



**P L A N**

**P O L I C I E S**



## PLAN POLICIES

The following shall be the policies of The Regents of the University of California, as regards the physical planning of the University of California, Merced. These policies shall be implemented as appropriate during the development of the campus:

## Conservation and Development

CONS-1: Provide for development of a university campus while minimizing the impact of long term development on wetland and vernal pool habitats to the maximum extent feasible. Based on comprehensive plant and animal surveys conducted during the course of campus planning, the campus has been sited to minimize impacts on natural resources, including annual grassland habitat known to support resident special-status species, wetlands, and drainages supporting vernal pools.

CONS-2: Within the overall 2,000-acre UC Merced campus, provide for establishment of permanent Campus Natural Reserve area of 750 acres where resources such as vernal pools, wetlands and other biological resources are permanently protected from development. Any faculty and graduate level research would be carefully undertaken to ensure that there would be no impacts to the natural environment and its resources.

CONS-3: Set aside an area of 340 acres to accommodate unknown and unforeseeable future campus needs that are as yet undefined. This area will be maintained indefinitely as a natural area, generally undisturbed by activities or collateral development.

CONS-4: Prepare and implement a management plan for those areas of the campus that will remain undeveloped in the long term, or that will remain in agricultural use (grazing) in the short or mid-term.

CONS-5: Continue to work with federal, state, regional and local governments in the development of regional conservation plans for the purpose of preserving special status species that would be affected by the potential cumulative impacts of regional development.

CONS-6: Use campus open space areas as buffers and greenbelts to separate campus buildings and activity centers from adjacent public recreational, agricultural and grazing operations in production.

CONS-7: Comply with all applicable laws, regulations and campus policies in the development and operation of the campus.

### **Sustainable Planning and Design Policies**

SUST-1: Recognize principles of sustainable development, and incorporate them into the overall plan form, layout, infrastructure, operations, and into the design and construction of facilities.

SUST-2: Adhere to principles of environmental stewardship, conservation and sustainability in the design and construction of the campus.

SUST-3: Model new, cost-effective ways to reduce consumption of water and energy, minimize resource consumption and pollution from transportation systems, and otherwise minimize waste of resources through careful use and reuse.

SUST-4: Design buildings to meet energy targets that represent approximately a 20% improvement on existing energy codes.

- By 2008, design campus facilities to provide all necessary energy services while using 50% or less power and energy than equivalent 1999 benchmark campuses, adjusted for climate and laboratory density.
- Shift most remaining electricity from cooling load (approximately 25% of total) away from peak electricity demand periods through chilled water thermal storage or possibly gas or cogeneration-driven cooling.

SUST-5: Install an energy performance monitoring system and other monitoring equipment to foster continuous improvement in environmental stewardship. These systems will enable optimization of campus operations, inform improved design of future phases of the campus, and make the campus a “living laboratory” for study of engineering and resource conservation.

SUST-6: Design buildings to maximize daylighting, occupant control over the interior environment, indoor air quality, and general indoor environmental quality.

SUST-7: Plan for water resource conservation, including provisions for future on-site or nearby wastewater treatment to be added in future phases.

SUST-8: Design landscapes to minimize the use of irrigation water after the initial growing phase.

SUST-9: Utilize tree plantings and other methods to shade buildings and walking areas.

SUST-10: Institute a recycling program as a formula for source reduction.

SUST-11: Design campus landscaping to emphasize regional natives, avoid invasive or allergenic species, and select plantings that are compatible with campus infrastructure.

SUST-12: Develop the campus landscape with integrated pest management principles, avoiding plantings that require pesticide and herbicide use.

SUST-13: Eliminate of stratospheric ozone depleting chemicals including hydrochlorofluorocarbons (HCFCs) and halons in air conditioning, refrigeration, and other campus systems.

## **Campus Land Use**

CLU-1: Provide adequate land area for instruction and research space for the projected campus population.

CLU-2: Provide for adequate flexibility in plan and land allocation for unanticipated needs of a long-lived institution, including new research initiatives or academic endeavors.

CLU-3: Provide an undergraduate instructional core area that will centralize student activities and enhance student life.

CLU-4: Encourage the development of a mixed use Main Street as the central activity area of the Academic Core, with academic uses, especially large lecture halls and classrooms, dining, student services and convenience goods; and areas to relax and socialize.

CLU-5: Integrate campus land use patterns, transportation and circulation systems, and open space systems with those of the adjoining community, particularly in the area of the Town Center.

CLU-6: Locate uses that may attract community use, such as performance, arts and spectator sports facilities, near or adjacent to the Town Center to assure ease of access to the Merced community, and coordinate with the community in support of uses may be of joint use, such as conference centers.

