazardous materials surveys
- 4. Plant and animal surveys

Sub-area Specific Plans shall contain, at a minimum, the following components. It should be noted that this list is only intended as an overview of key elements that must be incorporated in the Specific Plans, as defined by UCP policies. It is not intended to serve as a comprehensive listing of all topics that must be addressed or studies to be undertaken. Authors of the Specific Plans must carefully review all UCP policies to ensure compliance with their requirements, and to consult with appropriate federal and state agencies.

- 1. Physical development plans including:
  - a. Land use plan that depicts the uses to be accommodated by type, density, and/or other descriptive characteristics, consistent the allowable uses stipulated in Table 2 or as modified as described above.
  - b. Land division and parcelization plan.
  - Urban design and streetscape plan (landscape, sidewalk and crosswalk paving, street furniture, lighting, signage, public art, and other elements).
  - d. Transportation Improvement Plan (TIP) that defines local streets, and highways, transit facilities, truck routes, bikeways, pedestrian paths, and hiking trails, parking management, demand management, and other elements that are consistent with the community-wide Public Improvements Plan (refer to *Imp 4.1*).
  - e. Parking plan that identifies the location and types of facilities such as on site for each use and/or shared facilities.

- f. Infrastructure services plan that defines the network of local integrated water (IWIMP), energy and telecommunications, and solid waste infrastructure systems that connect with backbone systems and any other local improvements and funding and governance methods (refer to *Imp 4.0*).
- g. Design and engineering plan for the protection of the MID canals, as appropriate.
- h. Public services plan that prescribes the location and facilities for schools, police, fire, library, and civic uses and funding methods (refer to *Imp 4.0*).
- i. Parks and recreation plan that prescribes park locations, improvements, and acquisition and funding methods (refer to *Imp 4.0*).
- j. Open space and habitat mitigation plan (refer to *Imp 4.10*). This may include park lands, trails, habitats to be preserved, restored, or newly developed on site. Specific Plans prepared for Residential Villages adjoining agricultural lands shall incorporate a landscaped buffer of adequate size to protect these lands.
- 2. Housing Program that stipulates the total number of units that shall be developed and affordable to very low, low, and moderate income households, the methods by which they shall be provided (fee waiver, inclusionary, in-lieu fee, bonus density, state or federal funding, etc.), the timing of their development, County or other agency purchase or rental financial assistance programs, and commitments for preserving the affordability of the units for a 10- to 20-year time period. The Housing Program shall be developed in collaboration with and approved by the County prior to the submittal of the final draft Specific Plan.
- 3. Impact mitigation plan that identifies the amount of productive agricultural lands, wetlands, or other habitats (as defined by UCP policy) that will be lost or otherwise affected by development and the method(s) by which these impacts shall be mitigated (e.g., replacement of lost habitat, or other strategy as defined in *Imp 4.10*). The mitigation program shall be developed in collaboration with and approved by the County prior to the submittal of the final draft Specific Plan. These requirements are not intended to supplant federal and state *Clean Water Act* or *Endangered Species Act* requirements.

- 4. Commitment for participation in:
  - The County Right-to-Farm Ordinance, that requires purchasers of property in the University Community to acknowledge the presence of continued agricultural activity in proximity to the University Community
  - Environmental resource habitat mitigation program and/or Habitat Conservation Plan
  - Mitigation program for the loss of agricultural lands in the north Merced area that may be established and adopted by the County of Merced and City of Merced. In the event that programs have not been adopted by the County and City prior to approval of any sub-area specific plan, the specific plan shall commit to the implementation of such measures that would achieve the equivalent protection of comparable farmland at a ratio of 1:1 for Important Farmland converted with the subject specific plan area. Examples of measures include acquisition of conservation easements, payment of in-lieu fees to the County (or an appropriate third party designated by the County) that would protect such lands through fee title, easement, or other measures.
- Development regulations pertaining to each use to be developed in the Specific Plan sub-area that shall address:
  - Permitted uses
  - Residential density (units per acre) and commercial and industrial intensity (floor area ratio)
  - Building height
  - Lot coverage and property setbacks
  - Landscape, including standards for the use of sustainable plant materials (natives, drought tolerant, drip irrigation systems, and so on)
  - Lighting
  - Signage
  - Parking and parking management including on-site showers for bicyclists (in activity centers)

- Sustainable development practices for site planning, building design, architecture, landscape, building fixtures, infrastructure improvements and other relevant elements, which shall include the establishment of energy and water conservation budgets and recycling goals
  - These standards shall constitute the zoning for the Specific Plan sub-area and, where appropriate, be uniquely designed to reflect the intended uses within the Community such as mixed use and pedestrian-oriented buildings/uses in the Town Center and Residential Village Centers.
- 6. Design guidelines for site layout, architecture, landscape, and grading and public streetscape improvements (paving materials, street furniture, trees and plantings, signage, lighting, public art, and other). These shall reflect the UCP's intentions, as expressed by policy, for the development of a "walkable" and "livable" community (e.g., siting of buildings, concentration and intermixing of development, pedestrian-oriented design, and so on) and the use of sustainable development practices (e.g., recapture of storm runoff on site, orientation and design of structures to reflect climatic conditions and minimize energy consumption, incorporation of solar and wind energy systems, use of native and drought-tolerant landscape, and so on).
- 7. Capital improvements plan that defines the costs and sources of funding for public infrastructure and services, consistent with the Public Improvement Plan (*Imp 4.0*).
- 8. Phasing plan that depicts the sequence of land use development, circulation, infrastructure, and public service improvements. Documentation shall be included that demonstrates that the phasing program results in cohesive neighborhoods and districts, is of a scale sufficient to assure economic viability, is financially feasible, is appropriately related to the development of UC Merced and peripheral land uses, and does not impact the integrity of agricultural and natural resource lands not designated for development.
- 9. Fiscal impact analysis that defines the full public costs associated with development and anticipated revenues.

- 10. Implementation programs that define the range of actions to carry out the Specific Plan that may include Development Agreements, development fees, County development review and approval processes, governance, and other appropriate programs.
- 11. Financing plan for public infrastructure and services, identifying costs, financing mechanisms, and projected revenue.

#### 12. Findings that:

- Levels of development to be accommodated in the sub-area reflect the scale of planned and anticipated student enrollment, faculty, and programs of UC Merced
- Pertinent interagency agreements have been approved
- Pertinent environmental permits have been committed or approved, in accordance with prescribed procedures
- Criteria specified for Policy LU -4.5 have been achieved.

