ACKNOWLEDGEMENTS:

Capital and Physical Planning
• Associate Vice Chancellor Ralston
• Campus Physical Planner Bullock
• Principal Analyst Murdock

Resource Management and Analysis
• Associate Vice Chancellor Hull
• Director O'Connell-Owens

Office of Design and Construction
• Associate Vice Chancellor/
  Campus Architect Caskey

Creative Design Services
• Publication Manager Chavez
• Technical Artist Bobbitt
# Table of Contents

I. Purpose of the Physical Design Framework ........................................... 5

II. Relationship of Campus Planning Documents................................. 9

   A. UCR 2005 Long Range Development Plan
   B. 2007 Campus Design Guidelines
   C. Ten Year UCR Capital Financial Plan

III. Campus Context ........................................................................... 13

   A. Setting and Physical Relationships
   B. Geography and Climate
   C. Local and Regional Context
   D. Development History and Growth
   E. Current Planning Documents
   F. Conclusion

IV. Campus Framework ..................................................................... 44

   A. Create a Balanced and Sustainable Campus Infrastructure
   B. Enhance UCR as a Residential Academic Campus
   C. Grow a New Graduate & Professional School Academic Core
   D. Connect UCR to Community through the East Campus Gateway Arts District
   E. Strengthen Campus Districts While Preserving UCR’s Heritage

V. Campus Fabric ................................................................. 69

VI. Capital Planning & Design Review and Approval Process .......... 89

   A. Design Objectives, Guidelines and Standards
   B. Design Approval Process

VII. Appendix – Supporting Planning Documents ................................. 95
I. Purpose of the Physical Design Framework
The University of California, Riverside (UCR) presents a unique continuity of buildings and landscape, due to its striking natural setting, relatively short history and modernist design origins. An enduring rational arrangement of modern buildings frames a set of linear malls at the base of rugged semi-arid mountains. This form has been strengthened over 50 years by contemporary construction that continues to honor the legacy of the UCR landscape. UCR is committed to respecting the beauty, order and intrinsic character of the campus as enrollment grows and the academic mission continues to evolve.

UCR is expected to grow dramatically in the coming decades only if funding is available for enrollment growth and/or the campus broadens its funding opportunities to become less reliant on State funds. This growth will challenge the University and its designers to understand the essence of the campus and promote a consistent aesthetic by infusing each project’s design with a sense of place. This Physical Design Framework is intended to provide simple and legible guidelines to help shape future growth, allowing the campus to evolve in a dynamic way that recognized the physical and academic roots that define UCR’s character. The guidelines contained within describe for future architects and planners, the fundamental characteristics of the University’s mission, setting, history, climate, landscape and architectural form that must inform any physical changes to the campus.

UC Riverside’s Physical Design Framework envisions a physical environment of appropriate character to support the campus academic mission and an enhanced “sense of place” for the sustained well being of its student, faculty, and staff communities. The framework establishes criteria for the campus to assess the appropriateness of planning and design efforts. The framework will be used as a tool in the context of UC Riverside’s capital program to ensure a built environment embodying the “sense of place” vision stated above. UC Riverside’s Physical Design Framework is anticipated to evolve over time in response
to incorporation of emerging best practices in planning, design and construction appropriate to the campus.

The Physical Design Framework was informed by not only the Long Range Development Plan (LRDP), but a number of master planning efforts including the 2007 Campus Design Guidelines. The combined direction of these documents will enhance the teaching, research and public service mission of the campus through its physical development, but it will also enhance the personal health and recreation needs of the campus community as the campus strives to: increase the on campus residential component; provide the support facilities such as dining, recreation, entertainment to increase opportunities for campus life and participation; provide facilities and programs to interact with the Riverside community; and provide direction for environmental stewardship of the campus with a strong policy on sustainability.

This UCR Physical Design Framework closely follows the Campus Design Guidelines which includes a summary of UCR’s long range development goals, followed by a description of the existing campus design structure. The structure serves as the underpinnings for future development, emphasizing the elements of the campus landscape and infrastructure as well as architectural themes emblematic of the University’s character.
II. Relationship of Campus Planning Documents
The LRDP is a component of the campus design framework which consists of the following documents presented as UCR’s design portfolio:

- Long Range Development Plan
- Physical Design Framework
- 10 Year Capital Financial Plan

### A. UCR 2005 Long Range Development Plan (LRDP)

The LRDP is the physical development and land use plan to meet the academic and institutional objectives for the campus. It is a general guide that discusses future land use patterns and development of facilities, circulation, open space and infrastructure. The 2005 LRDP built upon the vision, goals and objectives of previous LRDP goals, primarily the 1990 plan as well as current direction. The 2005 LRDP provides additional goals and a list of planning principles and strategies to achieve a campus vision as articulated through the 2001 “Vision 2010” planning exercise led by the Executive Vice Chancellor with a committee made up of students, faculty, staff, community leaders and elected officials and numerous presentations and meetings with the campus and community during the development of the 2005 LRDP.

Additional planning documents have been prepared based on the LRDP in support of it or testing its goals and objectives. These include neighborhood planning studies, a multi-modal transportation management strategy, campus design guidelines, a signage and wayfinding program, as well as supporting data bases. All of these planning documents have been informed throughout by the vision of UCR’s academic leadership as well as students, faculty, staff and the community. The documents are responsible for the physical design of the campus today and into the future while allowing flexibility for future changes in the academic, research and public service missions of the University of California, Riverside.
The 2005 LRDP and the campus master plan/study documents are identified by title below and will be found in the Appendix of this document on a compact disc:

- 2005 Long Range Development Plan
- 2003 Strategic Plan for Housing
- 2004 East Campus Entrance Study
- 2004 Multi-Modal Transportation Strategy
- 2005 Health Science Initiative (School of Medicine)
- 2006 East Southeast Campus Area Study
- 2007 Campus Design Guidelines
- 2008 Campus Sign Program
- 2008 Campus Aggregate Master Planning Study
- 2008 West Campus Infrastructure Development Study
- 2009 Barn Area Master Planning Study

B. 2007 Campus Design Guidelines

The 2007 Design Guidelines document provides the campus with direction for campus leadership, planners, and consultants when developing and designing campus facilities and infrastructure.

C. Ten Year UCR Capital Financial Plan

The Ten Year Capital Financial Plan, found in a companion document with this Physical Design Framework, provides a capital development plan for the next decade with facilities, cost estimates, and probable planning, design and construction dates to meet campus enrollment needs in support of the University's mission of teaching, research and public service.
III. Campus Context
A. Setting and Physical Relationships

The UCR campus is located three miles east of downtown Riverside at the base of the Box Springs Mountains. The City of Riverside is located within the County of Riverside in a larger geographic area known as the Inland Empire, which is composed of western Riverside and San Bernardino Counties. The City of Riverside and the Inland Empire have experienced significant growth in the last twenty years, with a total population increase of more than 50 percent as of 2005. The city has a current population of 311,600 with a projected population of 320,000 by 2010.

UC Riverside is one of the ten campuses, and one of the three land grant institutions, within the University of California system. UC Riverside is the only public research university located within the Inland Empire. UC Riverside has impacted virtually every facet of economic, social, and artistic life for this region for over 100 years.

UC Riverside has over 18,000 students, contributes approximately $1 billion to the local and regional economy, and has 31 specialized research centers. UC Riverside offers degree programs in six established schools and colleges, including the A. Gary Anderson Graduate School of Management (AGSM); Bourns College of Engineering (BCOE); the College of Humanities, Arts, and Social Sciences (CHASS); College of Natural and Agricultural Sciences (CNAS); the Graduate School of Education (GSOE); and the Division of Biomedical Sciences. Two additional academic units were established in 2008 (School of Medicine and the School of Public Policy), and will begin instruction in conjunction with the admission of students and recruitment of faculty for these programs.

The 2005 LRDP assumes a need for approximately 11.8 million gross square feet (GSF) of development to accommodate a total of 25,000 students, 1,742 faculty and researchers and 8,798 staff on 1,127 acres. The proposed population and square footage targets in the 2005 LRDP represent estimates envisioned during the development of the LRDP. UC Riverside’s ability to accommodate the projected population and square footage by the 2015/16 horizon year of the LRDP will be affected by a variety of factors including funding availability, demographic changes, student preferences, etc. As of 2008-09 UC Riverside comprised 6.5 million GSF of development, accommodating a total of approximately 18,000 FTE students, 1,400 faculty and researchers, and 5,900 staff.

UC Riverside is a multi-site campus, with teaching, research, and public service programs conducted not only at the main campus but also in downtown Riverside through the ARTSblock facilities and in the recently established Palm Desert Graduate Center in the Coachella Valley. The 2005 UCR LRDP does not, however, cover development at any of the satellite campuses or properties in the natural reserve system for which UCR is responsible and as such, projects at those locations are not eligible for the new delegated capital process.

B. Geography and Climate

The topography of the campus ranges from comparatively level areas to steep hills with massive rock outcroppings. The area of predominately citrus groves and agricultural fields west of the freeway or the West Campus is relatively flat. The Box Springs Arroyo cuts through the southernmost
portion along a meandering alignment generally extending from east to west south of Martin Luther King Jr. Boulevard. The area east of the freeway or the East Campus presents a greater variety in landforms. The developed central portions of the East Campus appear to be level although there is actually a 60-foot difference in elevation from east to west. The southeast portion of the campus, comprising approximately 120 acres, exhibits the greatest variety in topography, ranging from limited flat plateau areas to very steep hills with large rock outcropping, loose boulders and deep ravines.

Nearly half of the campus’ 1,127 acres are currently devoted to agricultural teaching and research fields, most of which are west of the freeway. The East Campus comprises 616 acres and provides the setting for the current Academic Core. Devoted primarily to teaching and research, it includes almost all of the developed facilities including student housing. The virtually undeveloped 511 acres of the West Campus will provide the land base for the majority of facilities growth for the campus including the new School of Medicine in the coming decades with some infill on the East Campus.

The campus is located in a seismically active area of southern California. However, no active faults are known to exist on the campus and the area is not part of an Alquist-Priolo Special Studies Zone (state designated zones along active and potentially active faults) for seismic hazard. While the campus is not located within any of the active fault zones, ground shaking from any of these faults could result in considerable damage. The potential for liquefaction is minimal due to existing soil types which consist of consolidated materials and bedrock and the depth to groundwater.

Riverside’s climate is semi-arid in character. Temperatures vary widely, with lows occasionally below freezing, and highs in summer often over 100 degrees Fahrenheit. Average temperatures in the summer months of July and August can be in the 90s. Pleasantly warm conditions typify the area in the spring and fall. Low humidity makes evaporative cooling an important alternative to air conditioning during the hot season.

C. Local and Regional Context

The University of California, Riverside has been valued by the City of Riverside since the days when the city fathers called on The Regents of the University to locate the Citrus Experiment Station in Riverside in the early years of the 20th Century. More recently the local and regional constituency worked tirelessly with the campus to persuade The Regents and the State of California, including the Governor, to establish the next UC School of Medicine (SOM) at UCR. The Regents approved the establishment of the UCR SOM in July, 2008. The legal profession and the City also worked with the campus to bring a Law School to the campus. Although this has not come to fruition as yet, interest in this possibility remains strong among the campus and city leadership and the legal and judicial community.

UCR is a economic engine in the region. An Economic Impact and Benefits Report completed in June of 2006 estimates that UCR produces $5.50 in value to the Inland Empire region for every dollar invested. All together it is
West Campus Agricultural Teaching and Research Fields
estimated that UCR had a $953 million economic impact in the State of California during the 2004-05 academic year. This impact will continue to grow in the future as student enrollment continues its upward trend.

UCR works hard to keep the lines of communication open with the city through regular meetings of the City and University Coordinating Committee at the staff level with the city Planning, Public Works, Economic Development, and Police Departments to discuss projects of mutual concern and to inform each other on potential issues affecting the city/university relationships. These meetings are generally attended by the city councilman for the UCR area and include UCR staff from Capital Planning, Design and Construction, Transportation and Parking Services, Community Relations and others as appropriate.

D. Development History and Growth

1. The Early Years of the UC Citrus Experiment Station - The original University of California Citrus Experiment Station (CES) was founded just west of the downtown area of Riverside at the foot of Mt. Rubidoux in 1907. Early descriptions of this and the history of Riverside are found in the UCR 2005 LRDP.

In 1917, the University of California acquired 370 acres from the City of Riverside and the CES moved to a location at the foot of the Box Springs Mountains three miles east of its former location to take advantage of a year around water supply - the Gage Canal. It flowed by gravity through the new station fields to the groves further west in the Arlington area of Riverside which maintains a certain amount of citrus groves to this day. Located in the Arlington area is the state Citrus Heritage Park. The park preserves a working citrus grove, and includes a grove home, field buildings, and specialized facilities such as a packing house and picking equipment.