CLU-7: Develop the campus in a compact fashion to minimize impacts on the land, cost of infrastructure, and to ensure a pedestrian and bicycle-friendly environment.

CLU-8: Encourage the incorporation of a mix of uses in university facilities, especially in the Main Street area, to promote an active, 24-hour community.

CLU-9: Provide ample open space to support the high level of activity in the Academic Core, including plazas and parks, generous sidewalks, and ample plantings of shade trees.

CLU-10: Develop streetscapes within the campus with ample amenities such as landscaping and shade trees, street furniture, signage, lighting, and art to promote and make attractive the pedestrian movement corridors in the campus.

CLU-11: Phase development generally to the northwest and east from the initial phase, avoiding leapfrog patterns.

CLU-12: Locate uses to respect the site's natural drainage to the extent feasible.

CLU-13: Designate adequate areas for student housing for up to 50% of the student population (FTE).

CLU-14: Allocate a range of housing types to accommodate undergraduate students, graduate students, and students with families or dependents.

CLU-15: Prepare detailed design standards to guide urban design and master planning issues, building design and landscape design.

CLU-16: Ensure a supply of housing adequate to offer housing to 100% of all freshmen and transfer students.

CLU-17: Provide adequate land to house 50% of all faculty on campus in a range of residential unit types.

CLU-18: Encourage residential building types that support activity on streets, with entries, gateways and public areas fronting on the public right-of-way.

CLU-19: Provide for indoor and outdoor facilities for intercollegiate competition, intramural use and general recreation by students, faculty and staff.

CLU-20: Provide childcare facilities consistent with University policies.

CLU-21: Integrate the Le Grand and Fairfield canals into the open space system of the campus, working with MID to ensure their ongoing viability for agricultural irrigation, while using landscaping and other elements to assure visual quality.

CLU-22: Design landscaping, trails, and other improvements adjacent to the canals to ensure their physical integrity.

CLU-23: Collaborate with MID to determine the need for barriers such as fencing and other methods to ensure public safety.

CLU-24: Develop and maintain an open space system in and around the periphery of the developed portions of the campus, that will protect the campus from natural hazards, will respect natural resources, and will provide a natural amenity.

CLU-25: Collaborate with the County of Merced Parks Department to develop a master plan for recreation facilities at the joint edge of park and campus for mutual benefit of the community and campus.

## **Aesthetics**

AES-1: To the extent feasible, ensure that development of the campus, its buildings and landscaping, are compatible with surrounding developed and undeveloped environment of Merced County, including:

- Design structures and landscaping to complement the natural features of the surrounding area, including the rolling hills, open space and grasslands.
- Minimize change to site topography.
- Minimize the visual impacts of the campus and its buildings, including glare, through the appropriate use of color and materials, the sensitive design and massing of structures, and the shielding of exterior lights on the periphery.

AES-2: To the extent feasible, protect views from the vicinity of the site to the Sierra Nevada from Lake Yosemite Regional Park.

AES-3: Visually buffer views of the campus from its edges, in particular from Lake Yosemite Regional Park, by stepping building massing, decreases in building density, and with landscape screening.

AES-4: Preserve the dark night sky through design of interior and exterior lighting and time control of lighting for athletic and other outdoor events.

## **Agricultural Resources**

AG-1: Phase development of the campus incrementally, consistent with availability of services and infrastructure, retaining economically viable agricultural uses (grazing) until development of campus uses is necessary.

## Biological Resources

### Wetlands

BIO-1: Ensure no-net-loss of wetlands functions and values by avoiding, minimizing and compensating for impacts to wetlands.

BIO-2: Update, extend and/or re-verify, in accordance with appropriate requirements, the formal wetland delineation of the Main Campus, that was conducted prior to site design and has been verified by the U.S. Army Corps of Engineers.

### Annual Grassland Habitat

BIO-3: Avoid and minimize impacts to areas within annual grassland habitats known to support resident special status species, to the extent feasible. Seasonal visitors or migratory species and the wide-ranging golden eagle are not considered resident special status species for purposes of this policy.

BIO-4: Maintain grassland habitats to the north and east of the campus site to the extent feasible.

### Special Status Species

BIO-5: Update as appropriate the already completed comprehensive plant and animal surveys for the Main Campus site to determine the presence and/or absence of special status species and their associated habitats within the campus area.

BIO-6: Continue to consider the special status species survey results in the detailed design and build out of the Main Campus.

BIO-7: Avoid and minimize impacts to special status species, to the extent feasible.

BIO-8: Manage mitigation areas including the Campus Natural Reserve to maintain the existing habitat for special status species to the extent feasible.

BIO-9: Where direct impacts to special status species cannot be avoided completely, compensate for such impacts through a combination of preserving occupied and potentially occupied habitat and creating or restoring and enhancing additional habitat in accordance and through consultation with California Department of Fish and Game and U.S. Fish and Wildlife Service standards.

