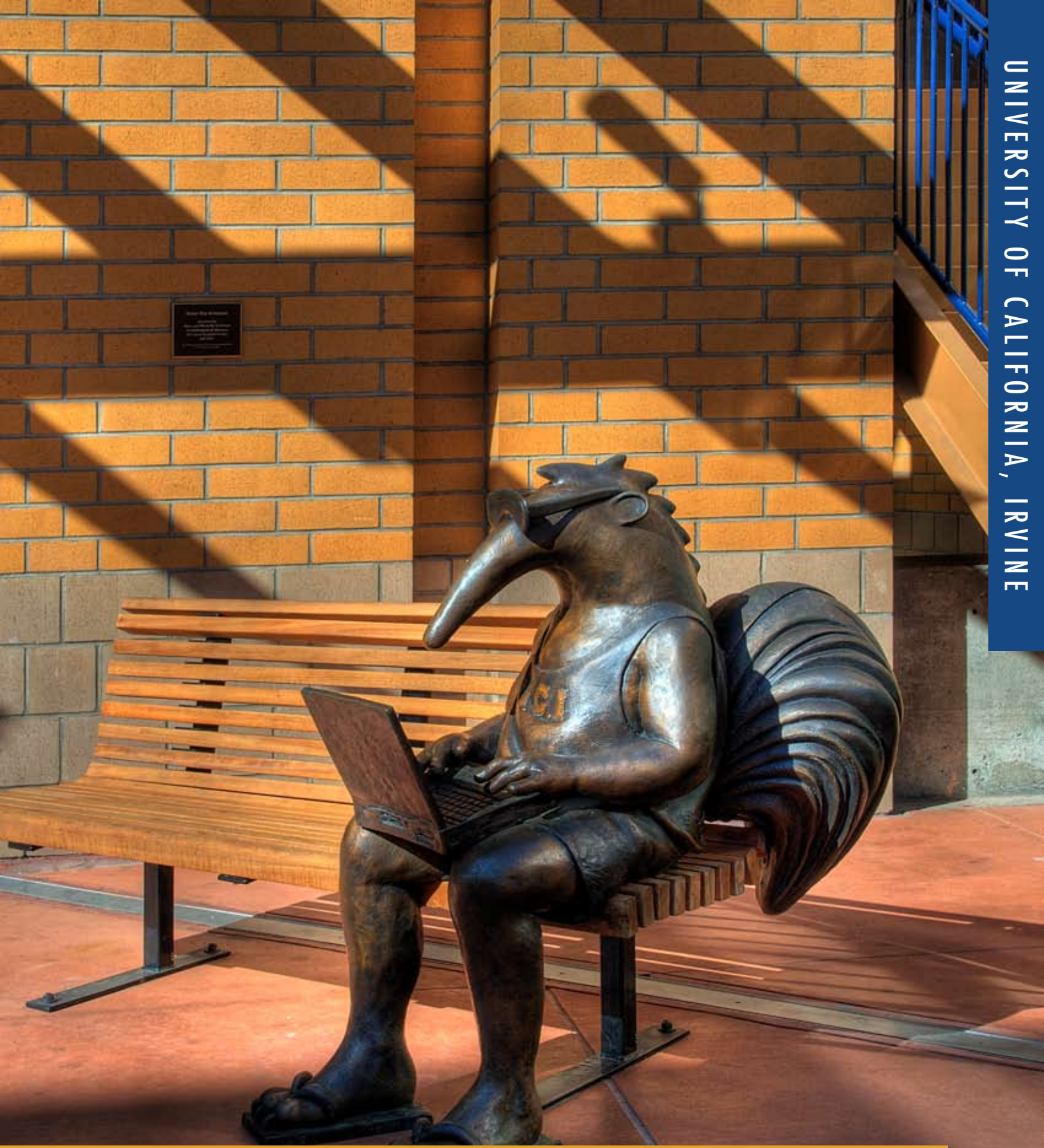

UNIVERSITY OF CALIFORNIA, IRVINE

PHYSICAL DESIGN FRAMEWORK

A Vision for the Physical Environment at the University of California, Irvine

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January 2010

UCIrvine

ACKNOWLEDGEMENTS

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UCI
FOUNDING CHANCELLOR
DANIEL G. ALDRICH
1918 - 1990
"MAY THESE ROCKS BE SO REGARDED THAT THE RIGHT MAN CAME HERE AT THE RIGHT TIME, AND FROM THIS BARE GROUND BUILT A PLACE AS LASTING."
WILLIAM PEREIRA