## IMP 2.6 ZONING REGULATIONS AND BUILDING CODES

While the Specific Plans shall serve as the zoning ordinances for the Community, it may be necessary to revise the County Ordinance, as well as the Building Code, to ensure that the more precise standards for the Community can be found to be consistent with these. In some cases, the revisions may be only applicable to the University Community, while in others that may have potential utility throughout the County. Such may include:

- Establishment of a new General Plan land use category, "Multiple Use Urban Development," that accommodates the mix of uses specified by the UCP
- Establishment of a new land use category for the development of mixed-use structures that integrate housing with retail commercial, office, civic, institutional, public parking, or other uses
- Establishment of new residential categories to reflect the range of housing types and densities in the Community, as well as provide flexibility for the accommodation of innovative and new housing types that may be proposed

- Establishment of flexible commercial and office/ research and development land use categories that facilitate the Community to accommodate new uses that may evolve in the marketplace during its buildout
- Modification of noise standards to allow the development of housing units in areas exceeding a 65 dBA L<sub>dn</sub> provided that interior noise levels do not exceed a standard of 45 dBA Ldn in the Town Center and other key activity centers
- Modification of building codes to permit the use of sustainable and energy conserving building materials that fully comply with structural design, wind, and seismic requirements such as Rastra, stamped bales, and other innovative materials
- Modification of building codes to permit the use of innovative design techniques that promote sustainability such as the recapture of rain water in cisterns and on site; gray water recycling plumbing; use of solar and wind generated elements; location of heating, ventilating, and air conditioning in the exposed, "conditioned" space; and incorporation of showers in offices and public buildings (for bicyclists)
- Modification of building codes to preclude the use of wood roofs and other combustible materials in Community areas exposed to high fire hazards

## IMP 2.7 DEVELOPMENT AGREEMENTS AND SUBDIVISION MAPS

Development Agreements shall be prepared as contractual agreements between the County and developers of the University Community sub-areas to provide assurances to each party regarding the uses to be entitled and rules of development. Development Agreements shall be adopted by the Board of Supervisors, in consideration of public comments, and be effective for a specified time period. Since the University Community will be developed over an extended time period, such agreements reduce the uncertainty of changing policies, rules and regulations, and conditions of approval that are likely to occur and which can impact development feasibility and quality. In accordance with Government Code §65865.2, the Agreements shall specify the permitted uses of the property, density and intensity of use, maximum height and size of proposed buildings, and provisions for the reservation or dedication of land for public purposes (schools, parks, and so on), consistent with the adopted UCP and related Specific Plans.

Subdivision maps shall be prepared to implement an approved Specific Plan and Development Agreements in accordance with the *California Subdivision Map Act* (Division 2 of Title 7 of the Government Code). These will divide the planning sub-area into legal parcels of record to accommodate planned development, including those dedicated for transportation and infrastructure improvements and open spaces. Generally, the subdivision process involves the preparation of a Tentative Map that is submitted for County review and approval, for which conditions of development are normally applied. The Final Map incorporates the approved elements and conditions and provides the legal basis for land division and development.

The County's Subdivision Ordinance shall be revised by Merced County to reflect UCP policies and standards, where appropriate. These may address land use density/intensity and parcel size, grading to reflect the site's topography, and the use of best management (BMPs) and environmental sustainability practices.

## IMP 2.8 ENGINEERING REVIEW AND MONITORING

Proposed development projects shall be reviewed for their compliance with applicable building code, subdivision, and other County engineering requirements and standards. At a minimum, this will encompass review of (1) infrastructure improvements consistent with the Public Facilities Plans (Imp 4.0), including transportation, potable water, wastewater, storm drainage, electricity, natural gas, and telecommunications; (2) site grading and soils/geological stabilization; (3) building and foundation design for structural stability, fire codes, soils and geologic characteristics, and so on; and (4) compliance with energy and water conservation budgets and environmental sustainability standards. Project applicants will be required to submit studies and analyses that are necessary for an adequate engineering review such as traffic impact studies, soils tests, and percolation test.

Where development or public improvements abut or otherwise impact the Merced Irrigation District (MID) canals and tributary facilities in the University Community, proposed grading and development plans shall be reviewed with MID to ensure that the structural integrity, functionality, and safety of the systems are maintained.

#### **IMP 2.9 DESIGN REVIEW**

Proposed development projects shall be reviewed for their consistency with the UCP and Specific Plan design and development standards and guidelines and applicable codes and regulations. Plans and designs may be reviewed and approved by the County Planning Director, the Planning Commission, or an appointed University Community Design Review Board. If the latter, its membership should consist of design professionals (architecture, landscape, urban design, and/or visual arts) and Community residents and businesspersons that would report their recommendations to the Planning Director and/or Planning Commission. Appeals would be submitted to the Board of Supervisors.

## IMP 2.10 ENVIRONMENTAL RESOURCE AND IMPACT MONITORING

The County shall maintain a map of the sensitive plant and animal resources within the University Community. The map will be updated to reflect current conditions within the University Community every two years. Any potential unauthorized activities will be reported to the appropriate regulatory agency. These activities include but are not limited to unauthorized fill or draining of jurisdictional waters, the take of threatened or endangered species or their habitats, and the destruction of active raptor nests.

Environmental impacts and the effectiveness of defined mitigation measures of the University Community shall be evaluated in accordance with a prescribed Environmental Monitoring Program, prepared in accordance with CEQA.

#### 3.0 GOVERNANCE

he Governance portion of the Implementation Program describes the institutional process through which key policy decisions related to the University Community will be made and carried-out. It is likely that the actual governance of the University Community will evolve over time with more developed governing bodies created as the area becomes more developed and populated. At the outset, governance will be provided by the county; however as changes in district or municipal boundaries are considered or independent special districts are created, the Merced Local Agency Formation Commission will be involved pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. The actual governance will be determined through the following processes.

## IMP 3.1 INTERIM GOVERNANCE STRUCTURE

Initially, the County will serve as the governing body and may continue to play an important role in decision-making and public service provision over time. However, the County will need to establish an entity (i.e. a special district) that is responsible for overseeing and coordinating University Community-related infrastructure development and public services delivery.