The first facilities for the relocated CES were formally dedicated in 1918, and followed the mission-style architecture with tiled roof, recessed windows and entries and covered arcades. Two interconnected structures constituted the original Citrus Experiment Station facilities and also
included the Director’s and the Superintendent’s residences all of which are still in use today. Down the hill to the west the Barn and assorted small buildings associated with the maintenance and operation of the station were constructed as wood frame buildings. They are also still in use and are the subject of the recent Barn Area Planning Study to provide adaptive reuse of these circa 1917 structures.

By mid century, the CES, with many mature trees and covered archways, shaded and cooled the buildings and outdoor spaces making the hot dry summers pleasant even on the hottest days. That oasis-like feeling has been maintained to today as the station was transformed from a citrus research outpost of the University of California to a teaching campus.
2. 1948-1954 University of California Riverside Campus

The University of California, Riverside, had its official beginning in 1948, when a committee of the State Legislature recommended, after much lobbying by the Riverside city fathers, that a small liberal arts college be established in proximity to the Citrus Experiment Station.

In April 1951, a College of Letters and Science was approved by the Academic Senate of the University of California, and ground was broken for the initial building. By this time, additional lands had been acquired north of the original Citrus Experiment Station, bringing the combined total to approximately 1,000 acres.

A grouping of core buildings was completed by 1954: the Library, Webber Hall, the Physical Sciences Building, the Physical Education Building, and the Social Sciences Building (known now as Tomas Rivera Library, Webber Hall, Geology, Physical Education and Watkins Hall). The first five buildings were centered on a wide central open space and is now anchored by Hinderaker Hall (home to the Chancellor’s Office) opposite Webber Hall at a distance of 1,750 feet. Classes began in February of 1954 with “a soft opening” with a faculty of 55 and a student body of 117, and a planned capacity of 1,500 students. New buildings were designed in a modernistic style using the example of the CES and included overhangs, recessed doors and other openings, covered walkways and building arcades and landscaping to provide relief to the dominant semi-desert environment.
3. **1990 Long Range Development Plan** - The 1990 LRDP proposed approximately 18,050 students and included a horizon year of 2005-06. Approximately 10 million square feet of facilities were proposed to support the anticipated student population. A pedestrian bridge was proposed across the freeway as another method to access the West Campus.

Goals and Planning Principles were articulated in the 1990 LRDP which created the foundation of the campus vision at the end of the Twentieth Century.

---

**The 1990 LRDP defined five principal goals:**
- Create a state-of-the-art facilities and land use plan that conveys and supports the University’s excellence;
- Develop land-use elements to strengthen academic, cultural, social interactions;
- Preserve, enhance, and restore the natural environment;
- Strengthen and clarify circulation systems; and
- Maintain planning flexibility

**The 1990 LRDP also identified four major planning principles:**
- Use the open space network as the unifying element;
- Maintain the academic core on the East Campus;
- Use academic precincts as organizing elements; and
- Create a strong and unique sense of place.
E. Current Planning Documents

A number of master planning studies were completed during the preparation of the 2005 LRDP and immediately thereafter. These studies were in support of the LRDP and were used to validate, inform or were mitigation measures for potential environmental impacts that the projected LRDP student enrollment growth and/or development would have on the local and regional environment. The studies are identified below starting after the 2005 LRDP description.

1. 2005 Long Range Development Plan - The University of California of Riverside Long Range Development Plan is the blueprint for development that is approved by The Regents of the University of California and provides land use designations. The accompanying Environmental Impact Report (EIR) analyzes potential impacts to the environment by the proposed development and potential mitigation measures that could help decrease the effects of those impacts. This Physical Design Framework of the UCR campus is based on the 1990 LRDP, the Vision 2010 exercise led by the Executive Vice Chancellor from 1998 to 2001 and additional visions and goals identified through the 2005 LRDP planning and approval process. They were tested by a number of neighborhood and master planning studies such as housing, transportation and infrastructure that are identified and discussed elsewhere in this document. The supporting documents are responsible for the physical design of the campus today and into the future while allowing flexibility for future changes in the academic, research and public service missions of the University of California, Riverside. In addition to the UCR Physical Design Framework, which will be updated as needed, planning is guided by the UCR Ten Year Capital Financial Plan. It too is updated each year and both are accepted by The Regents.

The 2005 LRDP proposes 25,000 students by the horizon year of 2015-16 with approximately 11.8 million square feet of facilities. In order to accomplish the increase in facilities, the West Campus continues to be the prominent development area, along with some infill on the East Campus.

Goals

The 2005 vision for the physical framework of the campus reiterated the 1990 goals as stated above but addressed new conditions, issues, and opportunities of the 21st Century. The 2005 goals are as follows:

- Enhance UCR’s image and identity (The 1996 UCR Design Guidelines and 1996 UCR Landscape Master Plan were updated and revised as the 2007 Campus Design Guidelines. This document not only speaks to the history of the architecture and landscape that has carried UCR into the 21st Century but also contains sections on sustainability and sustainable design);
- Accommodate planned growth of UCR to 25,000 students while retaining flexibility for unanticipated needs in the future (In order to retain some flexibility, the 2005 LRDP is divided into seven land use categories in contrast to the 1990 LRDP which had twenty-seven);
- Recognize teaching and research change, and encourage interdisciplinary endeavors by identifying a flexible academic zone rather than individual college precincts (The 1990 LRDP had college precincts with identified boundaries while the 2005 has an Academic zone as an organizing element and goes a step further in identifying the Academic zone of the East Campus as the Undergraduate Academic Core while the Academic Core on
the West Campus is reserved primarily for Graduate and Professional Schools acknowledging that some undergraduate programs will spill into the West Campus due to land constraints on the East Campus; 

- Increase the size of the on-campus residential community and thereby improve opportunities for social interaction and socialization—i.e. a learning/living environment (The 2005 LRDP has a housing goal of 50% of student enrollment housed on campus or campus-controlled housing while the 1990 LRDP had a housing goal of 35%); 

- Improve university/town interaction and synergy—encourage new development and intensification of activity on University Avenue (The 2004 East Campus Entrance Area Planning Study articulated this goal in physical form by locating a number of community/campus programs/facilities at the formal entrance to the campus as the Intersection of University Avenue and Canyon Crest Drive including the Alumni & Visitor Center and a 2000-seat performing arts center); 

- Emphasize strong connections and ease of access within campus and with the surrounding community (The 2004 Multi-Modal Transportation Management Strategy articulated transportation modes from the pedestrian level to bicycle to transit and making the private auto at the bottom of the circulation and transportation hierarchy by placing parking structures/facilities at the periphery of the Academic Cores making them pedestrian and bicycle oriented); and 

- Create a regional model of planning, design, and environmental stewardship, protecting the natural environment and incorporating sustainable planning and design practices (Sustainable design strategies and best practices are articulated in the 2007 Design Guidelines and UCR draft Sustainability Plan).
Planning Principles and Strategies
In order to achieve campus goals and to accommodate 25,000 students, the 2005 LRDP addressed and expanded on the principles articulated in the 1990 LRDP and developed additional principles and strategies to achieve the goals. They were incorporated in the LRDP and by reference in the 2005 LRDP Environmental Impact Report (EIR) which supports the LRDP. Many of the following principles are directly tied to or are the mitigation measures for LRDP implementation.

The Land Use Planning Principles and Strategies are as follows:

• Achieve academic core densities of 1.0 F.A.R. (floor area ratio) or higher on both the East Campus and the West Campus in order to achieve a balance of academic land area versus other required uses.

• In order to achieve densities of 1.0 FAR, infill sites in the partially developed East Campus academic core and expand to the West Campus academic zone immediately adjacent to the I-215/SR 60 freeway, maintaining a compact and contiguous academic core.

• Maintain the Agricultural, Teaching and Research Fields south of Martin Luther King Jr. Boulevard.

• Pursue a goal of housing 50% of the student enrollment in on-campus or campus-controlled housing.

• Remove existing family housing units on the East Campus, and provide replacement and additional units of family housing on the West Campus.

• Provide expanded athletics and recreational facilities and fields on the East and West Campuses, adjacent to concentrations of student housing.

• Over time, relocate general parking from the central campus locations to the periphery of the academic core, and replace surface parking with structures, where appropriate.

The Circulation and Parking Planning Principles and Strategies are as follows:

• Develop an integrated multi-modal transportation plan to encourage walking, biking, and transit use.

• Expand shuttle or tram service connecting major parking lots and campus destinations and linking the East and West Campuses, and coordinate this system with RTA routes and schedules.

• Provide a continuous network of bicycle lanes and paths throughout the campus, connecting to off campus bicycle routes.

• Over time, limit general vehicular circulation in the central campus, but allow transit, service and emergency vehicle access, and provide access for persons with mobility impairments.

• Provide bicycle parking at convenient locations.

• Implement parking management measures that may include restricted permit availability and mobility.
The Open Space and Landscape Planning Principles and Strategies are as follows:

- Protect the steep and natural southeast hillsides designated as a Natural Open Space Reserve to protect wildlife habitat, to provide a visual backdrop to the campus, and protect against erosion.
- Within the Natural Open Space Reserve, no major facilities will be allowed (except for sensitively sited utility projects), vehicular and pedestrian access will be limited, and native plant materials will be used, where needed, for erosion, screening, and restoration.
- In Naturalistic Open Space areas, where arroyos and other natural features exist, preserve where ever possible, existing landforms, native plant materials, and trees, and where appropriate, restore habitat value.
- Provide landscaped buffers and setbacks along campus edges such as Valencia Hill Drive and its extension south of Big Springs Road, Martin Luther King Jr. Boulevard, and the I-215/SR-60 freeway.
- Retain the Carillon Mall as a major Campus Landmark Open Space respecting its existing dominant width of approximately 200 feet throughout its length. Other “named” malls and walks will be 100 feet wide.
- Provide a new Campus Landmark Open Space on the West Campus, The Grove, to reflect the campus citrus heritage and provide a gathering/activity space.
- Provide neighborhood parks and tot lots in the family housing areas as neighborhood open space.

The Campus and Community Planning Principles and Strategies are as follows:

- Provide sensitive land use transitions and landscaped buffers where residential neighborhoods might experience noise or light from UCR activities.
- Encourage a “permeable” edge with the community where interaction is desirable, especially along University Avenue and in areas where a high proportion of students live in close proximity to the campus.
- Discourage vehicular traffic originating off campus from moving through the campus as a short cut.
• Provide strong connections within the campus and its edges to promote walking, bicycling, and transit use, rather than vehicular traffic.
• Continue to improve campus signage and wayfinding to provide easy access for visitors and to discourage impacts in neighboring residential areas.
• Locate public-oriented uses such as performance facilities, galleries and major sports venues, where they can be easily accessed and where they can contribute to the vitality and economic health of businesses along University Avenue.
• Additional strategies are identified specific to University Avenue, Off Campus Housing, Retail, Open Space and Circulation & Parking.

The Resource Conservation and Environmental Stewardship Planning Principles and Strategies cover areas such as:

• Energy and Emissions;
• Resource Conservation including Water;
• Land and Land Uses;
• Facility Planning, Design and Construction;
• Landscape Planning, Design and Construction; and
• Transportation Planning and Design.

The campus is committed to using Leadership in Environmentally Efficient Design (LEED) criteria for facilities and the campus draft Sustainability Plan in creating a green campus environment.

LRDP Land Use Map
In order to maintain a goal of flexibility in future development and to provide for future multidisciplinary programs, the 2005 LRDP has only seven land use designations. They are:

1. Academic Core: A major change from 1990 to the 2005 LRDP Land Use Map is the designation of an Academic Core instead of college precincts. This is to reflect the increasing multidisciplinary nature of contemporary research.

2.3. Housing: Housing is divided into Residence Halls or Apartments for undergraduates on the East Campus and Graduate and Family Apartments or Townhouses on the West Campus. Support uses such as master dining venues, computer labs, and teaching facilities as well as housing within residence halls for faculty advisors and child care centers are permitted uses within the Housing designation.

4. Open Space: Open Space is the designation for malls, and pedestrian ways and the UCR Botanic Gardens. Natural areas are identified as Open Space Reserve.

Recreation & Recreation Fields: With proximity to each housing neighborhood recreation facilities and fields are sited to provide for recreation opportunities for students and family members through registration fees as well as faculty and staff in general through membership.
fees. Fields are next to on-campus housing allows for easy access for on campus residents, and proximity to parking lots provides access for off campus residents as well as faculty and staff. Intramural athletics and exercise opportunities in the Recreation Center are important to the physical and mental health and the social well being of the campus community.