INTRODUCTION

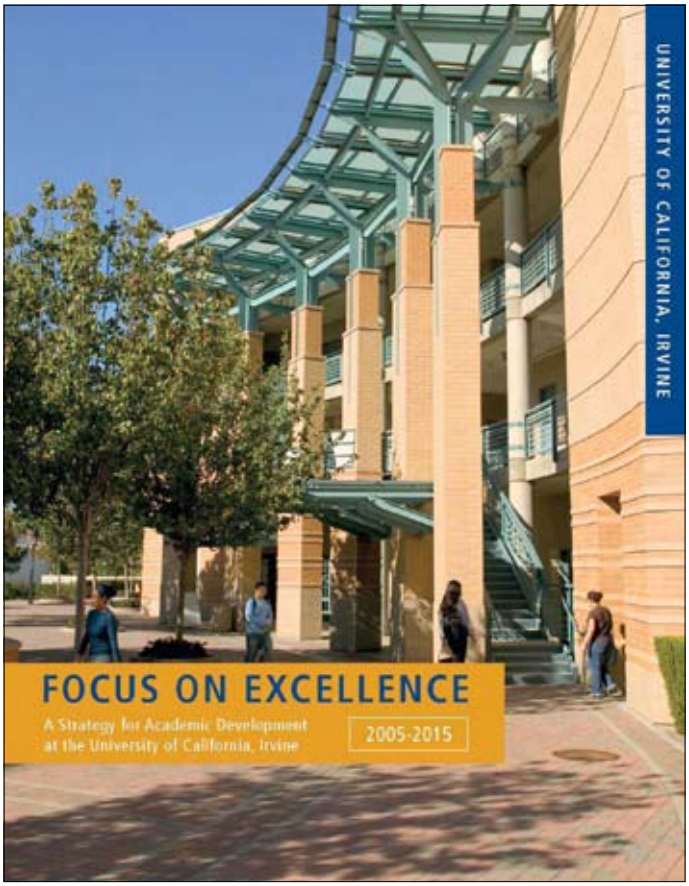
Development at the University of California, Irvine, historically has been guided by a strong physical plan. Beginning with UCI's inaugural Long Range Development Plan (LRDP) in 1963, the campus established fundamental planning concepts for developing a comprehensive academic community of teaching and research facilities, residential neighborhoods, community support space, and private sector uses. Subsequent versions of the LRDP—including the most recent update in 2007—refined and did not dramatically depart from the original plan.

In 1992, UCI prepared a campus design framework that described its vision for implementing the planning concepts set forth in the LRDP. Specific guidelines provided policy direction for site design and planning, architecture, landscape, circulation, exterior lighting and furnishings, and signage. In addition, based on focused build-out studies of UCI's academic core, the design framework provided guidance for the planning and location of utility infrastructure. Since 1992, the framework has provided a crucial link between individual projects and the overall campus development plan.

The present Physical Design Framework represents an update to the earlier set of guidelines. It describes the planning principles and physical design standards that are applied to new campus development, facility renovation, and ongoing management and operation of campus facilities and grounds to ensure consistency with UCI's established form and image. The Framework will be utilized at all stages of land planning, project development, and facilities management—including project programming and budgeting, site and land use allocation studies, project design, and eventually construction document preparation.

Pictured left: Memorial to Daniel Aldrich, UCI's founding chancellor, located in the center of Aldrich Park. With William Pereira, Chancellor Dan was instrumental in establishing UCI's form and image.

Pictured above: Plaza linking buildings in the Social Sciences quad.



UCI's strategic academic plan provides a roadmap for continued academic development and guides campus physical planning decisions.

This document is organized into four sections. Part 1 describes the context in which the Physical Design Framework resides, including the physical setting of the UCI campus, planning history, projected growth, and key design challenges and opportunities. Part 2 summarizes the fundamental values and principles that guide development of the campus. Specific planning, architectural, and landscape guidelines that reflect these core values are provided in Part 3. Finally, Part 4 describes the physical planning process that ensures that the Framework is embodied in all new projects developed at UCI.

This Framework encompasses physical development on the main campus. Guidelines for planning and design at the UCI Medical Center in Orange are covered in a related document.