## IMP 3.2 OPTIONS AND MECHANISMS FOR TRANSITION

Given that the form and structure of the governmental entities with jurisdiction over the University Community is likely to evolve over time, a transition plan will need to be developed. The Transition Plan will define the process through which new governing structures are adopted and developed. Options include continued operation as an unincorporated area of the County served by a special district, annexation to the City of Merced, and incorporation of an entirely new City.

## IMP 3.3 INTER-AGENCY COORDINATION AND AGREEMENTS

Success of the University Community depends in some measure upon the successful cooperation between the County of Merced and UC Merced. The proximity to the City of Merced and the need for coordination with other regulating agencies also create the need for a range of special agreements.

#### County and University of California Merced

Development of the University Community is directly linked to the development of UC Merced and its population of faculty, staff, and students. There are numerous issues of common concern that need to be jointly addressed by the County and UC Merced through collaborative planning processes, formal agreements, and informal coordination. At a minimum, these must address:

- Provision of a connected system of transportation and, where appropriate, water/wastewater and other utility infrastructure
- Provision of recycling and solid waste disposal facilities
- Development of shared or transitional uses in the Town Center and campus core and shared parking facilities at the same locations and Lake Yosemite Park
- Development of connecting open space systems
- Provision of a range of housing in the Community that is affordable in the long-term for UC Merced students, faculty, and staff
- Mitigation of the loss of vernal pools, wetlands, and other environmental resources
- Mitigation for the impacts of the campus on Lake Yosemite Regional Park and replacement of County lands that had been acquired for the purposes of Park expansion
- Use of campus recreational, libraries, and other facilities by residents of the Community and greater Merced
- Provision of adequate public schools to support the needs of campus residents

- Development of lands adjoining the University Community and UC Merced to ensure that it is complementary, compatible, and of a high quality
- Support for economic development strategies designed to attract business sectors that will both complement and benefit from the academic environment fostered by UC Merced

#### **JURISDICTIONAL AGENCIES**

A number of governmental agencies and districts currently have and may continue to have decision-making and service provision responsibilities within the University Community area (e.g. water, irrigation, and wastewater districts). In many cases, development of the University Community will require expanding, modifying, or reconstituting these district and agency responsibilities. Thus, implementation of the Community Plan will require establishing agreements with these agencies and districts.

Development projects that abut or otherwise affect the MID canals and ancillary facilities shall be reviewed with and be subject to approval by MID to assure that their structural and functional integrity is maintained and that there are no adverse impacts on public safety or liability.

Agreements necessary for the development of an integrated water system include the following:

- Prior to the approval of the first Tentative Map, an agreement between the County of Merced and MID to discharge stormwater to MID facilities from lands outside of the current district shall be approved by the Board of each agency:
  - Land areas north of Sections 10 and 11 and west of Section 4 will require an agreement and fee for discharging stormwater runoff to the Fairfield Canal
  - At a minimum the Agreement shall be based on the MID Facilities Master Plan and the Storm Drainage Master Plan (previously prepared and adopted) and shall identify necessary improvements (if any) both within the UCP and outside the UCP that may be required to accept drainage outside of the current district
- 2. Prior to the approval of the first Specific Plan, develop an agreement between the County and the University of California, Merced related to shared water-related infrastructure systems. At a minimum, the Agreement shall address the following:

- Definition of those facilities to be shared
- Governance of the shared facility
- Cost sharing for the design and construction for each shared facility
- Cost sharing for on going operation and maintenance of each shared facility
- Determination of when and how the expansion of proposed facilities would take place to meet Campus and UCP demand
- 3. Prior to the approval of the first Specific Plan, develop an agreement between the County and the City of Merced related to the potential connection of the University Community to the City of Merced water distribution grid, if needed. At a minimum, the Agreement shall address the following:
  - Governance of the shared facility
  - Timing of when the connection can be made
- 4. If required, prior to the approval of the first Specific Plan, develop an agreement between the County and a local jurisdiction related to the potential connection of the University Community wastewater system to a local municipal wastewater treatment facility. At a minimum, the Agreement shall address the following:
  - Maximum quantity of effluent that will be accepted by the existing collection and treatment infrastructure operated by the local jurisdiction
  - The alignment of the off-site collection facility to the jurisdictions wastewater treatment plant shall be graphically defined and included as an Exhibit to the Agreement
  - The Agreement will constitute a "Will Serve" commitment on the part of the local jurisdiction
  - Fair share of cost to provide collection and treatment shall be included in the Agreement

#### **CITY OF MERCED**

The County of Merced and City of Merced maintain a number of cooperative relationships regarding land use development and infrastructure and public services. Development of the University Community will necessitate furthering these efforts including:

- 2. The proximity of the University Community to the City raises the issue of development in the North Merced area, the City's Sphere of Influence, and County "Rural Residential" areas located between the City and University Community. While the City's planned long term growth patterns are to the north of Bellevue Road, there has been some interest expressed by the City to reconsider whether or not this growth should be refocused easterly towards the University Community along the Bellevue Road corridor. To resolve these issues, it is recommended that the County and City engage in a collective process to determine the appropriate land uses, densities, and improvements that should link and serve as transitions between the City's urban area and the University Community. Depending on the outcomes of such a study, this may involve amendments to the County General Plan, County-City Revenue Sharing Agreement, and a revised Sphere of Influence Study for the North Merced Area developed by the City in cooperation with the County that would be submitted to the Merced Local Agency Formation Commission for approval.
- 3. The County and City may enter into an agreement that:
- Reiterates the commitment of both jurisdictions for the preservation of agricultural lands east of the City of Merced
- Establishes appropriate oversight, information exchange, and approval processes by the Board of Supervisors and the City Council for changes of zoning to urban uses within the areas south of the University Community boundary and immediately east of the City of Merced

#### **SCHOOL DISTRICTS**

As part of the implementation process, applicable developers shall formalize plans with the school districts that address the implementation of school facilities and support facilities that are needed and required to serve the University Community. Key issues to be addressed shall include:

- Number and Type of Schools: Although the Community Plan estimates the number and type of schools needed to serve the University Community, these estimates will need to be finalized and confirmed based on discussions with and requirements of the school districts. Estimates will be based on school generation factors, service standards, and other considerations. In this regard, it will be important to consider the potentially unique student generation factors associated with the expected population base within the University Community. The County, applicable developers, and the school districts shall agree on the number and type of schools that will be constructed in the UCP as the development proceeds.
- School Location and Phasing: The general locations of the schools estimated to be needed in the University Community are depicted on the Illustrative Land Use Diagram (Figure 4). The County and the school districts shall work together and identify the specific planning subareas in which the high, middle, and elementary schools shall be located. These school sites shall be designated in amendments of the County General Plan and the University Community Plan. Prior to adoption of specific plans, Development Agreements, or tentative maps, the school districts shall work with applicable developers to confirm the number and size of schools needed, and their location consistent with the urban form policies specified by the University Community Plan.