5. Parking: With the understanding that some small surface lots will remain in the Academic Core for special needs, the Parking land use designation is reserved for parking structures. The structures have been designated for placement on the perimeter of each of the Academic Cores (East Campus and West Campus) to provide access while putting the pedestrian at the top of the transportation hierarchy and the Academic Cores vehicle-free.

6. Support: The Support land use designation is reserved for support uses such as physical plant, fleet services, grounds, Environmental Health and Safety, etc., with student support uses such as Financial Aid, the Registrar’s Office and the Student Commons as permitted uses within the Academic Cores.

7. Campus Reserve: In the 2005 LRDP the facility development plan for the campus was identified to provide for a total East and West Campus student enrollment of 25,000 students at a 1.0 FAR. The remaining capacity or “land base” on the West Campus was consolidated into a 40-acre campus reserve located near the northeast corner of Chicago Avenue and Martin Luther King Jr. Blvd. (MLK) at the western boundary of the campus. It was anticipated that this would be the location for a use not identified at the time the LRDP was approved and at such time that a use was identified, a LRDP Amendment would be completed to allow for its new use(s). The Campus Reserve area is now the proposed location of the UCR School of Medicine (SOM). The campus is in the process of proposing an amendment to the LRDP to change the land use designation to the School of Medicine.
Utilities

The LRDP is a large scale plan which deals primarily with land use designations and policies for development within those areas. Land use designations inform the campus in estimating utility needs for various uses. Several infrastructure projects on the East Campus have been developed from this information to upgrade, enhance or provide new infrastructure. The 2008 Campus Aggregate Master Planning Study (CAMPS) is a capacity study and facility siting exercise showing building locations, use, square footage, and population. This study has provided the detailed information for the campus to develop the West Campus Infrastructure Development Study (WCIDS). The WCIDS calculates utility loads and required capacity needs, and provides utility strategies and actual numbers to assist the campus in anticipating its infrastructure requirements for buildout of the entire West Campus including the SOM. It also provides an opportunity to work with the City of Riverside to ensure that the off campus infrastructure can provide capacity for the anticipated growth for the West Campus development. The result is that the University can pinpoint and anticipate energy and resource requirements and address sustainable design practice on a large scale.

2. 2003 (2008 Update) Strategic Plan for Housing: The 2003 Strategic Plan for Housing was developed in order to validate that the campus had a land base available for providing housing on campus for 50% of the projected student enrollment of 25,000. This translates into a need for 12,500 beds or family units. The plan identified housing type, number of beds or...
units, sites, support uses, and square footage requirements for undergraduate residence halls, upper-class and graduate apartments, and family townhouse/apartment units. The Housing Strategy also identified a Phasing Plan, articulating type, number, where and when. The plan was updated in 2008 and will be modified and adjusted as student enrollment numbers decrease and/or increase during the time frame of the 2005 LRDP.
2004 East Campus Entrance Area Study (ESCAS)
3. **2004 East Campus Entrance Area Study (ECEAS):** This study articulated concepts for the formal entrance to the campus at the area centered on the intersection of University Avenue and Canyon Crest Drive. The study identified a number of facilities that should have a campus-community interface and good access. Facilities identified that should be located at the entrance to campus included the Alumni & Visitors Center, a 2000-seat Performing Arts Center, a museum and art gallery, two parking structures, and several academic buildings and a Student Support building.

4. **2004 Multi-Modal Transportation Management Strategy (MMTMS):** In order to address future transportation issues and solutions for 25,000 students, the LRDP EIR directed that a transportation strategy be developed. The MMTMS articulated a hierarchy of transportation modes for UCR starting with the pedestrian and pedestrian experience at the top of the hierarchy. Second in importance was the bicyclist, then alternative transportation and transit, with service, delivery and emergency support next, and lastly the private automobile. The strategy identified a number of goals and objectives and included an Implementation Plan and Cost Estimate.

5. **2005 Health School Initiative:** The initial scope and program for the proposed medical school was approved by The Regents several months before the 2005 LRDP and EIR. The campus has been developing the program and completing a development plan which includes the facilities necessary for buildout to 400 students. During this initial plan, several site options were examined and the final resolution was to locate the school on the Campus Reserve. Subsequent to the initial approval for the medical school the campus completed more detailed studies and program exercises as well as a business plan. The school is the major component in the proposed amendment to the LRDP.
6. 2006 East/Southeast Campus Area Study (ESCAS): This study reviewed the quality and usefulness of the facilities remaining on the East Campus Academic Core outside of the master planning study areas. The plan graded all of the facilities and developed a matrix for the campus to use in the future as new facilities were needed. It provided information on infill sites, potential facility upgrades or remodeling and demolitions.

7. 2007 Campus Design Guidelines: A LRDP goal and a LRDP EIR mitigation measure required that the campus update the 1996 Design Guidelines and the 1996 Landscape Master Plan. The 2007 UCR Design Guidelines are more concise and directed than the 1996 guidelines (see later section for detail).
ESCAS Study Area Existing Aerial

ESCAS Concept Plan Aerial

Citrus Mall Illustrative
8. **2008 Campus Sign Program**: An extremely important component of campus branding is to capture a sense of place and an ability to provide real time direction and information to the campus and the community. The Campus Sign Program identifies a hierarchy of UCR signage from a freeway pole sign with changeable message capabilities to real time messaging at ground level with monument signs at critical vehicle entrances to the campus. Additional sign types from street signs to interior building signage are part of the program.
9. 2008 Campus Aggregate Master Planning Study (CAMPS):
The CAMPS is an all-encompassing examination of those areas plans and studies identified above which were developed within the context of the 2005 LRDP. It is a key element in the physical planning framework supporting the LRDP. Due to rapid campus growth and the scale of the UCR campus, area plans and studies at times needed reconciliation in the seams between plans. The CAMPS weaves the various planning documents together, creating coherence amongst the numerous University districts.
CAMPS examined the development potential of the 227 acres of existing agricultural teaching and research fields of the West Campus north of Martin Luther King Blvd. and estimated carrying capacity of the land base at a development ratio of 1.0 FAR (floor area ratio) as prescribed in the 2005 LRDP.
10. 2008 West Campus Infrastructure Development Study: The capacity study that was provided by the CAMPS was used to develop the West Campus Infrastructure Development Study (WCIDS). Knowing the land use designations, providing building envelopes within the land uses and the FAR, CAMPS was able to project information on gross square footage estimates, construction types and facility locations. The West Campus Infrastructure Development Study provides a foundation for planning the utilities, hardscape, landscape, and transportation infrastructure necessary to support proposed West Campus development.

Future infrastructure and facilities projects will be able to tier off of the WDIDS taking advantage of the foundation developed for the entire infrastructure network identified to achieve UCR’s sustainable energy goals for the West Campus.
11. 2009 Barn Area Master Planning Study: The study area dates from the beginnings of the relocated Citrus Experiment Station on the current campus site and includes a collection of circa 1917 wood frame buildings that were the original maintenance and operations buildings for the CES. Still functioning today, the teamster’s cottage recently housed the office of the campus ombudsman, the barn is a dining venue, the stable is used for storage of tables and chairs for special events, and the storage building is a rehearsal venue for the College of Humanities and Social Sciences. This study addresses a number of issues in the area including circulation conflicts, back door images to the west entrance to the East Campus. It will assist the campus in developing a campus center by creating a dining and entertainment venue, as well as a new entrance to the East Campus from the West Campus, while retaining and enhancing the campus fabric of these historic structures through adaptive reuse, thereby providing a unique sense of place to this area of the campus.
12. Americans with Disabilities Transition Plan

The campus has recently initiated an Americans with Disabilities Act (ADA) Transition Plan which will identify barriers to access on campus in facilities, parking lots, and path of travel. The plan will develop an implementation data base which will identify existing barriers and corrective measures to make the campus accessible to everyone. It is anticipated that the transition plan will be completed in fall of 2010.

F. Conclusion

UCR grew slowly during the first forty years of its existence from 177 students in the first class in 1954 to 7,665 by 1996. The student enrollment began escalating at a rapid rate in 1997 with approximately 1,000 additional students per year to an enrollment of 18,079 in fall 2008. This rapid growth has put a premium on space in every program on campus. New construction and remodeling of older buildings and spaces has been intense in the last decade on the UCR campus. This rapid growth has resulted in directed efforts by Capital and Physical Planning and the Office of Design and Construction to accelerate development of campus documents and the design process to assist the project approval process. The campus has made a significant investment in master planning studies and updating campus design documents to keep pace with development in order to achieve the best design solutions for UCR and to create a sense of place that evokes a positive and unique experience for students, faculty, staff and visitors to the campus.

With the master planning efforts starting with the 2005 LRDP, the campus is in a prime position to move forward, not only with general campus growth and facilities, but with the new School of Medicine. Primary to the success of future development are the goals and principles put forth in the Campus Aggregate Master Planning Study, the West Campus Infrastructure Development Study, the 2007 Design Guidelines, and the UCR Sign Program.
IV. Campus Framework
Five main organizing ideas create the framework for the UCR campus. This chapter illustrates how the five organizing strategies add up to a cohesive campus, integrating buildings, public outdoor spaces and circulation. Within each main strategy, planning concepts, architectural guidelines, and sustainability values are identified to guide development and the campus vision.

A. CREATE A BALANCED AND SUSTAINABLE CAMPUS INFRASTRUCTURE
With the development of a new West Campus, UCR has the opportunity to design and build a new sustainable organization of open space, circulation, building densities, and infrastructural support systems and networks that fulfills our sustainability aspirations and goals.

B. ENHANCE UCR AS A RESIDENTIAL ACADEMIC CAMPUS
Increasing UCR’s housing opportunities for students, increases the critical mass of on-campus community and improves social interaction, socialization, and learning. This organizing strategy also supports the objectives of the campus’ Sustainability Plan by lowering UCR’s carbon footprint.

C. GROW A NEW GRADUATE AND PROFESSIONAL SCHOOL ACADEMIC CORE
UCR is ‘living the promise’ with a long range plan to expand the campus to incorporate a new medical school and an Academic Core on the West Campus to house future professional and graduate schools.

D. CONNECT UCR TO COMMUNITY THROUGH THE EAST GATEWAY ARTS DISTRICT
The intersection of University Avenue with Canyon Crest Drive has been considered the formal entrance to the campus for many years. This area had remained undeveloped, and had not been part of a master planning study prior to the 2004 East Campus Entrance Area Study. The study developed a conceptual plan that would give this important area a sense of place and a sense of being. Through the goals of the LRDP, the East Gateway creates the appropriate formal interface between the UCR campus and the surrounding community, and provides the opportunity to refine an important organizing element in the physical design of the UCR campus - one of the gateways. This area provides a specific opportunity to create a synergy between the public face of the University and a sense of place represented by the Arts District with its many opportunities for presentations, cultural occasions, and even the random practice of the Taiko drummers on the steps of the Arts Building at noontime. Siting potential public interface buildings such as the Alumni & Visitor Center, a 2,000-seat performing arts center, a museum and art gallery, as well as the Arts Building and Parking Structures provides the elements to be a civic center or interface for the campus and city communities. The gateway also acts as a convenient area for pick-up/drop-offs, including transit, and a pivot point for orientation and wayfinding.

E. STRENGTHEN CAMPUS DISTRICTS WHILE PRESERVING UCR’S HERITAGE
UCR has a number of campus districts or centers, many with a historic connection to the early history of the Citrus Experiment Station that moved the current site in 1917. Many of these districts have had focused master planning studies to define a cohesive vision for that specific district of the campus. The example shown in this section is the Barn Area Study for the original operations and maintenance area of the CES. This includes the Barn Group buildings in an area of the campus which now serves as the west gateway to the original East Campus of UCR. A major component is a relocation of West Campus Drive to reduce pedestrian vehicle conflicts and relocation or remodel of a number of loading and service docks in adjacent buildings to improve the visual and circulation aspects of the area. In addition, a master landscape plan and roundabout located at the terminus of Canyon Crest Drive will be developed to create a sense of arrival and a sense of place to this west entry to the East Campus.
A. CREATE A BALANCED AND SUSTAINABLE CAMPUS INFRASTRUCTURE

The layering of circulation and utility infrastructure to support sustainable growth on the West Campus and increased density with infill on the East Campus is an important commitment to UCR’s campus vision. UCR currently is engaged in the long range planning of three major infrastructure planning and design efforts—two on the West Campus (Infrastructure Part 1 for the West Campus Graduate and Professional Academic Core and Part 1 of the Infrastructure for the SOM) and one on the East Campus (Infrastructure 2). One of the major focuses of these design efforts is to give the campus relative flexibility to support changing needs over the years to come, while at the same time including environmentally-sound stewardship and resource strategies into the design.