BIO-10: Prior to commencing Project construction in areas that may result in the potential for take of listed species, complete consultation with the U.S. Fish and Wildlife Service and California Department of Fish and Game to obtain federal and state authorizations for the take of listed species, as necessary.

### Raptors

BIO-11: Take appropriate measures in connection with construction in the vicinity of raptor nesting areas during the nesting season for raptor species nesting in or near development sites.

### **Cultural Resources**

CUL-1: Conduct site specific surface and subsurface investigations as appropriate in connection with the development of specific facilities.

CUL-2: Develop procedures for protecting discovered significant archeological resources.

### **Hazards and Hazardous Materials**

HAZ-1: Comply with all applicable federal and state regulations and campus policies regarding hazardous materials and hazardous waste.

HAZ-2: Develop and establish a Biosafety Program using applicable federal and state guidelines as needed.

HAZ-3: Maintain grassy and landscaped areas surrounding campus buildings so as to minimize the risk of wildland fires.

HAZ-4: Minimize amounts of hazardous materials through coordinated procurement and inventory management of research supplies.

### **Hydrology and Water Quality**

HYD-1: Comply with all applicable permit requirements established as part of the municipal storm water permit program for small municipalities or any other applicable state and federal stormwater quality requirements, to manage stormwater runoff.

HYD-2: Ensure to the extent feasible maximum percolation and infiltration of precipitation into the underlying groundwater by the use of the following, or equally effective, measures:

- Clustering of structures
- Use of single project or multi-project detention or retention basins
- Preservation and use of natural drainage areas

### **Public Services**

PS-1: Provide sufficient access for emergency vehicles to buildings on campus by allowing pathways of adequate configuration.

PS-2: Prepare emergency preparedness plans as needed for campus safety and in coordination with appropriate local agencies.

PS-3: Cooperate with the local school districts to negotiate fair share payments for public school facilities needed for K-12 students living on campus in faculty or family housing.

## Traffic, Circulation and Parking

### Multi-Modal System

CIRC-1: Designate a functionally-classified system of principal transportation facilities that represents the circulation system needed to serve the campus at acceptable levels of service.

CIRC-2: Ensure that the transportation infrastructure will adequately serve campus circulation needs, and provide appropriate connectivity to adjacent areas while minimizing impacts to those areas.

CIRC-3: Accommodate multiple modes, including walking, cycling, and riding transit, as well as driving.

CIRC-4: Design attractive transportation corridors that are compatible with adjoining land uses and with expected modal usage patterns.

CIRC-5: 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.

CIRC-6: Reserve adequate rights-of-way to implement the designated circulation systems and designate access management restrictions for adjoining properties.

CIRC-7: Maintain flexibility by designing early stages of the campus in a way that does not preclude later changes in modal priorities.

CIRC-8: Promote the timely development of the principal circulation system, through phases coordinated with implementation of the land use element.

CIRC-9: Design the secondary campus circulation system in a grid pattern, to disperse traffic and provide multiple connections to most destinations for all travel modes.

### Pedestrian and Bicycle Circulation

CIRC-10: Create a comprehensive, interconnected bicycle and pedestrian circulation system that provides access to major campus destinations. The design of the bicycle and pedestrian system should be consistent with the following principles:

- Design all campus vehicular streets (transit, service, and general traffic) as bike-friendly streets, with calmed traffic speeds, wide curb lanes or adequate bike lanes, no parking or parallel parking only, and roundabouts rather than stop signs at intersections.
- Minimize bike paths paralleling roadways, unless they can be designed in a manner that offers significant safety or circulation directness advantages over bike-friendly streets.
- Separate pedestrians from cyclists, either in different corridors (or block grids) or, when using the same corridor, on a bikeway with a parallel but separate walkway.
- Minimize number of pedestrian/bicycle crossing points. Where bicycle and pedestrian paths cross, emphasize proven safe and efficient design treatments such as roundabouts and pedestrian refuges. Design bike paths and lanes for

moderate but safe speeds at pedestrian and vehicular crossings (8 to 10 mph).

- In the most dense areas of the campus core, design the bike grid to be at least two square blocks in scale, to avoid having each building surrounded by bike streets, and promote a more protected pedestrian realm and more efficient bike realm.
- Design integrated and secure bicycle parking at residences, lecture halls, research facilities and student service buildings.

CIRC-11: Accompany each new building on campus with appropriate additions to the bicycle and pedestrian systems, to ensure that the bicycle/pedestrian system expands to keep pace with campus development.

CIRC-12: Install amenities to serve bicyclists and pedestrians, such as water fountains, campus maps, and showers and changing rooms.