Funding for School Facilities: The school districts, at a minimum, have indicated that they will levy Level I development impact fees. Since Level I fees may not be adequate, the school districts have the authority under state law to levy and impose Level II and Level III development fees, upon a showing of the proper justification and subject to school district state eligibility and applicable statutory requirements. In the event that school impact fees are not adequate to fund the acquisition and construction of school facilities, landowners and developers may enter into voluntary impact mitigation agreements with the school districts. Landowners and developers also may choose to advance to the school districts the difference in costs between the state-mandated school impact fee and the actual "fair share" costs of providing necessary school facilities. When and if the school districts receive state funds for facilities constructed with funds advanced by landowners or developers, the school districts would then reimburse the landowners/developers on a pro-rata basis. The school districts may also offer to landowners within the Community the opportunity to voluntarily establish one or more Mello-Roos Community Facility Districts (CFD) or School Facility Improvement Districts (SFID) in order to provide a higher level of school facility funding, in the event development fees and state funding are deemed insufficient.<sup>2</sup> Since both the CFD and SFID can be tailored to the actual areas of new development, they can provide more funding than the state minimum standards without burdening the current district landowners with general obligation bonds. The implementation of CFDs or SFIDs will require the affirmative vote of the landowners to form the CFDs or SFIDs and levy special taxes, and shall be in compliance with applicable standards and accepted financing procedures and requirements.

The above issues will need to be addressed in the context of promoting a high quality and financially feasible Community Plan. For example, the development of school facilities will need to be phased to make optimal use of existing facilities and minimize overly burdensome up-front costs on development. Such use shall not, however, result in unreasonable impacts on existing facilities or facility-related services.

#### IMP 3.4 EXISTING COMMUNITY-SERVING SPECIAL DISTRICTS

Certain infrastructure and services may be provided to the University Community by existing special districts such as the Merced Irrigation District. When such services differ in some fashion from those provided through the jurisdiction of these special districts special agreements may be required.

## IMP 3.5 PARTNERSHIPS WITH PRIVATE AND QUASI-PUBLIC AGENCIES

The County shall work with private, quasi-public agencies and organizations, and non-profits to provide selected services for the University Community. This may include partnerships with conservation organizations for the protection of on-site resources and/or participation regional habitat and agricultural conservation programs, development of affordable housing, and the provision of health, seniors, youth, and other social services.

<sup>&</sup>lt;sup>1</sup> Under current state statutes, school districts have the authority to levy fees on new residential and commercial and industrial development. The statutory fees (known as level I fees), currently at \$2.05 per sq. ft. of new residential and \$0.33 per sq. ft. for commercial and industrial development, often do not generate the necessary funding for new schools. Non-unified school districts share the maximum authorized development fee levy based on agreements between the districts. School districts may also establish fees (know as Level II fees) equal to one-half of the cost of providing new school facilities (at state cost standards) if they meet certain conditions that may affect the entire school district, and after non-residential development fees are applied. With Level II fees, it is assumed that the state, through the issuance of statewide general obligation bonds, will provide the other half of the cost of the new schools and thus the impacts of new construction will be "fully mitigated." In the event that the state does not have funding available (provided through state-wide bond elections), then school districts may temporarily increase the fees (known as Level III fees) on new residential development in order to provide full funding for schools. This allows school districts to receive the state's half of the funding when the state is out of money. When state funding becomes available through future statewide bonds, the Level III fees must be refunded or the district must forego future state funding. Thus, funding (at minimum state standards) to mitigate the impacts of new development may be assured, whether or not state funding is available. The ability of a school district to impose Level III fees is subject to certain statutory conditions and requirements, including but not limited to the State Allocation Board finding and noticing the state legislature that school facility funding apportionments are unavailable. Without this notice school districts are not permitted to levy and impose Level III fe

<sup>&</sup>lt;sup>2</sup> Since state funding levels (Level II fees plus state funding) are often less than the actual cost of providing adequate school facilities, additional local funds may be needed to provide quality school facilities.

# Implementation Plan

## IMP 3.6 CREATION OF NEW SPECIAL DISTRICT(S)

In addition to existing agencies and districts, the University Community may require (as noted above) the establishment of an entirely new service district(s). The creation of a new district will require a resolution of formation by the County to the Merced Local Agency Formation Commission and may require a vote among applicable property owners and/or approval by other agencies with jurisdiction over the area. A determination of which, if any, new districts need to be formed will be

based on public service and facility requirements and the preferred provision mechanism. It is anticipated that a general purpose special district, such as a community facilities district will be created early in the development of the Community. Initially this special district would be governed as a "dependent" district by Merced County but over time, as the population in the Community increases to above 5,000 persons a vote to transfer governance to a locally elected board of directors shall occur. This will assure that decisions regarding infrastructure and services are guided by local residents.

#### **4.0 PUBLIC IMPROVEMENT PLAN**

he Public Improvement Plan shall specify the type, amount, cost, and phasing for the public improvements and facilities that will support the University Community. A description of these improvements is provided in the Infrastructure and Services Chapters of the UCP, as elaborated below. The actual improvement projects, as well as their cost and timing, will need to be refined and finalized before development can proceed through the formulation of Community-wide master plans (Imp 2.4) and subare Specific Plans (Imp 2.5). The development of these improvements will require the County, City, University, and project developers, enter into cooperative agreements about service provision, participation, capacity, and funding contributions (see the Governance and Financing Strategy sections of this chapter for further discussion of these issues).

## IMP 4.1 TRANSPORTATION INFRASTRUCTURE

The UCP area is largely undeveloped, with limited transportation infrastructure in place. New transportation corridors, roadways, and improvements to existing roads, will be necessary and will be consistent with the Regional Transportation Plan (developed by MCAG) and by guidelines articulated in the UCP. Certain roadway improvements, such as the Campus Parkway, will need to be developed in the early years of Community development in order to link the Campus and Community to Highway 99. Other roadways and improvements will be tied to the construction of various land uses and will be guided by subsequent Specific Plans.