Sustainability Value

Alternative and Clean Transportation

With planned growth of the campus population, alternative transportation planning strategies can significantly contribute to campus character and operations. UCR will implement:

- An extensive transit system to move students, faculty, staff and visitors throughout the campus, and to and from community destinations;
- An expanded bicycle circulation system; and
- Improvements to streets and malls to facilitate pedestrian movement.
Commitment to Energy Efficiency
The campus will incorporate the principles of energy efficiency and sustainability in all planning, capital projects, renovation projects, operations and maintenance within budgetary constraints and programmatic requirements. The campus goal is to achieve LEED Silver certification by USGBC or higher for all new construction and renovations.

Commitment to Sustainable Power
The campus will work to minimize the use of non-renewable energy sources on behalf of the campus’s built environment by creating a portfolio approach to energy use, including the use of local renewable energy and purchase of green power from the grid as well as conservation measures that reduce energy consumption.

New Infrastructure to Reduce Storm Water Run-Off
- Infrastructure plans will emphasize natural infiltration and evaporation where possible to reduce water run-off during storm events;
- Campus infrastructure will include provisions for water harvest and storage (cisterns) where feasible;
- Campus paving will move towards using materials that allow rainwater infiltration where feasible, particularly for secondary paths and roads; and
- Objectives will be met by:
  - Filtering the storm water run-off from roofs and paving by bio-swales, filter strips, stormwater planters;
  - Minimize the scale of surface parking lots by using multi-level parking garages; and
  - Where retained the campus will design surface parking lots with stormwater drainage detention swales for runoff interception, filtration and storage.

Landscape Patterns
UCR will Reduce Water Use by moving toward a Drought Tolerant or Low Water Requiring Plant Palette
- On the West Campus, UCR will maximize the use of native or climate-appropriate and drought tolerant or low water requiring plantings where feasible;
- The campus will select broad-canopy trees and shrubs where appropriate to maximize shading and evaporative cooling; and
- Infrastructure will eliminate use of irrigation where possible through the selection of climate-adapted plants.

Infrastructure that Reinforces the Reduction of Potable Water Usage
UCR will move towards the use of graywater or reclaimed water as an alternative source of irrigation water.
PLANNING AND DESIGN STRATEGIES

- Balance core elements and systems of the campus including: open space, building densities, circulation, and infrastructure support to provide for optimum sustainability for all elements and systems.

- Increase density of campus to 1.0 Floor Area Ratio.

- Implement a multi-modal transportation management strategy including: controlled access streets, vehicle free pedestrian/bicycle zones, pick up/drop off areas, accessible pathways/parking, and parking at the periphery of the Academic Core.

- Preserve orthogonal interconnected malls and open space views to Box Springs Mountain.

- Strategically locate Thermal Energy Storage (T.E.S.) Tanks throughout the campus to lessen dependence on peak-hour energy consumption for HVAC needs campus wide.

- Focus core academic facility densities within a 10-minute walkable framework.
B. ENHANCE UCR AS A RESIDENTIAL ACADEMIC CAMPUS

UCR is on track to align the housing program with UCR’s 2005 Long Range Development Plan (LRDP) goal to increase on-campus or campus-controlled housing from 35 percent as stated in the 1990 LRDP to 50 percent of the UCR students in the 2005 LRDP. This goal includes housing 75 percent of the freshmen and 50 percent of transfer students. In 2008/09, UCR housed approximately 30 percent of the student population on campus.

Sustainability Value

Reducing the Carbon Footprint While Strengthening the Campus Community

It is the intent to increase the critical mass of the on-campus community and improve opportunities for social interaction, socialization, and learning. Increasing the on-campus community reduces the transportation carbon footprint enormously given that residential students do not need to commute to campus. In addition, the campus is committed to providing more retail and commercial services on campus to limit the need for the campus community to go off-campus for basic necessities, thereby further reducing potential vehicle trips.

Ideal Residential Community

The Ideal Residential Community Models that are discussed in the strategic plan are targeted for each student group. The Principles of Planning define and provide the framework for the logical organization of the physical environment of each neighborhood.
Landscape Patterns

Utilize natural outdoor environments that encourage habitats for birds, butterflies. Develop visible icons that can become sources of community identity regarding commitment to the environment.

The natural features of the sites, as well as opportunities regarding the environment, can provide a significant source of community identity that is aligned with environmentally—responsible actions.

Examples of this include:

- The enhancement of natural features, such as the University Arroyo on the East Campus.
- The prominent placement and celebration of physical features that provide visible reminders of the campus community commitment to the environment. Good examples of this include solar-powered lighting, and use of photovoltaic and windmills for wind driven energy sources.
Canyon Crest Neighborhood will be created North of Linden. It will contain (3) distinct housing communities designed for first year and transfer students - Dundee, Edinburgh and Lennox.

Child Development Centers

Dining Centers

Conference Center

Neighborhood open space and pool facilities

Group housing will create larger housing settings for individual campus social groups.

Arroyo-Veitch neighborhood provides a mix of Inverness, Pentland, and Lothian residential communities and apartment style living communities in Glen Mor I and soon, Glen Mor II.

Natural environment will be protected in the arroyo separating the Glen Mor communities.

Apartment communities for upperclassmen, graduate students, and family housing will be emphasized along the Canyon Crest corridor. The communities will include: Falkirk Apartments, Summer Ridge Apartments, and a to be redeveloped Bannockburn Apartment with additional mixed-use facilities softening the edge between the campus and the surrounding community.

PLANNING AND DESIGN STRATEGIES

• Increase critical mass of on-campus community and improve opportunities for social interaction, socialization and learning.

• Emphasize strong connection and accessibility within campus and with the surrounding community.

• Create a regional model of planning, design and environmental stewardship, protecting the natural environment and incorporating sustainable planning and design practices.

• Create an ideal residential community that offers a mix of living options, organizing the residential framework with distinct and identifiable neighborhoods.

• Create residential communities that respond to the needs of the individual student, the larger residential community and that connect to the broader campus, focusing on the diverse needs of specific student groups: first year students, transfer students, upperclassmen, family housing, graduate students, and student organizations.

• Integrate related programs to meet the diverse needs of neighborhoods including: recreation fields, swimming facilities, open space, childcare facilities, and dining facilities.

• Reduce UCR’s carbon footprint by creating a residential university.

ENHANCE UCR AS A RESIDENTIAL ACADEMIC CAMPUS
C. GROW A NEW GRADUATE AND PROFESSIONAL SCHOOL ACADEMIC CORE

As student enrollment and the need for new facilities for graduate and professional schools increases the campus will need to expand development to the West Campus to accommodate new facilities. The new School of Medicine (SOM) is also slated to occupy a 37-acre site at the northwest corner of Martin Luther King Jr. Boulevard (MLK). The new West Campus development will occur on 270 acres located east of Chicago Avenue, north of MLK, west of the I-215/SR-60 freeway and south of University Avenue. This West Campus expansion, as well as the increase in density across the East Campus as infill, is in response to the goal of accommodating the program associated with growing the student enrollment to 25,000. This represents an opportunity for the design of the West Campus landscape and buildings to reflect the strong citrus history of the campus and the region, and retain the sense of place that personifies UCR. Until specific parcels are needed for development, citrus groves will be retained in cultivation on the West Campus north of MLK. In addition, remnant groves can be retained, and plantings to recall early groves can be added over time. Buildings will also refer to the citrus architectural heritage of the campus and region, while also reflecting the image of a modern, 21st Century national research university.
Sustainability Value

Creating Resource Strategies while growing the West Campus

While UCR has the enormous benefit of a large site that has accommodated a variety of uses including agricultural research and teaching for many years, recent enrollment and space projections demonstrate how limited a resource the land can be. Capacity studies for the West Campus show that most of the land north of MLK will be required to accommodate projected enrollment and facilities growth. Since its inception, UCR has used its land as a laboratory for research and experimentation.
PLANNING AND DESIGN STRATEGIES

- The West Campus will be arranged in three districts: a Graduate and Professional Academic Core, a Housing Precinct for family housing and graduate students, and a new School of Medicine campus.
- The West Campus circulation will follow a rectilinear grid layout and will separate and distinguish between vehicular, bicycle, and pedestrian pathways.
- Open space will be articulated in: 1) Generous malls and plazas oriented east to west and plazas and courtyards hugging the buildings. 2) A sinuous mall following the course of the Gage Canal.
- The layout of the West Academic Campus falls within the circle of a walkable campus as defined by the Long Range Development Plan.
- The West Campus infrastructure will be designed to support a reduced carbon footprint as required by UCR’s Climate Action Plan, goals and objectives.
- Malls and open space are designed to reinforce specific view windows to the Box Springs Mountains and to specific signature structures/buildings on campus.
- Linkages for pedestrian, bicycle and transit between the East and West Campus will be highly visible and symbolically enhanced.

1. A new UCR Medical School is proposed to anchor the west end of the West Campus on 37 acres at the northeast corner of MLK and Chicago Avenue. The school’s signature flagship building will occupy the west end of the Southwest Mall which will connect the academic districts of the West Campus - the Graduate and Professional Academic Core on the east and the School of Medicine on the west.
2. A new physical plant located just to the north of the SOM site will be developed to support a sustainably designed medical education campus.
3. Two family housing neighborhoods, to include recreation and childcare facilities near and within the communities will be located west of Iowa Avenue and adjacent to the SOM campus. The residential district is walkable to either east or west academic districts and to marketplace and community venues located to the north at the edge of campus on University Ave.
4. Graduate / Professional academic campus signature buildings on East - West mall In the West Campus Academic Core.
5. The Gage Canal Mall will be a sinuous, linear pedestrian/bicycle spine that follows the historic Gage Canal irrigation waterway. The mall will be characteristic of an arroyo botanical walk blending environmentally responsible pre-settlement plant palettes and additional drought tolerant species. Parking garages will be concentrated at the outer edges of the West Campus Academic Core.
6. Clear and symbolic linkages between the East and West Campus will be established by a pedestrian/bicycle bridge over the I-215/SR-60 freeway and by mural decorated connections at two freeway underpasses, one at University Avenue on the north and the other at Canyon Crest Drive on the south.
Circulation

The West Campus will feature an orthogonal grid of rectilinear campus streets and malls, and presents an opportunity for UCR to create a transportation system that encourages several modes of travel. The most important elements of the pedestrian system will be compatible with the open space, paralleling the Gage Canal (the only meandering circulation element on the West Campus) and the edges of the more formal malls in a rectilinear pattern as found on the East Campus. Most of the streets on the West Campus will also include provisions for transit and bicycling.

Buildings

The concept for the West Campus is to provide an orderly arrangement of new buildings on land that the UC Riverside has identified for significant future campus growth. While professional and graduate schools are a major focus of new development, there is also an increase in capacity for academic uses in a logical extension to UCR’s undergraduate East Campus. New buildings will border generous quadrangles and feature a fine-grained network of pedestrian, bicycle, transit, and vehicular circulation and will retain the heritage of the original mission-style architecture of the CES with its modernistic nomenclature.

Planning Patterns

Open Space

The Open Space concept on the West Campus provides two distinct features that will continue UCR’s tradition of generous, distinctive open spaces: a sinuous band of open space, evoking an arroyo or dry wash, following the course of the Gage Canal (which would be piped) and a series of formal east-west malls framed by new academic buildings and linked together by this meandering space.

With significant growth planned, UCR has an opportunity to expand use of the campus through its land use decisions, design of buildings, grounds, and infrastructure, and through its operational programs. Among other considerations associated with land use decisions and site development that UCR will consider are:

- Erosion and sedimentation control
- Reduced site disturbance
- Storm water management
- Landscape and exterior design to reduce heat island effect and energy consumption
- Light pollution reduction
- Use of renewable materials
- Maintain existing landscapes especially healthy mature trees.
Landscape Patterns

It is anticipated that, wherever appropriate, the citrus heritage of the campus will be articulated in the landscape design and plant palettes of future landscaped areas. This is not only to evoke the heritage of the campus to provide a sense of place and a continuity with the past and but also to provide aroma, color, and visual excitement as well as a sustainable opportunity for casual picking and consumption of fruit as a pedestrian passes by.

Malls and Linear Open Spaces

Malls and linear Open Spaces provide an interconnected system of linked open spaces throughout the developed areas of the campus. In the future as the campus grows, more and better pedestrian and bicycle connections will be required to allow convenient and efficient movement throughout campus, particularly from outlying residential areas to the inner Academic Cores.