RELATIONSHIP TO OTHER DOCUMENTS

This updated Physical Design Framework summarizes the contents of a portfolio of planning documents that guides physical development at UCI and promotes proper stewardship of the campus environment. All of these douments share a common goal of insuring that campus planning and design principles are manifested in the capital projects implemented at UCI and in ongoing management and operations. The illustration at right describes the collection of planning documents employed at UCI.

- *2006 Academic Strategic Plan:* In 2004, the Irvine campus commenced a strategic planning initiative to affirm specific goals for continued academic development, building on the original vision and aspirations that made UCI what it is today. This process led to the publication of a long-term strategic plan in 2006 that describes objectives for the campus through the 2015 horizon year. Physical planning decisions at UCI are guided by and support the academic objectives in the strategic plan. While these objectives remain long-term goals for the campus, the strategic plan presently is being updated to reflect recent budget challenges, particularly in the area of state-supported growth.
- *2007 Long Range Development Plan:* The 2007 LRDP is a comprehensive policy and land use plan that guides the physical development of the campus through 2025-26. The plan, designed to support key academic and student life goals, identifies development objectives, delineates campus land uses, and estimates the new building space needed to support projected program

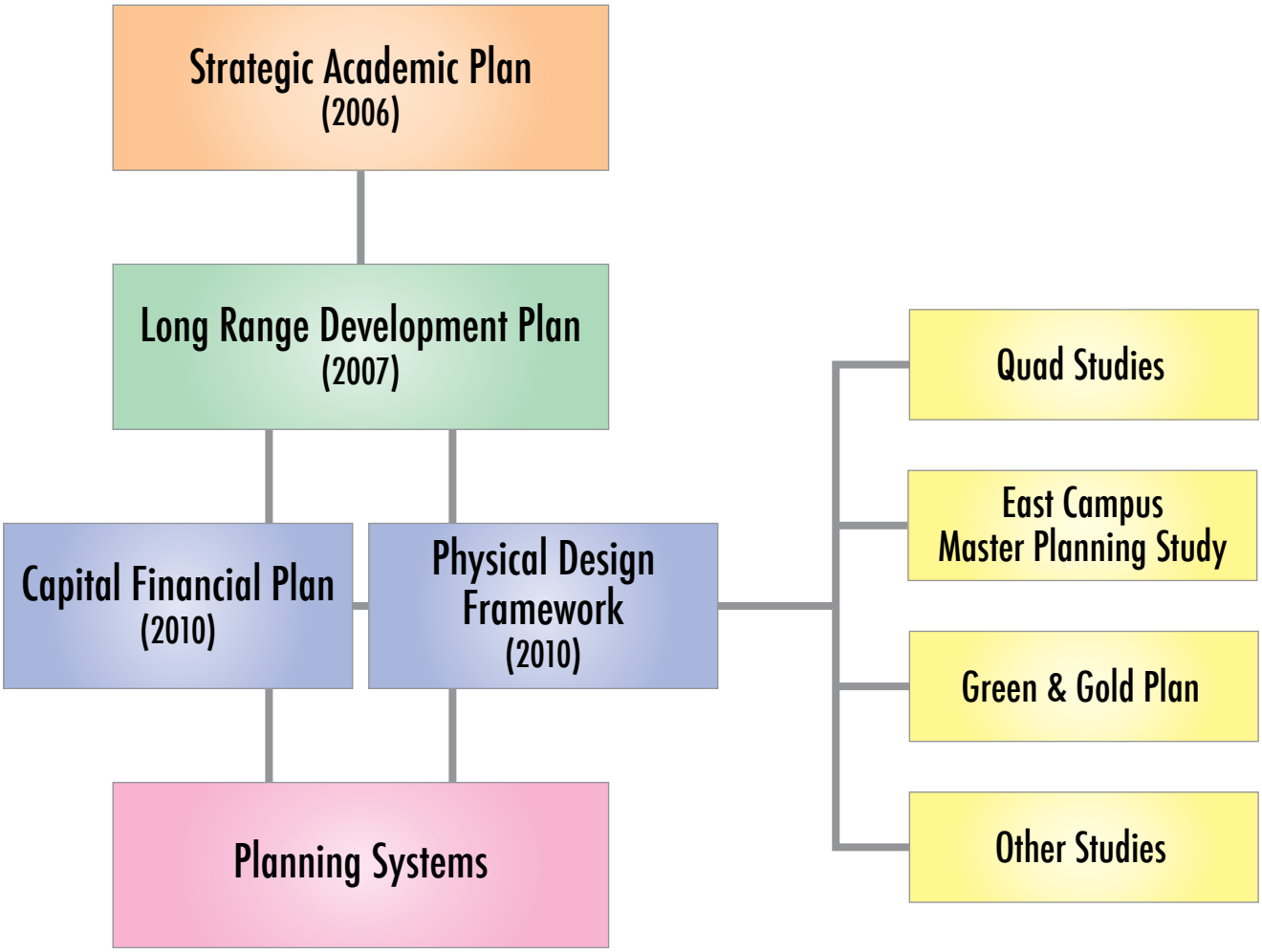
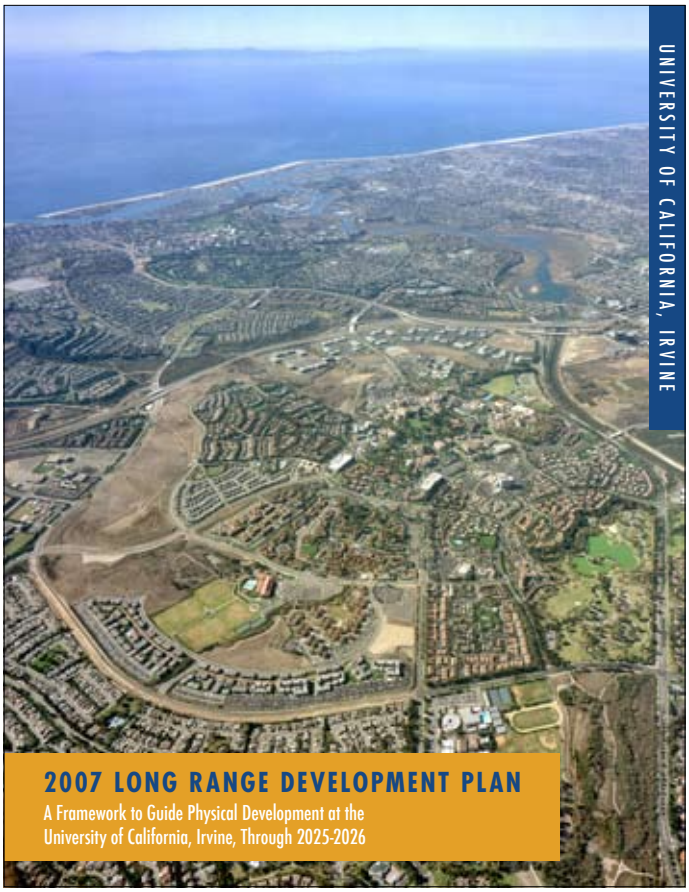