CIRC-13: Link the campus bicycle system with regional bikeways to encourage utilitarian and recreational travel by bicycle. Prime candidates for campus-regional linkages include existing and planned paths along Lake Road and Bellevue Road.

CIRC-14: Work cooperatively with the transit provider to encourage transit-bicycle transfers by installing bike racks on all buses.

CIRC-15: Provide secure bicycle parking within convenient walking distance of all destinations in the campus core.

CIRC-16: Develop a comprehensive public information strategy to publicize bicycle- and pedestrian-related rules, regulations, and helpful hints.

### **Transit Services**

CIRC-17: Provide high-frequency, safe, and convenient transit services that seamlessly connect major activity centers on campus and in the neighboring Community. Primary transit destinations would include the campus core, the Town Center, outlying commuter parking facilities, and key locations within campus and off-campus housing areas. Each building in the campus core should be within a 6-minute walk of a transit stop.

CIRC-18: Work with local and regional transit providers to coordinate transit service, and establish convenient transfers between transit and other modes of travel. Integrate transit corridors with the City of Merced transit corridors.

CIRC-19: Contribute to development of a transit hub at the interface between the Town Center and campus core, for timed transfers between local and regional transit connections.

CIRC-20: Develop a transit fare policy and transit pass system that provides maximum incentives for transit ridership among University students and employees.

CIRC-21: Ensure that campus transit services are accessible to the disabled. Choose transit technologies that have been tested and proven in similar operating environments.

### **Vehicular Access and Parking**

CIRC-22: Design the secondary campus circulation system in a grid pattern, to disperse traffic and provide multiple connections to most destinations for all travel modes.

CIRC-23: Protect the quality of campus core and residential areas by reducing or controlling traffic routing, volumes, and speeds on local streets.

CIRC-24: Develop major parking reservoirs on the periphery of the campus core, at strategic intercept points along regional access routes.

CIRC-25: Investigate the development of shared parking facilities to minimize the total amount of parking required and encourage walking between nearby activities. Promising locations for shared parking include the interface area between the campus and Town Center, as well as the area between the campus and Lake Yosemite Regional Park, where shared parking resources could take advantage of the different peak demand patterns of the two institutions.

CIRC-26: Provide priority parking for vanpools, carpools, and energy-efficient and low-pollution vehicles, including recharge stations for electric vehicles and provide a natural gas vehicle charging station. Provide leadership by using alternative fuel or other low-emission vehicles in the campus service fleet.

CIRC-27: Install “intelligent parking” technologies, such as message signs indicating parking location and availability, to encourage efficient use of parking resources.

CIRC-28: Charge users the full cost of providing parking facilities. Assign premium prices to the close-in parking and limit the supply of such spaces, in order to maximize use of remote parking, limit the amount of traffic in and near the campus core, and encourage intra-campus walking and transit use.

CIRC-29: Enforce all parking rules and restrictions, and cooperate with community efforts to establish and enforce permit parking and parking time-restrictions in areas surrounding the campus.

CIRC-30: Apply street standards in the campus core that account for service access needs.

#### **Transportation Demand Management**

CIRC-31: Actively promote alternatives to solo vehicle travel.

CIRC-32: Develop a system of financial incentives for alternate mode use.

CIRC-33: Establish a joint City/County/University transportation clearinghouse and website that provide information on local transit services and alternative travel options, including ride-share matching.

CIRC-34: Develop a comprehensive public information strategy to publicize alternative travel options.

CIRC-35: Invest in telecommunications infrastructure to enable alternate work arrangements.

**Regional Coordination**

CIRC-36: Encourage establishment of a joint City/County/University transportation committee, to suggest and oversee transportation improvement and incentive programs of mutual benefit.

CIRC-37: Coordinate parking development, restrictions, and enforcement with the appropriate Community representatives at the interface area between the campus core and the Town Center.

CIRC-38: Work with local and regional transit providers to coordinate transit service, and establish convenient transfers between transit and other modes of travel.

CIRC-39: Circulate transportation planning studies and reports to neighboring jurisdictions that may be affected by the proposed changes.

**Utilities and Infrastructure**

UTIL-1: Design underground utility systems for long term use. Capacity and service lives of 20 to 50 years should be required.

UTIL-2: Consider the use of life cycle costs in lieu of initial costs in the planning and design of utility systems for specific projects.

UTIL-3: Utilize utility corridors throughout the development of the campus, locating them beneath roadways or other easily accessed, low impact areas.

UTIL-4: Provide for the short and long term collection and treatment of campus wastewater, initially by the City of Merced's Wastewater Treatment Facility, with possible long term addition of a recycled water treatment facility either on site or in the University Community, that will allow the campus to augment its other water supplies and create a source for recycled water.