The Gage Canal Mall

This curving central space will serve a number of roles, providing a range of gathering spaces, a linear pedestrian and bicycle spine, and a somewhat organic counterpoint to the formal grid of buildings, streets, malls and quads. This space could become a showcase for plants adapted to the Inland Empire climate. It could be a “botanical walk” that roots this new campus expansion in a landscape blending environmentally-responsible and pre-settlement plant palettes, fostering a sense of place, and potentially contributing to UCR research activities.

Central Mall

The linear mall intersecting the meander of the Gage Canal emulates the Carillon and Library Malls, the original UCR open spaces. The Central Mall corresponds to the width of its East Campus counterparts and will be framed by four to five story buildings. This ‘outdoor room’ will terminate on signature buildings on its eastern and western ends. The Central Mall, like the Carillon Mall, will also orient the campus to the distant Box Springs Mountains. The predominant plant palette is envisioned as open lawn, using a low water requiring turf developed by UCR researchers to withstand Inland Empire heat and drought. The campus will provide gathering spaces, outdoor classrooms, and impromptu recreation opportunities and look for opportunities to create micro climates to enhance the outdoor gathering experience. The West Campus should incorporate native or low water requiring vegetation where appropriate, recognizing the imperative for sustainable design and landscape management at UCR.

Courtyards and Transitional Spaces

Other important open and public spaces on the West Campus are: internal, shaded courtyards; transitional spaces between academic buildings; the larger, more public malls; and the Gage Canal open space. Related to these are hardscaped or paved plazas near important building entries and in high-traffic areas such as outdoor dining facilities. These important ancillary spaces should be accounted for in the designs of buildings on the West Campus and will require careful attention when interfacing directly with signature open spaces and circulation systems.
D. CONNECT UCR TO COMMUNITY THROUGH THE EAST GATEWAY ARTS DISTRICT

At the heart of the East Campus Entrance Area Study (ECEAS) conceptual plan, a future Arts Plaza serves as a ‘welcome mat’ for UCR and capitalizes on the adjacent art venues to create a space that emphasizes campus-community interaction. In its position at a crossroads on campus and at the formal entrance, the generous plaza serves as: a pre- and post-function space for visitors attending performances; large-scale campus community gatherings; and small outdoor study groups, as well as the primary entrance to the East Campus from housing to the north of the campus central core.

Looking east over the Arts Plaza toward the Box Springs Mountains, glimpses of the powerful arroyo system is apparent starting half way up Box Springs Mountain. The arroyo is a green pathway as it travels across the city to the campus and along Big Springs Road to North Campus Drive, through the landscaping in the Athletic Fields and to the Gage Basin. The conceptual design respects this strong natural feature by creating an open space framework to organize future development and protect the visual drainage pattern. As the existing arroyo emerges from an underground culvert west of Canyon Crest Drive, buildings are located along its perimeter, protecting the integrity of the naturalized channel while capitalizing on its unique visual character as a southern Californian riparian system.
**Sustainability Value**

The ESCAS concept captures the current values of the campus community in its articulation of identity, promotion of campus-community relationships, and emphasis on environmental respect and stewardship. The ECEAS respects the unique natural characteristics found within this area of the campus, while simultaneously creating a series of development sites necessary to support a sense of campus pride and place as well as civic vitality for UC Riverside.

The following guidelines reinforce the sustainable design of the Arts Plaza District:

- Maintain views toward the Box Springs Mountains and the University Arroyo through careful consideration of building placement, building height and plant palette;
- Utilize vegetation to reference the connection of the East Campus and University Arroyo features; and
- Retain adequate open space within the plaza to accommodate large scale public and University gatherings.

**Landscape Patterns**

*Lush plantings and canopy trees* may be utilized to soften the edges of buildings fronting the plaza, providing shaded gathering spaces to support informal outdoor lectures and study groups. Raised planters, seating walls, or benches may be incorporated to allow visitors moving to and from performances to pause and mingle, while an open central plaza of specialty paving or open lawn could provide a central congregating space for students and visitors alike. The plan articulates that:

- Landscape along the stretch of Canyon Crest Drive should be upgraded to include street trees and to create a sense of place at the formal entrance to the campus;
- There is a recognition of the “A-Ha Moment” (the moment of “realizing” you have arrived at the UCR campus proper);
- Public Art is included in the design;
- A landscaped traffic circle or roundabout for traffic calming and contributing to the sense of arrival is located at the intersection of University and Canyon Crest;
- Landscape design is coordinated with new buildings;
- There be a District Lighting Plan; and
- Wide Sidewalks (8’-12’) on both sides of street are installed.

The Glade at the northeast corner of Aberdeen Drive and North Campus Drive
PLANNING AND DESIGN STRATEGIES

• Provide sensitive land use and landscaped buffers at adjacencies to residential communities.
• Discourage vehicular traffic from traveling through campus as a shortcut.
• Provide strong alternative transportation connections for pedestrian, bicycling, and transit modes within the campus and at its edges.
• Improve campus wayfinding.
• Locate public oriented uses at strategic locations on campus edges to contribute to community vitality.
• Work with the City of Riverside to link the open spaces of UCR, University Avenue, the Marketplace, and the Downtown with enhanced streetscapes.

THE EAST GATEWAY THROUGH THE ARTS DISTRICT

1. Utilize planned ceremonial roundabout as the “Front Door” and as a terminus to the campus approach that can be used as a drop-off point.
2. Create an Arts Plaza District around a new Arts Plaza that is a large multi-use outdoor vegetated area scaled to accommodate large gatherings responding to adjacent arts buildings and events.
3. Future Performing Arts Center
4. Future Recital Hall and Museum/Art Gallery - Lobby that will serve as a lantern to campus entry.
5. Existing Arts Building
6. Existing CHASS Interdisciplinary Building
7. Future Enhanced Tree-lined Art Mall is an extension of Canyon Crest Drive
8. Maintain views to Box Springs Mountain through East-West Arroyo Pedestrian Parkway through the “Glade Area”
9. Natural Arroyo from the Box Springs Mountain through to the Gage Basin
10. Enhanced landscaped boulevard with mixed use frontage, both sides, will soften west entrance to campus from freeway.
E. STRENGTHEN CAMPUS DISTRICTS WHILE PRESERVING UCR’S HERITAGE

Focused district master planning studies develop strategies for place making within specific contextual environments on campus. One such master planning study was just completed for the Barn Area - a nine-acre mixed-use collection of historic and relatively new buildings at the west end of the East Campus. This area was identified through the East/Southeast Campus Area Study as part of the South/East Carillon Mall District. The other districts of the East Campus Academic Core were identified as the Picnic Hill District, the Arts District, the Citrus Mall District and the Panhandle District.

The original Barn Group wood frame structures were built in 1917 and are still in use today. The Cottage is a small building used originally as a home for the teamsters. The teamsters managed the horses used to till the CES fields during the early years of the station. Adjacent to the Cottage is a specimen Camphor Tree of substantial size that is beginning to uplift the Cottage foundation. To save both of these campus resources, the campus made the decision to move the Cottage. To move the Cottage in a responsible way and provide for its adaptive re-use on a new site, the campus developed a concept plan which would investigate the area, its potential for developing as an entrance to the campus from the west, and to create a sense of place with the historic structures.

The location and siting of the existing Barn Group buildings prompted the simultaneous investigation of several other key planning issues in the vicinity. The buildings are situated in close proximity to the intersection of West Campus Drive and Canyon Crest Drive, an area highlighted in the 2006 East/Southeast Campus Area Study as a future gateway. The plan revisits this area in more detail addressing views, topography, circu-
lation and open space issues to confirm the feasibility of creating a truly unique East Campus entry statement. Similarly, two other campus connectors are examined and enhanced: Sproul Hall corridor and Eucalyptus Walk. The existing Sproul Hall corridor, the north-south connector from West Campus Drive to the Carillon Mall is reconfigured to work with the proposed East Campus gateway. This new service drive provides access for service, emergency vehicles and bicycles from West Campus Drive and the Barn Area to the Carillon Mall and ultimately to the Arts Mall. Paralleling it is pedestrian-friendly Barn Walk with entrances and views into the Barn interior as well as the outside dining courtyard.

Eucalyptus Walk coming from the east is redefined as a visual backdrop and major connector to the Gateway, with a strong landscape statement and visual realignment to highlight the Cottage at its western terminus after being relocated from the west side of West Campus Drive. Also included in the study was an expansion of the existing Barn kitchen, expansion of the Barn Theater, slight relocation and expansion of the Barn Stable to accommodate the campus radio station, and development of a central interior courtyard to expand the dining and entertainment options available in the Barn Group.

Retaining the historic buildings of the Barn Group emphasizes the concept of the area south of Olmstead Hall as a cultural resource celebrating the history and agricultural heritage of UCR.

**Sustainability Value**

A sustainable approach for the Barn Group is one in which current and future program needs are met with the minimum expenditure of new resources through adaptive reuse of the existing facilities. This minimizes solid waste and need for raw materials. In addition this is an opportunity to develop strategies to incorporate sustainable design into the buildings to create a high degree of component and material integration. Key to this is the collective decision-making process involving all stake-holders—students, faculty, staff, design team, and the consultants—from the onset of the study and as it goes into program verification and design. This area of the campus and the history that these buildings have created over the last hundred years is meaningful to many on campus and in the community.

**Achieving an Energy Efficient Design Solution**

Energy is used both during construction and in ongoing operations. For a typical 35-year period of facility operation, from the time of construction to the first major refurbishment, the energy use in operation is by far the dominant use, representing about 75% of the facility’s total energy consumption.
Achieving Sustainable Goals with Water Conservation

Water quality and water resources in the new Barn Area site design will be planned to achieve water quality goals and to maximize ground-water infiltration recharge as follows:

- **Reduce Consumption:** Landscape planting will be designed to conserve water and deep mulching can reduce water needs. The new irrigation systems will achieve water savings through the use of sub-surface drip equipment, integration of weather data, integration of soil characteristics and programming to reduce runoff.

- **Stormwater Treatment and Collection:** Permeable paving or management of stormwater to achieve infiltration will improve water resources. The new Barn Area site design will work to minimize large areas contributing to runoff. Biofiltration of stormwater runoff can improve water quality. Detention and infiltration will reduce needs for stormwater infrastructure investment and maintenance.

Supporting local growers

The reconfiguration and reinvigoration of the historic Barn Area on campus will support a more sustainable environment by creating a place for such activities as a farmers’ market. Stewardship of resources begins locally. The opportunity to provide spaces on campus for a farmers’ market or a community garden offers opportunities for UCR to interface with the surrounding community.

Landscape Patterns

East Campus Gateway

Traffic issues, sense of arrival and sense of place are addressed in the Barn Area concept. A traffic roundabout at the terminus of Canyon Crest Drive with West Campus Drive provides a central element which restores the focal point of the west entrance to the East Campus.

A grove of palm trees consistent with the recommended street trees from the 2007 Campus Design Guidelines was proposed to provide the height needed for visibility from the freeway and the West Campus. This also helps with the sense of arrival. The geometry of the citrus grove and the use of other landscape features such as arbors were in keeping with the agricultural heritage of the area. The concept of citrus groves occupying what is currently turf is intended to better define the space and embrace the drop off area, making it an inviting space to read, relax and mingle while waiting for transit.

Eucalyptus Walk

Eucalyptus Walk is a significant connector stretching from the east end of campus at the base of the foothills to the west end terminating at the Barn complex. In order to emphasize the walk as a pedestrian walk with a view of the Box Spring Mountains, it would be realigned slightly to terminate at the Cottage on the west end. Otherwise, the view to the west is the 12’ freeway sound wall.
West Campus Drive

The realignment of West Campus Drive will create more space for landscaping south of the Barn and the Cottage to West Campus Drive as well mitigate a sight distance problem as vehicles approach the area from the north. This will also bring the specimen Camphor into the Barn Group and provide shade for the extended courtyard for the Cottage.
PLANNING AND DESIGN STRATEGIES

- Define a cohesive vision for the Barn Group complex as a dining and entertainment venue on campus.
- Enhance Sproul corridor and loading area.
- Define arrival experience to west entrance of East Campus at Canyon Crest Drive and West Campus Drives.
- Identify and enhance pedestrian / bicycle circulation pathways.
- Promote the use of transit systems and create a designated drop-off area.

Create a future Southeast Entry roundabout with bus & vehicular drop-off. The roundabout will be flanked by an entry plaza equipped with stone benches, decorative paving and citrus experiment station heritage groves of orange trees and avocado trees.