Figure 1. The portfolio of planning documents that guides physical development at UCI.



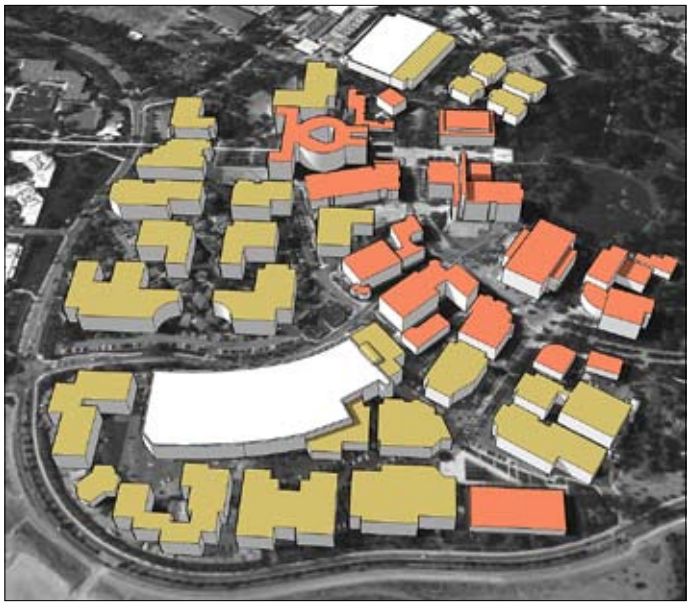
UCI's current LRDP, approved by The Regents in November 2007, provides a foundation for the Physical Design Framework.

expansion through the planning horizon year. The 2007 LRDP is accompanied by an Environmental Impact Report (EIR), prepared in accordance with the California Environmental Quality Act (CEQA) and University of California guidelines for implementation of CEQA. The EIR considers possible environmental effects of the plan and prescribes mitigation measures for reducing environmental impacts that could result from UCI's physical growth.