Construction of roadway improvements will require cooperation and funding from a variety of entities including County, state, and federal agencies, MCAG, and private developers.

Elements of the Transportation Improvement Plan (TIP) shall be formulated for the entirety of the University Community and relevant components contained and elaborated in the sub-area Specific Plans. The TIP shall incorporate:

- Roadway master plan
- Designated truck routes and ordinance
- Bicycle master plan
- Pedestrian master plan
- Street design and access management standards
- Street plan lines
- Land use–sensitive functional hierarchy of streets (to ensure compatibility between uses and transportation elements)
- Traffic calming guidelines
- Traffic control warrants
- Multi-modal level of service criteria
- Parking management plan (for prioritization of nonpolluting vehicles)
- Parking code and ordinance
- Residential permit parking ordinance
- Monitoring program for parking occupancy
- Parking violations and enforcement

- Short-range transit plan
- Transit and bus stop design guidelines
- Transportation demand management program
- Public outreach programs to encourage use of alternative modes

#### **IMP 4.2 INTEGRATED WATER SYSTEMS**

The Community has established as a priority the development of a self-contained system with a sewer treatment plant on site. Alternatively, it may connect to an existing local municipal treatment plant. Sewer pipes may be sized to serve only the Community or may include additional capacity to serve the Campus and other areas in the unincorporated County. Similarly, on-site water wells may be developed to provide potable water for the future Community. However, if conditions warrant, use of off-site wells or connection to the City of Merced water system may be considered most prudent. In the event that connections to local systems are desirable or required, the construction of integrated water infrastructure may require cooperation between the City, County, University, and regional utility districts to determine participation, service delivery responsibilities, and capacity. The type, amount, location, and phasing of infrastructure that is actually built may be determined based on the best information available at the time these systems are designed and by agreements reached between these jurisdictions.

Goals and policies set forth in the Community Plan will guide the decision making process with respect to such issues as governance, technology, environmental sustainability, and level of service.

Prior to the preparation of the first Specific Plan, an Integrated Water Infrastructure Master Plan (IWIMP) shall be developed for the UCP area. The IWIMP shall be prepared through the direction of the County of Merced and reviewed by the UC, MID, City of Merced and City of Atwater (if necessary). The IWIMP shall incorporate the following elements:

- A Potable Water System Master Plan
- A Recycled Water System Master Plan
- A Wastewater Treatment and Disposal System Master Plan
- A Storm Drainage Master Plan (SDMP)
- A Capital Improvement Plan (CIP) to construct the IWIMP elements

The IWIMP shall, at a minimum, achieve the standards identified below in Table 4.

Concurrent with the preparation of each Specific Plan, a design-level MID facilities master plan shall be developed for areas within the UCP.

- The plan shall demonstrate the ability of the MID system to continue to deliver irrigation to downstream users despite modification to the existing system.
- At a minimum, the MID Facilities Master Plan shall incorporate elements of the Storm Drainage Master Plan that identify specific improvement to MID facilities.
- The MID Facilities Master Plan shall be reviewed and approved by MID and the County of Merced prior to or concurrent with the Specific Plan.

## IMP 4.3 ENERGY AND TELECOMMUNICATIONS

Energy services will be developed in accordance with an Energy Services Plan that shall be approved either before or in conjunction with the first sub-area Specific Plan. This plan will establish a service agreement with a power distributor and will identify opportunities to purchase power generated from sustainable sources such as solar wind, and fuel cells, including the possible development of these facilities in proximity to the University Community site.

Telecommunications infrastructure will be developed by the phone, cable, and wireless communication providers that will serve the University Community and connect it to UC Merced and other appropriate off-site areas. The UCP will guide the siting of telecommunication facilities so that they may efficiently serve the community while complementing buildings and landscapes.

#### **IMP 4.4 POLICE SUB STATION**

Police protection will be provided by the Merced County Sheriff's Department. The Department has expressed interest in siting a substation in the UCP area and therefore one facility has been planned. The County may elect to contract with the City of Merced to provide urban level services to the Community during the initial years of development.

	Minimum Standards	
	William Standards	
Potable Water Systems	• Wells and distribution system capable of meeting maximum daily demand and fire flow requirements set by the local governing agency.	
	• Wells shall be equipped with well-head fluoridation and disinfection systems as required to meet state Water Supply Permitting requirements.	
	Backup well(s) shall be integrated into the potable water supply system.	
	<ul> <li>Wells grouted to minimum depth required by Merced County or state of California, whichever is greater.</li> </ul>	
	<ul> <li>Adequate storage shall be provided within the UCP area.</li> </ul>	
	<ul> <li>Storage tanks equipped with pumps capable of meeting maximum daily demand plus fire flow.</li> </ul>	
	• Community design standards that require use of water conserving devices, such as low-flow showerheads, toilets, washing machines, etc.	
	■ Water meters on all potable water connections.	
	■ If required, water supply infrastructure that allows for the expansion to the Campus and the City of Merced	
	<ul> <li>Monitoring programs designed to track long-term changes in local groundwater levels</li> </ul>	
	• If conditions warrant, consider development of off-site wells or connection to the City of Merced potable water system.	
Recycled Water Systems	Modular design of recycling plant to allow expansion to include community and campus demand.	
	<ul> <li>Recycled water distribution system capable of delivering recycled water to all developed and/or landscaped lots.</li> </ul>	
	Recycled water delivery systems that avoid discharge to receiving waters.	
	<ul> <li>Recycled water delivery system that allows for delivery of recycled water to the Campus.</li> </ul>	
	<ul> <li>Recycled water delivery system that allows for delivery of recycled water to ongoing agricultural users within the UCP</li> </ul>	

#### TABLE 4 INTEGRATED WATER INFRASTRUCTURE MASTER PLAN Minimum Standards **Wastewater Treatment and** Seasonal water recycling plant capable of producing Title 22 tertiary treated **Disposal Systems** water or to the level appropriate for agricultural applications. • Gravity wastewater collection system capable of conveying a peak flow of 3.5 times the average flow in areas served by recycling plant. On-site seasonal treated wastewater storage capable of accommodative wintertime treated effluent to be used for irrigation purposes during summer seasons. Alternatively, gravity wastewater connection to local municipal wastewater treatment facility capable of providing treatment and disposal of wastewater during winter or other times when wastewater flow exceeds recycled water demand. • Alternative to the seasonal connection to a local municipal wastewater treatment facility shall include on-site seasonal storage of treated effluent. Decentralized on-site collection and treatment systems where soils are suitable for year-round disposal of wastewater. **Storm Drainage Systems** • Stormwater conveyance system with capacity for 100-year storm. • Stormwater conveyance system that can accommodate campus demand. • Detention and retention basins that result in no net increase in stormwater discharge. Detention basins discharging to MID facilities sized to capture entire 10-year, 24-hour storm volume. • Detention/retention basin design(s) consistent with regional groundwater recharge program.