Existing specimen heritage tree to be protected.

The Barn Group (circa 1917). The cottage will be relocated north of current location abutting the heritage Camphor Tree and recreated into a coffee house preserving its historical significance.

The Barn will be expanded, in place, enhancing it as a restaurant venue on campus while preserving its historical character.

The Stable will be enlarged and recreated into KUCR radio station maintaining the buildings historical character. Broadcast studios will be visible to the adjacent entertainment courtyard.

The Barn Theater is used as a dance rehearsal studio space will be enlarged plus given an outdoor stage setting.

A site has been located for a new University Club (alternative) site. It is adjacent to the Barn dining facility in order that its catering kitchen might be served by the Barn’s full commercial kitchen.

The new multi-program outdoor gathering space will capitalize on the newly configured Barn Complex that boasts 220 seats for dining, theatre and special events.

Historic Eucalyptus Walk, a significant East-West pedestrian connector will be enhanced with a double row of shade trees.

Barn/Walk/Carrillon Mall connection will be redesigned to separate pedestrian, bicycle and vehicular service traffic greatly increasing safety while buffering the separations with landscaping. The walk also serves as fire-truck access to Carrillon Mall.
V. Campus Fabric
CAMPUS FABRIC

The University of California, Riverside (UCR) presents a unique continuity of buildings and landscape, due to its striking natural setting, relatively short history and modernist design origins. An enduring rational arrangement of modern buildings frames a set of linear malls at the base of rugged semi-arid mountains. This form has been strengthened over 50 years by contemporary construction that continues to honor the legacy of the UCR landscape. UCR is committed to respecting the beauty, order and intrinsic character of the campus as enrollment grows and the academic mission continues to evolve.

The Campus Design Framework is intended to provide guidance to shape future growth, allowing the campus to evolve in a dynamic way that recognizes the physical and academic roots that define UCR’s character. This chapter describes for future architects and planners, the fundamental characteristics of the University’s mission, setting, history, landscape and architectural form that must inform any physical changes to the campus.
ARCHITECTURAL ELEMENTS

The UCR campus demonstrates unique architectural responses to climate, topography and local history. The early mission-style Citrus Experiment Station structure and associated vernacular agricultural buildings are historic landmarks on the campus. Similarly, the midcentury modernist buildings built in the 1950s and 1960s are part of the campus’s established architectural heritage. These buildings (Webber Hall, Rivera Library Unit 1, Physical Education, Geology and Watkins Hall) are arranged around the Carillon and Library Malls, creating the original core of UCR. The integral relationship of these buildings to the adjacent open spaces creates a sense of openness that in part defines the character of the campus.

Considering the campus’s history, setting and built environment, a clear set of common elements, or a vocabulary, is revealed. New development will be integrated into the existing campus by building on this rich design vocabulary. The following elements, use of materials, and strategies will be incorporated into new buildings to help ensure the development of a cohesive campus.
Building Response to Climate

ARCADES
A variety of arcade types are found across the campus including arched and rectilinear, and freestanding and attached to buildings. Arcades provide shaded and visually obvious circulation routes between many buildings of different scales, as well as provide informal gathering space.

SUN SHADES
Found on most campus buildings primarily on the south and west sides, these sun shades range from integral building elements (deeply recessed windows) to those attached to façades, in a variety of materials.

Building Materials and Color Palette

COLOR PALETTE
The use of the UCR brick blend achieves a continuity of tone among the buildings and helps create a cohesive campus. This brick will be incorporated on permanent buildings, especially at the main entries.

DIRECT EXPRESSION OF STRUCTURE AND HONEST USE OF MATERIALS
The articulation of materials in a way that reveals the construction of the building is common on the UCR campus, and follows directly from the mid-20th century modernist tradition of the early buildings. This tradition lends a quiet sense of order which modulates the scale of buildings on campus and should be continued in new development.

Building Massing and Articulation

VARIED MASSING
The perceived scale of buildings on the campus is reduced through the use of articulated volumes. In keeping with the LRDP, new buildings of appropriate scale will be designed to be a minimum of 3-4 stories to create an overall FAR of 1.0, so this will continue to be an important design strategy. Often, limestone bands have been used to break up large façades.

SCREENING
Both roof top and ground level mechanical equipment (including trash receptacles) should be screened from public view.

Legend: UCR Brick Blend, Tinted Glass/Low E, Limestone Bands, Recessed Windows & Doors, Canopies and/or window shades (top to bottom):
1953 Physical Education Building
2003 Science Laboratories
2005 Chemical Sciences Building
2011 Health Sciences Surge Building
Relationship of Interior to Exterior at Ground Floor

PERMEABLE GROUND FLOORS
The permeable nature of the ground floors of buildings on campus fosters a high level of interaction between building and user. Passageways through buildings are an important element in the campus circulation system and often a link between campus open spaces. Other examples include attached arcades and open connections to courtyards, as well as direct entries to first-floor classrooms from adjacent malls or open spaces.

Building Orientation and Entrances

BUILDINGS WITH MULTIPLE ENTRIES
Building entrances are a key part of the wayfinding system on campus. The careful attention to the design of entrances establishes a hierarchy for buildings with primary and secondary entries, and those with public entries facing both the streets and academic quadrangles. Buildings with multiple entrances become an integral part of the campus circulation system and enhance the connections between buildings and open spaces.
BUILDING RESPONSE TO CLIMATE

An appropriate response to climate is integral to a building’s success. The siting and layout of a building should consider the climate of the region as well as the microclimate of the building site. The building’s response to the sun is a major factor in the functionality of the building, as is the consideration of wind and other weather patterns. The warm climate at UCR makes it possible to open the buildings up to the surroundings with the incorporation of exterior circulation, thereby creating a more active relationship with the outdoors than is possible in many regions. The ability for building occupants to control their environments through operable windows and shading devices helps to keep them connected to the larger environment. Passive solar design and day-lighting strategies reduce energy use. Utilizing natural ventilation reduces a building’s energy use; however, programmatic use, weather patterns and security are important factors to consider when incorporating operable windows into certain campus buildings.

One of the defining characteristics of UCR is the integration of campus buildings with outdoor spaces. The careful siting of buildings gives definition to open spaces, creating varied experiences across the campus, from naturalistic open spaces to formal malls to upper floor courtyards. Covered walkways, exterior corridors and connections between buildings further define these outdoor spaces while providing shelter for pedestrians from the sun. Exterior connections between buildings also create visual links and help create a cohesive sense of place on the campus, and are an integral part of the campus circulation system.

New buildings will be sited and designed to support, enhance and activate common outdoor space. Incorporation of exterior circulation elements and gathering spaces is encouraged, including:

- Freestanding arcades;
- Arcades connected to buildings;
- Courtyards/plazas;
- Roof terraces;
- Exterior circulation at multiple levels of a building;
- Linkages to existing buildings, including covered walkways and bridges;
- Building elements for protection from sun, wind and rain are to be employed in all buildings including:
  - Arcades-- attached to buildings,
  - Canopies,
  - Sun shading devices appropriate to orientation and fenestration (such as the ‘sails’ on EBU2), and
  - Recessed building entries and windows.
Sustainability

Strategies include:

- Utilize covered but not enclosed exterior circulation takes advantage of UCR’s favorable climate, reducing the need for conditioned space, providing shade and mitigating solar gain on the building;
- Integrate building and landscape design by using adjacent plantings such as deciduous trees to provide afternoon shade in the summer, helping with building cooling;
- Incorporate green roofs;
- Incorporate operable windows in all residence halls;
- Incorporate operable windows where appropriate in academic buildings and offices;
- Maximize day-lighting opportunities;
- Incorporate photovoltaic systems in building facades or rooftops; and
- Window placement and orientation should take advantage of climatic features of the site including solar orientation and natural breezes.
BUILDING MATERIALS AND COLOR PALETTE

The architectural character of UCR is in part defined by the clear and direct use of materials. The formative years (1950s and 1960s) in the development of the campus saw the direct expression of structure and “honest” use of materials, which lent a simple, quiet and modest dignity to the campus buildings. The buildings were also deferential to the campus open spaces.

The selection of building materials should accentuate the overall context of the UCR campus as well as the immediate surroundings of the building. Buildings, materials and colors should be harmonious with the existing buildings on campus to achieve an overall sense of unity. The UCR campus is characterized by this continuity, due in large part to the use of a consistent brick blend as a means of tying the buildings together.

All UCR buildings are expected to incorporate the ‘UCR Blend’ brick to continue this tradition. Other building materials must be compatible with this range of brick tones as well as glazing types and other expressions of metal and concrete found on the campus.

The careful selection of building materials establishes a sense of permanence and quality on the campus. Materials that are durable, lasting and detailed appropriately for climatic conditions and patterns of maintenance are preferable.

- Building elements related to building materials and color palette should reflect the following elements:
  - Low reflectance glass, emphasizing clarity; reflective or mirror glass is not permitted; and
  - A color palette that is harmonious with existing campus buildings using the UCR brick blend as an organizing element.

Selection of materials is based on the following considerations:

- Long-term durability and ease of maintenance;
- Textural variety;
- Type of structure, facility occupancy and use; and
- Minimizing vandalism.

Sustainability

The University of California requires that UCR use its purchasing power to:

- Promote the availability of recycled and rapidly renewable content for building materials, subsystems, components, equipment, and supplies;
- Select materials that are produced as close to southern California as possible;
- Consider materials produced with minimal pollution or adverse impacts to sensitive ecosystems; and
- Maximize energy conservation by considering life cycle heating and cooling costs for a range of potential building materials.
BUILDING MASSING AND ARTICULATION

Attention to building massing and articulation is important to reinforce the character of the campus. In general, newer buildings on campus are larger than the original buildings, reflecting the need to provide a compact, walkable Academic Core with facilities that meet growing enrollment levels. It is important to be sensitive to existing smaller buildings, and to develop the campus in a way that maintains a comfortable pedestrian scale on the primary outdoor spaces. One of the ways to achieve this is to carefully compose the massing of large buildings into smaller building volumes and use thoughtful articulation of materials to reduce the overall scale.

Building height and coverage should reflect the following:

- New structures are limited in height to four stories around the Carillon Mall and other major open spaces to maintain a pedestrian scale;
- Buildings could step back from four stories up to six stories as appropriate to maintain density, if they remain subordinate to the Carillon Tower or other future campus icons;
- New structures will primarily have flat roofs, incorporating terraces where feasible;
- Rooftop mechanical equipment should be screened from view at ground level and from other buildings where feasible; and
- Temporary trailer or modular type facilities are discouraged within the Academic Cores.

The following factors are additional design considerations:

- Divide large buildings into smaller components to reduce the overall scale;
- Incorporate smaller-scale elements on lower levels to provide a human scale;
- Minimize blank walls at the ground floor and encourage active uses and ample fenestration;
- Reduce building mass to mediate scale and provide transitions to open spaces and adjacent buildings;
- Express the structural frame clearly to reduce the apparent scale of the building; and
- Express circulation elements as separate components.

Sustainability

- The orientation of the building faces should consider solar angles and wind direction to reduce energy consumption.
RELATIONSHIP OF INTERIOR TO EXTERIOR AT GROUND FLOOR

A successful campus relies on a positive relationship of its buildings to adjacent exterior spaces. Buildings should not simply define or enclose an open space but should also actively engage them. It is important to have ground floor levels of buildings that maintain human scale and encourage activity in and around the buildings. It is at the ground floor where people interact most directly with a building, so the scale should be more attuned to human dimensions and perception.

Transparent and open ground floors will be provided to increase the interaction between inside and outside. The ground floors of new buildings should be designed according to the following:

• Ground floor spaces are to house active uses, for instance, classrooms and class laboratories;
• Façades at the ground floor should be open to view from adjacent spaces;
• Ground floor windows with clear glass, for 50% of the length and 25% of the area of the ground floor wall area, will be incorporated;
• Blank walls should be avoided;
• Permeable ground floor areas, such as arcades or open connections to internal courtyards, will be integrated;
• Entries providing a direct visual connection to internal courtyards are encouraged;
• Multiple entries will be incorporated to activate ground floor façades when possible;
• A hierarchy of building entries (primary, secondary, service etc.) should be reflected in the design of the façade; and
• The design of the ground floors of buildings will be closely coordinated with the design of the adjacent open spaces, plazas or courtyards.

Sustainability

To achieve a more sustainable design:

• Careful consideration of the indoor-outdoor transition can minimize indoor energy loss.
• Low-emitting glazing will also improve building efficiency; and
• Shaded arcades at entries offer protection from the weather and shade interior spaces.
BUILDING ORIENTATION AND ENTRANCES

The careful siting and orientation of buildings helps define the character of a campus. One of the key strengths of the UCR campus is the integral nature of the buildings and open spaces. The buildings are oriented in ways to help both define and differentiate the adjacent open spaces.

Building entrances help orient students and visitors to the campus. It is important that entrances be clearly marked and visible from a distance. The orientation of a building and its relationship to adjacent outdoor spaces also establishes a hierarchy that is critical as part of the system of wayfinding on the campus. In combination with the design of the entries, this hierarchy helps clarify primary and secondary points of entry.

Currently on the UCR campus, some entries to buildings are not on axis with or visible from adjacent outdoor space, but instead are marked by an arcade. These arcades create informal gathering spaces, identify the entries indirectly, and provide sheltered outdoor circulation. This strategy of marking entries reinforces a quality of informality on the campus.

All building entries should be designed to feel safe and secure. When combined with arcades or other covered exterior spaces, it is especially important to ensure the entry is well lit and that signage provides building identification on all doors including service areas.

- Primary entrances (typically adjacent to streets and quadrangles) will be carefully located; pedestrian circulation around and potentially through the building should also be considered;
- The relationship of the building to the campus open space network and useable open space is critical; facades of buildings fronting on major open spaces require careful design to respect their prominent locations;
- Buildings help frame significant view axes;
- Building orientation should consider future development on or adjacent to the site, including potential linkages to such development;
- All new building entries should:
  - Be clearly defined,
  - Be well lit during evening hours, and
  - Be articulated to differentiate primary and secondary entrances;
- Provide building name on all doors and at loading dock/service areas; and
- Typical ways to designate entries include:
  - Incorporation of a canopy or other feature to mark the entry,
  - Articulation of entries as a vertical element,
  - Orientation of building entries toward major axis or primary open space, and
  - Horizontal articulation of entries with arcade elements.

Sustainability

The orientation of the building’s façade should consider solar angles and wind direction to reduce energy consumption.
SITE ELEMENTS

There is an important aspect of sustainability in site planning for UC Riverside’s campus. Sustainability measures include the use of appropriate materials, stormwater management, and increased density of development, minimizing vehicle use and long-term maintenance. Water efficiency in irrigation is another key issue in UCR’s climate. These aspects will be considered for incorporation in the design of both site elements and campus facilities in general.

Specifically on the UCR campus, site elements embody the underlying campus design framework and goals and policies for specific physical development. The following section provides detailed descriptions and guidelines for the elements listed below:

- Planting
- Paving
- Lighting
- Furnishings & Campus Art

PLANTING

Naturalistic Planting

UCR features a number of transitional spaces between natural areas and managed campus malls and courtyards. Landscapes that use native or climate adapted plants are increasingly employed on these transitional edges to help attain sustainability goals and blend the campus with the surrounding natural landscape of Open Space Reserves while helping to prevent wildfires from spreading to built areas of campus.

- A variety of planting treatments, from semi-arid to subtropical, are appropriate, and can include succulents, pines, palms, ornamental grasses and riparian plantings (associated with arroyos);
- Plantings should require low water consumption and consist of native, climate-adaptive plants or low water requiring plants arranged in informal patterns; and
- Designers should refer to the Plant Palette in the 2007 UCR Campus Design Guidelines for plant species.

Malls

UCR’s malls, which consist of park-like lawns and large shade trees framing academic buildings, provide pleasant and inviting spaces and a welcome contrast to surrounding busy streets and dry, exposed natural areas. Existing malls, including the Carillon and Library, will be preserved and strengthened, and new malls will incorporate their design principles. Groups of trees and unique landscape beds can help to reinforce and define
UCR’s malls and climate, contributing to the existing recognizable sense of place.

- Encroachment into campus malls by buildings is subject to a regulating plan contained in the 2007 Campus Design Guidelines;
- Traditional open lawns have important iconic value and are to be provided in high use areas only. In other areas, drought tolerant grass mixes that are aesthetically and functionally similar to lawn, but require less water and maintenance, should be considered;
- Shade trees that reinforce a park-like setting and define edges are preferred;
- Groupings of trees should be located and maintained to allow clear visibility for safety and security;
- Irrigated turf areas will be limited to malls and other high-use areas. The intent is to use lawns only where a surface is to be walkable or used for recreation or other high activity uses;
- Other open spaces may be planted with low water requiring plant material; and
- UCR will consider identifying significant ‘heritage’ trees for long-term protection and to foster the idea of the campus as an ‘informal arboretum.’

Building Specific Plantings

COURTYARDS AND GARDENS

Courtyards at UCR provide very special places for both interaction and solitude and when effectively designed can contribute directly to intellectual pursuit and dialogue within the UCR community. New buildings will be sited and designed to enhance and activate outdoor space. The most successful courtyards are those that have a sense of enclosure, provide a variety of seating opportunities, and have a high level of refinement in materials. Courtyards and gardens can be the most ornamental and lushly planted areas on campus with plants especially chosen for their thematic, aesthetic and aromatic qualities, as well as shade to emulate a ‘garden oasis.’

Plant Material

Plant selection should consider the following:
- Choose plants for their color, texture, scent, seasonal change and shade;
- Perennials and flowering trees are to be considered to create focal areas where appropriate; and
- Trees and plants should be selected that will look their best throughout the academic year.

The campus landscape includes ‘structural’ plantings of trees, shrubs and groundcovers adjacent (and sometimes attached) to buildings and walls that provide important form and edges to the campus setting. Structural planting helps to blend buildings into the campus, provides screening of utility and service areas and directs pedestrian movement to building entries. To accomplish these concepts.

- Utilize a simple palette of mass plantings that provides uniformity and consistency throughout the campus; and
- Provide accent plantings at key building entries.
Streets

Tree species are identified in the campus design guidelines and, in addition:

- Streetscapes, formal gateways and drop-offs should be aesthetically and functionally reinforced with street trees and median plantings;
- Plantings are to be wayfinding cues to guide pedestrians sequentially through campus;
- Street trees will be adequately spaced, depending on species, to provide shade and cooling for pedestrians and reduce the overall urban heat island effect;
- Street trees will shade 65-75% of a typical sidewalk’s length;
- South-facing streets and walks require more shade; and
- Trees should have low maintenance requirements and sufficient hardiness to withstand the region’s hot climate and the effects of adjacent traffic.
PAVING

A well-designed hierarchy of walks, plazas and building entrances enriches the campus environment and identity, improves visual quality and reinforces the primacy of the pedestrian. Paving should:

- Meet all current Americans with Disabilities Act (ADA) criteria for slopes, width and finishes, including non-slip surfaces;
- Layout of paved hardscape areas should facilitate regular maintenance and cleaning; and
- Paving materials are to be selected for durability to withstand wear and minimize maintenance.

Sustainability

To achieve a more sustainable environment, the campus will:

- Use permeable paving materials that allow rainwater infiltration where feasible, particularly for secondary paths and roads; and
- Use paving materials with post-consumer recycled content where possible.

Modular Pavements

The use of high-quality modular “unit” pavement, such as precast concrete, brick or cut stone will be considered as accents for building entries, courtyards and plazas as well as special walks, in keeping with the existing tradition of brick banding. These are visible areas that have high levels of pedestrian interaction and help establish a rich campus texture and character. They also allow for easy access to underground utilities. The campus will use the following guidelines for paving:

- Non-slip surfaces;
- Colors complementary to the color palette of UCR’s buildings;
- Concrete or asphalt stamped to look like brick is not acceptable; and
- Paving patterns for larger areas should be in interlocking forms to facilitate long-term stability.

Cast-in-Place Concrete Pavement

Concrete paving will continue to be used throughout UCR for most pedestrian surfaces. It is economical, durable and reflects the modernist vocabulary of materials on campus. On major walks, existing concrete panels are often divided by a regular pattern of brick banding and edging, a unique detail that will be continued where appropriate. The following guidelines direct the campus with respect to concrete paving:

- Surface glare will be reduced by using ‘UCR Tan’ integral color admixture; and
- Pervious cast-in-place concrete will be encouraged to enable rainwater infiltration where feasible.
Asphalt Paving

Asphalt paving is generally used on campus for vehicular surfaces due to its durability and flexibility. Asphalt paving indicates a public vehicular way and should rarely be used for pedestrian paving, especially in heavily-used areas. In addition, on campus:

- Cast-in-place concrete curbs will be used along asphalt vehicular roads; and
- Pedestrian paths should only be asphalt on the periphery of campus. Stabilized decomposed granite may still be a better option in these locations.

Soft Surface Paths

Within natural areas and gardens, soft-surface paths provide the textural quality that reinforces a connection with the natural environment. To guide installation of soft surface paths on campus:

- Paths should be narrow and configured to allow sufficient pedestrian circulation within the area; and
- Decomposed granite, a good permeable and ADA-accessible option, should be used to pave trails and small garden paths in natural areas to complement the setting.
SITE LIGHTING
Effective lighting adds to public safety and to the night-time vitality of campus. Lighting should focus on providing an even, consistent coverage, softening contrast ratios at edges, and thus improving visibility by avoiding excess illumination and brightness. Campus lighting should also be well-organized in simple patterns which reinforce the open space, courtyards and plazas and circulation on campus. Future campus lighting plans will:

- Provide sufficient lighting to establish safe conditions for access and circulation;
- Use lighting to enhance the aesthetic qualities of the campus and highlight special features and trees at night;
- Avoid in-ground up-lighting to minimize maintenance and vandalism; and
- Coordinate lighting locations and pole heights with tree locations and landscape areas and constructed elements.

Sustainability
Guidelines for sustainable lighting plans require that:

- Light illuminating from fixtures should be cast downward with full cut-off shades;
- Lighting will be specified for maximum durability, energy-efficiency and lifespan; and
- Minimum lighting levels will be used as required by code and campus standards; focus on contrast ratios versus standard foot-candle light levels.

Free-Standing Lighting
Consistent pedestrian lighting is an important contributor to UCR’s identity and can help suggest a hierarchy of travel routes. Guidelines are as follows:

- Walks and paths to be uniformly illuminated;
- Parking areas, pedestrian plazas, campus building entries, loading areas and courtyards should be illuminated;
- Pole spacing to be determined by pole height, luminaire type and desired foot candles at ground level; and
- Pole placement should reinforce the linearity of campus open space and circulation.

Building Lighting
Building lighting will be designed as follows:

- Building-specific light fixtures can be integral components of buildings, highlighting significant features and identifying entries;
- Lights will be compatible with buildings and will articulate and accent their landscape context;
- Lighting should be indirectly focused; and
- Light sources should not be visible.
SITE FURNISHINGS

Site furnishings are important elements of UCR’s exterior public realm. They help define the campus character and improve the livability and comfort of outdoor spaces by providing places to gather, study, and socialize thus improving collegial communication and interaction. Furnishings should be selected and located to maintain the cleanliness and order of campus, and enhance circulation.

Furnishings on major campus malls should match the existing palette of simple concrete pieces. Non-standard furnishings should be replaced. In all other campus spaces, different pieces are permitted as long as they recognize the distinct character of adjacent buildings. This consistency and contextual consideration both enhances the campus’s image and can help reduce maintenance costs.

Furnishings should be:
- Efficient to repair and maintain;
- Vandal-resistant;
- Selected in coordination with campus lighting, signage and buildings;
- Located to avoid conflicts with site circulation; and
- Located to take advantage of shade.

Sustainability

Selection of furnishings should consider:
- Local climate (especially intense sunlight and heat);
- Recycled content;
- Durability and lifespan;
- Southern California production when possible; and
- Minimize the use of toxic materials (paints, finishes, glues).

Benches/Seating

In highly-public areas, seating can serve to invite collegial group activities, dining and informal study or introspection. A variety of comfortable seating opportunities along walks, paths, courtyards and plazas is an important contributor to the pedestrian circulation system and the comfort of a campus. A family of benches should encompass a range of seating requirements. Campus designers should:

- Provide seating throughout campus, particularly in the following areas:
  - Plazas and courtyards, especially those offering shade,
  - Building entries,
  - Along major and minor pedestrian malls or walks,
  - Oriented toward interesting and varied views, and
  - Near transit stops, with a clear view of approaching buses;
- Incorporate fixed seating at a comfortable height into planters, low dividing walls and the façades
The campus should:

- Minimize over-use of bollards, which can impede pedestrian flow;
- Remove bollards are appropriate where service and emergency vehicles require temporary access to pedestrian/bicycle only routes; and
- Bollard design should be simple in design, architecturally and aesthetically appropriate, and should complement other site furnishings.