- Detention basins that sustain vegetation beneficial to water quality.
- Pump station to discharge stormwater to Fairfield Canal.
- In MID receiving canals/creeks, sensor devices that determine when canal/creek is at capacity.
- Stormwater quality control devices that prevent sediment, petroleum, and heavy metals from entering receiving waters.
- Grass swales that filter "first flush."
- Stormwater quality monitoring program to ensure achievement of SWRCB discharge standards.
- Stormwater infrastructure that does not preclude the continued use of existing irrigation facilities to ongoing agricultural users.

## IMP 4.5 FIRE STATION AND FIRE FIGHTING EQUIPMENT

The Merced County Fire Department provides fire, rescue, and emergency medical services to the University Community and all unincorporated areas in the County. McKee Station #85 is the closest facility to the University Community area. Development in the University Community will likely require the County to construct a new station in order to assure response times and maintain current levels of service.

#### **IMP 4.6 LIBRARY**

The Merced County Library system currently serves Merced's residents; however, reduced funding has resulted in the reduction of programs, hours, and staff. The UCP provides for the development of one or more library facilities to serve the community. This may include partnerships with UC Merced and local schools to provide shared facilities, as well as wired/wireless connections between residences and library resources. The County will need to use a creative finance approach to funding capital costs for site acquisition, construction, furnishings, fixtures, and equipment.

#### **IMP 4.7 SCHOOLS**

As housing development proceeds, elementary, middle, and high schools will be developed within or outside the University Community to serve the University Community. The number of necessary schools shall be based on the planning of the University Community in conjunction with the implementation programs of the applicable school districts. The actual number of schools to be developed will depend on the actual rate of students generated by housing in the University Community, the school sizes based on enrollment levels, and the standards and requirements of the local school districts. There is a statewide trend to the development of somewhat larger schools on smaller parcels that share facilities with adjoining parks or other schools for efficiency and to reduce costs. Additionally, it can be expected that the student generation rates for the Community may be less than traditionally experienced in Merced due to the expected high occupancy by unmarried UC Merced students without children.

In order to accommodate K-12 students generated from the University Community, local school districts will be required to obtain school sites, and construct schools and support facilities concurrently with the development activities of the University Community. In order to help ensure that facilities are constructed in a timely manner to accommodate enrollment growth, the Community Plan Financing Strategy and Specific Plan Financing Plans adopted by the County, and containing a schools and schools support facilities financing program approved and accepted by the applicable school districts shall be approved concurrently with the sub-area Specific Plans and specific development activities within the University Community to help ensure that the cost of school facilities, school support facilities, and services are funded through development impact fees, bonding, state funding programs, grants, and/or other public or private sources or techniques. The County and developers within the UCP area shall collaborate with local school districts in seeking expanded school financing mechanisms through new or revised state programs or through new or revised local facility financing instruments. Additionally, the location and designation, the costs and sources of funding, and the fiscal impact associated with required school sites and facilities, support facilities, and district operations shall be considered, evaluated, and presented in the Public Services Plan, Capital Improvements Plan, Fiscal Impact Analysis, and Implementation Programs as required to be included in the sub-area Specific Plans.

A process shall be defined, incorporated, and consistently implemented by each development sub-area Specific Plan for the resolution of any differences or disputes in the event that the County, the respective school district and the private development applicant are unable to reach an agreement on the schools portion of the contents of the Financing Strategy, Specific Plan Financing Plan, the Public Services Plan, the Capital Improvement Plan, the Fiscal Impact Analysis, and/or the Implementation Program.

## IMP 4.8 PARKS AND COMMUNITY FACILITIES

Parks and other community amenities will be important assets to the University Community. A comprehensive network of parks and open space has been planned for the Community. The County will be largely responsible for developing parks and other facilities, although there will also be opportunities for sharing facilities will UC Merced. To facilitate management and funding, Community Facilities Districts (CFDs) may be created.

## IMP 4.9 PUBLIC VEHICLE FLEET AND PUBLIC TRANSIT

The County shall purchase and public transit providers shall be encouraged to purchase a fleet of vehicles to serve the University Community that are non-polluting and energy efficient.

## IMP 4.10 OPEN SPACE AND HABITAT CONSERVATION/MITIGATION

The eastern Merced County region is part of the largest block of relatively undisturbed, high-density vernal pool grasslands remaining in California. As such, habitat protection is a critical aspect to the UCP, which focuses on preserving and sustaining the vitality and diversity of the relatively undisturbed areas of the UCP district.

Consultation with relevant federal and state permitting agencies will guide the approach and define the constraints for providing habitat conservation and mitigation. Responsibility will fall initially to the County to adopt a land use plan and zoning designations that are acceptable to the regulating agencies. Subsequent development will be responsible for mitigating habitat off-site when necessary.

#### HABITAT MITIGATION PLAN

The County, in consultation with federal and state agencies, shall require the project applicant to prepare a Habitat Mitigation Plan that must achieve:

- No net loss of wetland functions and values
- Minimization of impacts to affected annual grassland and other upland habitats and preservation of similar habitats at a minimum ratio of one acre preserved for each acre lost.

The Habitat Mitigation Plan must address all habitats that will be affected by the implementation of a Specific Plan including:

- All permit conditions provided by the United States Fish and Wildlife Service, Regional Water Quality Control Board, California Department of Fish and Game, and/or United States Army Corps of Engineers.
- Mechanisms for long-term protection, monitoring, and maintenance of protected habitats, including long-term funding instruments.