Trash & Recycling Receptacles

Trash and recycling containers are essential for a clean and sustainable campus environment. Careful selection and design can minimize the aesthetic effects from the multiple units that are required. The campus should:

- Provide receptacles throughout campus, particularly near seating, crosswalks, transit stops, at residence halls and at all dining facilities;
- Group benches and receptacles as a composition of elements for practicality of usage and to reduce visual clutter; and
- Recycling receptacles will be clearly marked for their purpose and be part of a family of furnishings.

Bollards

TYPICAL BOLLARD

Bollards are generally used to create a low barrier between vehicular and pedestrian traffic. The need for vehicles to enter the campus via pedestrian routes should first be minimized through careful site design.

Trash & Recycling Receptacles

Trash and recycling containers are essential for a clean and sustainable campus environment. Careful selection and design can minimize the aesthetic effects from the multiple units that are required. The campus should:

- Provide receptacles throughout campus, particularly near seating, crosswalks, transit stops, at residence halls and at all dining facilities;
- Group benches and receptacles as a composition of elements for practicality of usage and to reduce visual clutter; and
- Recycling receptacles will be clearly marked for their purpose and be part of a family of furnishings.

Campus Art

Campus art can express the intellectual inquiry, exploration and creativity found within UCR. The Advisory Committee on Campus Art organizes the acquisition, commissioning, or acceptance of art for locations throughout the campus. The committee screens potential donations and recommends acquisition of art to the Chancellor and identifies placement, funding and ongoing maintenance for the pieces. The campus will:

- Select art that relates to associated academic programs to enhance the learning experience;
- Place each art piece to relate to its immediate surroundings and context within the campus; and
- Carefully consider the placement of art at focal points and pedestrian gathering areas.
VI. Design Review and Approval Process
A. Design Objectives, Guidelines & Standards

The design objectives, guidelines and standards are articulated in the 2007 Campus Design Guidelines. It begins with a summary of UCR’s LRDP goals followed by a description of the existing campus design framework. The framework serves as the underpinnings for future development emphasizing the elements of the campus landscape and infrastructure as well as architectural themes emblematic of the University’s character.

Following the objectives, guidelines and standards is a description of the current UC’s system-wide mandates for sustainability, which includes a commitment to Leadership in Energy and Environmental Design (LEED) standards and other key benchmarks for energy and resource efficiency and pollution reduction. In addition, each individual guideline in the document includes, where applicable, information on how campus development projects can meet University of California system-wide sustainability mandates through the implementation of the guideline.

The main body of the document, the Site and Architectural Guidelines, is not intended to be prescriptive but to establish the basic premises and clear intent within which creative design decisions should be made. The Guidelines advises the campus to hire professionals who are committed to implementing the Guidelines and that design professionals will be expected to respect the form and values of the campus and work collaboratively with the University under the guidance of the document, the Campus Architect and the campus Design Review Board. The document points out that there must be an inherent level of respect for professionals who are trusted to follow the basic intent of the guidelines while creatively responding to new building programs, individual sites, and ensuring design opportunities.

The campus Design Guidelines are intended for use by every architect, landscape architect, civil engineer and planner hired by UCR for consulting services as well as the campus in general. The document represents a directive to those consultants to incorporate the campus design goals and objectives articulated by the guidelines into all design work for the campus. The guidelines are purposefully not presented as regulatory restrictions or prescribed standards. They provide an informal framework within which designers who willingly commit to contribute to the campus legacy of quality and continuity can add positively to the UCR built environment.

To assist design professionals in developing suitable spaces and facilities for the campus, a series of guidelines are provided based on the following sections and sub-sections:

- **Campus Framework**
  - Regional Context
  - The Essence of the UCR Campus
- **Site Guidelines**
  - Planting
  - Paving
  - Site Lighting
  - Furnishings
  - Grading and Rainwater Management
  - Circulation Systems
  - Service Areas and Drives
  - Surface Parking Lots
  - Campus Wide Signage
- **Architectural Guidelines**
  - Outdoor Circulation
  - Building Orientation and Entrances
  - Relationship of Interior to Exterior at Ground Floor
  - Building Massing and Articulation
  - Building Materials and Color Palette
  - Building Response to Climate
- **Appendices**
  - Campus Plant Material Palette
  - Campus Street Tree Plan
  - Circulation Standards
B. Capital Planning and Design Approval Process

The UCR Campus Architect, Capital and Physical Planning, the Office of Design and Construction, and the Design Review Board utilize the Campus Design Guidelines as a template within which all proposed architectural designs and site plans are measured. The document is intended to be a dynamic work-in-progress which will evolve as UCR grows and will be adapted to future programmatic and physical changes.

Physical Planning Working Group – On a monthly basis, this committee meets to identify and discuss potential minor capital projects (cost up to $750,000) on campus being considered by units or colleges. The charge is to communicate and coordinate anticipated physical changes to the campus which are not included in the Capital Improvement Program. This is a campus wide group of staff from units responsible for physical changes (Capital & Physical Planning, Office of Design & Construction, Physical Plant, Computing & Communications, etc.) to identify feasibility of proposals through a Feasibility Study/Approval to Proceed process, to ensure that anticipated projects do not preclude or interfere with other projects and, if possible, to be able to identify opportunities for synergistic benefits. After consideration by the group for completeness, capital and physical planning staff prepare the minor capital approval form, environmental documentation, funding stream and obtain signatures of the Dean or Vice Chancellor and the Vice Chancellor of Finance and Business Operations.

Advisory Committee on Campus Art - The Advisory Committee on Campus Art (ACCA) is charged with initiating and/or reviewing potential donations of Campus Art with recommendations to the campus Design Review Board (DRB) and the Capital Projects Advisory Committee (CPAC)/Chancellor on the acceptance. The ACCA reviews appearance, funding, and location of all interior or exterior art pieces or art to be acquired by the campus. The Chancellor makes the final decision to accept, fund or display campus art.

Planning Advisory Committees - Input to each physical plan, whether campus wide or involving a sub-section (“precinct”) of the campus, is provided by a committee of faculty, students, administrative leaders, and senior capital and physical planning and design staff. These physical plans identify sites for new academic, administrative, housing, recreation, parking, and support facilities; define vehicular and pedestrian circulation improvements; develop guidelines that define neighborhood site characteristics and building attributes; and provide phasing plans to enable orderly growth. This UCR Physical Design Framework includes a detailed discussion of recent master planning studies in the previous sections. Typical membership for a planning advisory committee includes representation as follows:

- Faculty Senate – Physical Resources Committee;
- Associated Students of UCR;
- Graduate Student Association; and
- Other campus stakeholders (faculty, students, staff) from the associated program area.

The project/study is reviewed by the Design Review Board and campus leadership at the Capital Program Advisory Committee (CPAC). Each project/study is reviewed a minimum of two times during this process: Once at the alternative stage, and again at the preferred plan stage for approval by the Chancellor through CPAC. These studies have traditionally been campus documents that inform the design of future projects within the fabric of the campus environment.

Project Advisory Committees - For each major building, landscaping, or infrastructure project, programmatic and design input is provided by a project-specific committee of faculty, students, administrative leaders, and senior capital planning and design and construction staff. Other campus stakeholders may be included in the committee as appropriate. These committees work closely with the appointed programming and design professionals so that each project satisfies prioritized program goals, design objectives, and sustainability performance expectations. Additional technical assistance from Environmental, Health & Safety; Physical Plant; Telecommunications; etc. is provided in the context of the Project Advisory Committee process. Typical membership for a Project Advisory Committee includes representation from:

- Faculty Senate – Physical Resources Committee;
- Associated Students of UCR;
- Graduate Student Association; and
- Other campus stakeholders (faculty, students, staff) from the associated program area.
The Project Advisory Committee is usually composed of future facility stakeholders and they are responsible for input into the Detailed Project Program (DPP), the first phase of a capital project. The DPP and its accompanying PPG (Project Program Guide) is approved by the Chancellor, the President or the Regents depending on cost, to move forward into design. The committee members also serve through schematic design and design development of the project.

**Design Review Board** - In conformance with Regental policy on independent design review, this group advises the Chancellor on the designs of new buildings, major landscape projects, and master planning efforts to ensure consistency with applicable planning guidelines. All projects are reviewed a minimum of two times by the board. DRB membership includes:

- Two architects and one landscape architect from the private sector;
- Faculty representing at least three of UCR’s primary academic units and an at-large representative of the Academic Senate;
- Associate Vice Chancellor of the Office of Design & Construction/Campus Architect; and
- Associate Vice Chancellor of Capital and Physical Planning/Real Estate Services.

**Capital Program Advisory Committee (CPAC)** - The primary purpose of CPAC is to ensure that relevant issues related to the planning and design of campus facilities are addressed; that adequate consultation with constituent groups and/or stakeholders takes place; and that appropriate standards for the use of land, facilities, and design are developed and applied. Staffing and administrative support for the CPAC is provided by the Associate Vice Chancellor, Capital and Physical Planning/Real Estate Services, Associate Vice Chancellor of the Office of Design and Construction/Campus Architect; and the Associate Vice Chancellor for Facilities. The CPAC is an advisory committee chaired by the Chancellor with the following primary functions and responsibilities:

- LRDP - review existing land use and precinct plans and proposed modifications;
- Sustainability Initiatives - review of proposals to foster best practices at UCR for all levels of planning and design, as well as major campus operations;
- Capital Budget and Deferred Maintenance/Capital Renewal plans - review annual capital budget and deferred maintenance/capital renewal budget. This includes recommending priorities and strategies for integrating capital improvement with renovation and deferred maintenance requirements;
- Major Capital Improvement Projects - review proposals for new buildings and major renovation projects, including programmatic and financial feasibility studies and schematic/final design;
- Major Reallocation of Space - review proposals for significant reallocation of space among schools, colleges, and other major program units;
- External Initiatives and Contracts - review major lease agreements and other potential contracts or initiatives with parties external to the UC system; and
- Design and Campus Standards - review proposed standards for land use, design criteria for buildings (including massing, siting, circulation, parking, site development, and significant landscaping projects), as well as review and comment on schematic/final designs.

The CPAC standing members by office are:

- Chancellor (Chair);
- Executive Vice Chancellor and Provost;
- Vice Chancellor, Finance and Business Operations;
- Vice Chancellor, Research;
- Vice Chancellor, Student Affairs;
- Vice Chancellor University Advancement;
- A Dean; and
- Chair, Academic Senate.

**City & University Collaboration**

As UCR continues to influence the region through its role as an institution of higher education, a center of research and public service, and as a
regional economic engine, the University continues to foster an open avenue of discussion with the region and especially with the campus host city of Riverside. On several levels, the campus shares future development plans and building projects with the city staff, city council, and the mayor through the following committees:

**City and University Coordinating Committee** - UCR communicates to the city through regular monthly meetings at the staff level with the city Planning, Public Works, Economic Development, and Police Departments to discuss projects of mutual concern and potential issues affecting the city/university relationships. These meetings are generally attended by the city councilman for the UCR area and include UCR staff from Capital Planning, Design and Construction; Transportation and Parking Services; Community Relations; and others as appropriate.

**City/University Task Force** - On the executive level, the campus leadership meets with the city leadership on a quarterly basis. Campus and city leaders meet in an informal setting to discuss city-campus projects, potential partnerships and general policy issues. Staff to the Task Force is represented by the campus and the city and the essential attendees are the Chancellor and the Mayor.

The usual attendees in addition to the Chancellor and the Mayor are the following:

**UCR**
- Executive Vice Chancellor/Provost
- Vice Chancellor Finance and Business Operations
- Vice Chancellor Student Affairs
- Campus Counsel
- Campus Architect
- UC Police Chief
- Assistant Vice Chancellor for Strategic Communications
- Executive Director of Advocacy
- Director of Transportation and Parking Services
- Director of Housing Services
- Associated Students of UCR President
- Graduate Students Association President
- Staff – Director of Local Government and Community Relations

**City of Riverside**
- Councilperson Ward 1
- Councilperson Ward 2
- Assistant City Manager
- City Attorney
- Community Development Director
- Planning Director
- Police Commander East Area
- Manager of City Arts and Culture
- Staff - Economic Development Director
- Staff – Mayor's Chief of Staff
VII. Appendix – Supporting Planning Documents
VI. Appendix – Supporting Planning Documents

2005 Long Range Development Plan
2004 East Campus Entrance Study
2004 Multi-Modal Transportation Strategy
2006 East Southeast Campus Area Study
2007 Campus Design Guidelines
2008 Campus Sign Program
2008 Update to the Strategic Plan for Housing
2008 Campus Aggregate Master Planning Study
2008 West Campus Infrastructure Development Study
2009 Barn Area Master Planning Study