- Specific design criteria to protect avoided on-site and off-site protected habitats. Design criteria will include, at a minimum, a 250' vegetated buffer between the building envelope and the edge of a protected habitats. The buffer will be designed to achieve the following:
  - Create a barrier for surface run-off from the UCP area
  - Create a barrier to the movement of domestic pets into natural areas
  - Minimize seed dispersal of exotic plants to the natural areas
  - Reduce noise and light from the Plan area into the natural areas
- The specifications of buffers and other habitat protection measures, including barrier requirements, activity restrictions, signage, monitoring, and reclamation requirements will be developed in coordination with the RWQCB, CDFG, USACOE, and USFWS.

Impacts to wetland habitats will be mitigated as follows:

• Mitigation that, at a minimum, meets or exceeds the following: The County shall ensure that three acres of wetlands will be preserved, enhanced, restored, or created for each acre lost. Wetland habitats will be mitigated in-kind to the maximum extent feasible. The mitigation wetlands should be aggregated and located immediately adjacent to other preserved wetlands of similar type whenever feasible and practical to avoid creating isolated preserves where function and value cannot be maintained over the long term.

Impacts to annual grassland habitats will be mitigated as follows:

- Compensatory mitigation that, at a minimum, meets or exceeds the following: The County shall ensure that one acre of annual grasslands will be preserved for each acre lost. The preserved annual grasslands should be aggregated and located immediately adjacent to other preserved annual grasslands of similar type whenever feasible and practical to avoid creating isolated preserves where function and value cannot be maintained over the long term.
- The County shall implement the following measures that address potential indirect impacts to annual grasslands within the UCP area and on adjacent natural lands:

- Provide a natural or semi-natural buffer between urban development and natural lands to the east (e.g., along the Fairfield Canal)
- Provide increased wildlife habitat value along interior corridors maintained for other purposes (e.g., canals)

The minimum performance standards for these natural and semi-natural lands shall include: maintenance of existing natural vegetation within buffer lands: minimum width of interior corridors shall not be less than 300 feet; no new permanent improvements, other than unpaved trails, within open space corridors designated for wildlife use (unless undergrounded); annual eradication of nonnative weeds that are nuisance species or that substantially reduce wildlife habitat values: annual mowing of undisturbed grassland within interior corridors shall occur only between August 31 and October 31 (after the avian nesting season); and establishment of an open space/natural landscape working group to advise the County on management of the open space corridors for wildlife habitat.

The preparation of Mitigation Plans must involve consultation with the EPA, USCOE, USFWS, CDFG, and other relevant agencies.

A mitigation plan completed as part of the acquisition of a permit under the *Clean Water Act*, federal *Endangered Species Act*, or *California Endangered Species Act*.

#### **OPEN SPACE CORRIDOR**

The County, during project review, will ensure that the designated open space corridors are sited and operated to maximize their conservation value. The County shall ensure that the open space corridors will support at least 30 acres of existing, restored, or created wetlands and allow the movement of wildlife through the Community Plan area, to the extent feasible and applicable.

#### **IMP 4.11 AFFORDABLE HOUSING**

The ability to maintain housing affordability over the long term will be an important challenge for the University Community. Affordable housing goals articulated in the UCP can be achieved through cooperation between the City, County, University, the business community, non-profits, and residents at large. Effective mechanisms for providing affordable housing include land use controls that require inclusionary units, in-lieu fees paid by residential and commercial development, leveraging of state and federal funds, tax credits, and volunteerism (e.g., Habitat for Humanity).

A Housing Affordability Plan shall be required to be incorporated into each Specific Plan. This shall quantify the anticipated housing needs for the planning area, goals for the production of housing for very low—, low—, and moderate-income households, and a specific program of actions for their achievement. The Community's affordable housing goals shall be integrated into the mandated five-year updates of the County General Plan Housing Element.

## IMP 4.12 OFF-SITE INFRASTRUCTURE PROGRAM

At each phase of development, off-site improvements to infrastructure (roads, sewer, etc.) may be required. These improvements, as well as funding mechanisms, will need to be identified throughout the development process. Guidelines set forth in the UCP will determine appropriate service levels for off-site improvements.

#### **IMP 4.13 INFRASTRUCTURE PHASING**

Infrastructure phasing will be determined by cooperative agreements between the City, County, and University as well as by market factors that drive the pace of development. Certain "backbone" improvements such as arterial roadways, sewer and water trunk lines, energy transmission lines, and possibly a fire station may need to be constructed before or concurrently with the first phase of residential and commercial development. Other items such as in-tract roads, schools, library, and recreation facilities can be phased to match the pace of development and to respond to the growing needs of the community as they arise.

#### **5.0 PUBLIC SERVICES PLAN**

he public services plan identifies the parties responsible for providing municipal services to the University Community and their participation as well as level of service standards. The County, City, and University will need to reach cooperative agreements that dictate how services are provided in both the short and long term. For example, in the early years of Campus and Community development, the Merced County Fire Department may provide protection to both the Community and UC Merced. As student enrollment increases, however, the UC Merced may transition to providing its own fire protection on campus or may provide joint services with the County throughout the campus and UCP areas.

Services that will need to be defined include:

## IMP 5.1 PLANNING AND DEVELOPMENT MANAGEMENT

Initially, planning and development management will be provided by the County and informed by Memoranda of Understanding (MOUs) between the County and City of Merced. These MOUs will reflect the goals, objectives, and policies of each jurisdiction.

#### **IMP 5.2 POLICE PROTECTION**

Initially, the Merced County Sheriff will provide police protection to the University Community at the level of service that is currently enjoyed elsewhere in the unincorporated County. In future years, the level of service may be modified as determined by the appropriate governing body.

#### **IMP 5.3 FIRE PROTECTION**

Initially, fire protection will be provided by the Merced County Fire Department. The County and University will need to come to agreement about service responsibilities as well as the possibility of providing reciprocal protection.

#### IMP 5.4 INTEGRATED WATER UTILITIES

The provision of integrated water service may require cooperation between the City, County, University, and regional utility districts to determine participation, service delivery responsibilities, and fee levels. For example, the County may provide its own water and sewer service or may contract with another agency for service.

## IMP 5.5 DRAINAGE, LANDSCAPE, AND HABITAT MAINTENANCE

For maintenance of drainage, landscape, and habitat areas, the County will need to determine whether existing County departments will be responsible or whether the County will need to create a new department. Levels of service will be guided by standards set forth in the UCP.

#### IMP 5.6 PARKS AND RECREATION

The County will be largely responsible for maintaining parks and other facilities and sponsoring recreation programs. However, there will be opportunities for sharing facilities and programs with UC Merced and the City.

#### **IMP 5.7 LIBRARY**

The County will bear the primary responsibility for staffing and maintaining library facilities in the UCP. The County may also participate in reciprocal borrowing and other programs with UC Merced.

#### **IMP 5.8 SCHOOLS**

The County will have to come to determine whether the schools in the UCP area will be integrated in the Merced area school districts or if they will form their own district. In any event, operations and maintenance will be provided by the governing district using a combination of property tax and state funds, which are distributed on a per student basis.

The Merced City School District, the Weaver School District, and the Merced Union High School District currently are responsible for providing the K–12

educational programs, operations, and facilities for the future residents residing within the Community Plan. The formation of a new school district, or the annexation or de-annexation of property from one district to another, is subject to state statutory requirements and procedures. In any event, operations, maintenance, and facilities will be provided by the governing district using a combination of property tax revenues, state funds and operational grants, and other local public and private revenues, resources and techniques. Operations, maintenance, and facilities shall be in accordance with the adopted and accepted requirements and standards of the applicable school districts providing service and facilities.

#### **IMP 5.9 FISCAL ANALYSIS**

A key component of the Public Services Plan will be an analysis of the public costs and revenues associated with providing the services described above. In this regard, a Fiscal Analysis will be conducted as a part of the record during preparation and consideration of individual Specific Plans to ensure that adequate revenues will be available to fund these public services.

#### **IMP 5.10 COMMUNITY EDUCATION**

The County shall prepare and make information available to inform residents and businesses within the University Community regarding its services, programs, and key community issues. Representative of the range

of information that may be presented include: land use zoning and development processes; development fees; code compliance; property and building maintenance and improvement techniques; financial assistance and affordable housing programs, public transportation; ridesharing and other transportation demand management programs; neighborhood traffic calming techniques and permit parking programs; status of infrastructure improvements; energy conservation methods and recycling programs; hazards and emergency response procedures (wind, fire, seismic, and flooding); the County's agricultural industry and compatibility of urban uses with these; natural resources and their value; educational and cultural events and venues; parks and recreation, health and safety, and seniors and youth programs; and access to government services and elected officials. This information may be presented in flyers and newsletters that are distributed to households in the University Community, on the County or a Community Web Page, and/or by cable television broadcasts.

#### **IMP 5.11 ECONOMIC DEVELOPMENT**

The County will develop or assist in the creation of a public or non-profit entity that focuses on promoting economic development activities within the University Community and related to UC Merced. This entity will sponsor programs and efforts designed to attract business sectors that enhance the University Community environment and foster positive inter-relationships with UC Merced campus.

#### 6.0 FINANCING STRATEGY

he Financing Strategy specifies the sources and uses of funds for the public improvements described in the Public Improvement Plan. The Financing Strategy is developed in part to ensure that the Community Plan as a whole can be developed in a financially feasible manner given available private and public funding sources. In addition to a Financing Strategy for the Community Plan as a whole, each individual Specific Plan for the Community Plan subareas will include a detailed Financing Plan, as required by state law and as specified above in the program addressing Specific Plan form and content.

Initial feasibility analysis conducted as a part of the UCP preparation indicates that development of the Community can be financially feasible, given expected infrastructure costs and the financial resources that will

become available as development occurs. In general, the Financing Strategy sets forth a "pay its own way" approach consistent with the Merced County General Plan and other development policies. Under this policy, the University Community will be expected, through one mechanism or another, to fund infrastructure and services without any negative effect upon existing taxpayers or ratepayers in other portions of the County.

The key steps in developing the Community Plan Financing Strategy, as well as the more detailed Specific Plan Financing, are as follows:

## IMP 6.1 REFINE AND UPDATE PROJECT DESCRIPTION AND COST ESTIMATES

Before the individual funding mechanisms can be implemented a clear and accurate project description, including information about the cost, phasing, location, and amount of development planned for each land use in must be assembled. Although baseline assumptions have already been developed, the County and/or Master Developer(s) will need to update and refine this information on an on-going and iterative basis. Additional research on the exact location of planned development as well as the characteristics of the various product types will need to be conducted. The timing of infrastructure improvements will also need to be specified in further detail and linked to development priorities and absorption assumptions.

## IMP 6.2 ASSEMBLE AND ASSESS FINANCIAL RESOURCES

The various funding sources that might be utilized to finance public improvements and facilities in the University Community should be identified and assessed. Factors to be considered include ease of implementation, reliability, availability, and timing. The overall logic of any potential financing mechanism will need to be evaluated and tested to ensure that it is sound and feasible given the perspective of the involved parties including the County, landowners, developers, and other agencies. The key funding sources and mechanisms are likely to include the following:

- University Cost Sharing Agreement
- Specific Plan Fees
- Development Agreement/Map Conditions
- Special District Financing
- Mello-Roos Community Facilities District(s)
- Area Development Impact Fees
- Existing County Fees
- Other County Funding
- Other Local Agency Funding
- Other State/Federal Funds

## IMP 6.3 DEFINE INPUT AND PARTICIPATION OF KEY STAKEHOLDERS

Input and participation from the key stakeholders associated with financing the University Community infrastructure development, including the Master Developer(s), the County, the University, and other public agencies should be solicited and their respective roles defined. For example, where appropriate, their position regarding the infrastructure costs, cost allocation, and proposed phasing should be solicited and commitments established. Such consultation with interested parties will help secure necessary funding and equity and allow subsequent implementation steps to take place with more efficiency.

## IMP 6.4 IMPLEMENT FINANCING MECHANISMS AND SECURE FUNDING

Based on the analysis described above a preferred Financing Strategy will need to be defined. Implementing this Financing Strategy will require that the County or other applicable governing entities establish financing districts and other funding arrangements and conduct negotiations with regulatory agencies. In addition, in many cases state, federal, and local funding sources will require legislative approval. A strategic approach to these institutional requirements will be needed, wherein individual activities and negotiations are coordinated to ensure that the most advantageous outcome for the County, landowners/developers, University, and other stakeholders is achieved.

Specific actions that may be undertaken include the establishment of a land-secured financing district (e.g. Mello-Roos District), approval of a general obligation bond, or adoption of a development impact fee ordinance. In most cases, supporting technical and financial documents will need to be assembled and required institutional actions taken, including voter approval by affected landowners.