- *Quad Studies:* Planning studies for the individual academic sectors or "quads" that make up the Academic Core provide more detailed program, site, and design information to advance the development of individual capital improvement projects and to support ongoing operations. Guidelines for each of the seven academic sectors—Gateway Quad, Social Sciences Quad, Engineering/Information and Computer Sciences Quad, Physical Sciences Quad, Biological Sciences Quad, Humanities/Arts Quad, and Health Sciences Quad—are aimed at achieving an individual identity for the respective quads while also producing a cohesive campus image. The quad studies are intended to ensure that the Academic Core can accommodate projected space needs at the desired intensity and scale. They also provide essential direction for site planning and design, architecture, landscape, and infrastructure planning within each quad.
- *East Campus Master Planning Study:* This document, prepared in 1997, provides specific recommendations to guide development on UCI's East Campus, a 430-acre sector that accommodates a variety of student housing and related uses. The planning study establishes the physical character of the East Campus and analyzes parameters such as residential size and density, site planning, architecture, circulation linkages, open space, and utility infrastructure. The East Campus is one of the largest master planned student residential communities in the U.S.
- *Green and Gold Plan:* For over 20 years, UCI has emphasized sustainable landscape practices, including the use of native and drought tolerant plant materials consistent with campus landscape planning, implementation, and management goals. These objectives are summarized in the Green and Gold Plan which identifies ways to better manage existing landscape assets and provides direction for future development of campus landscaping that is

environmentally suitable and more sustainable given natural and financial resource constraints.

- *Capital Financial Plan:* This Framework is accompanied by a ten-year Capital Financial Plan that outlines the specific capital needs of the UCI campus and describes the associated financing strategies designed to meet its capital program objectives. The overall purpose of the Capital Financial Plan is to demonstrate that the capital program supports UCI's academic and strategic priorities and that the campus has a reasonable and responsible plan for executing the program.



The Quad Studies identify appropriate locations and intensities of future space, and evaluate conceptual building massing and spatial characteristics. Shown here is a development concept for the Biological Sciences Quad and the Physical Sciences Quad.

CAMPUS CONTEXT

In the late 1950s, when The Regents undertook a search to establish a new campus site in the Southeast Los Angeles-Orange County area, the potential for a planned community to be built around the campus was considered essential. With the selection of a site located on the Irvine Ranch, the original vision for UCI was that of a university and town growing in unison as the central force in the ultimate urbanization of the 93,000-acre Ranch. In the nearly five decades since these ideas were first advanced, development of the campus and its surrounding community has been generally consistent with the founding plan.

This section describes the macro-level parameters affecting the physical development of the UCI campus, including the physical setting of the campus, its planning history, projected growth, and key design challenges and opportunities.

PHYSICAL SETTING

Fifty miles south of Los Angeles, five miles from the Pacific Ocean, and nestled in the coastal foothills, UCI lies amid master planned residential communities and the dynamic international business environment of Orange County and the surrounding region. The UCI campus consists of approximately 1,475 acres in a setting that is increasingly characterized as urban. Located in the southern portion of the City of Irvine, the campus is adjacent to the City of Newport Beach. Surrounding privately-owned land uses include established commercial and residential communities, as well as areas currently undergoing commercial and residential development or redevelopment.

Dedicated open space areas proximate to UCI include the 202-acre San Joaquin Freshwater Marsh Reserve located adjacent to the UCI North Campus, owned by The

UCI at a Glance, 2008-09

Land Area:	1,475 acres
Number of Buildings:	484 total 171 nonresidential 313 residential
Enrollment:	29,157 total 24,337 undergraduates 3,426 graduate 1,394 health sciences
Workforce:	10,319 total 2,685 facuty 2,357 other academics 5,277 staff

UCI is Orange County's largest employer and generates an annual economic benefit to the county of $4.2 billion.

UCI offers 81 undergraduate degree programs, as well as 51 master's, an M.D., and 44 Ph.D. programs.

Table 1-1.

Pictured left: Aerial view of the campus toward Upper Newport Bay and the Pacific Ocean (Photograph by Air Photo Services, Inc.).

Pictured above: View of the academic core from the Ecological Reserve.

The San Joaquin Freshwater Marsh Reserve supports a variety of wetland habitats, including freshwater marshlands, shallow ponds, and channels confined by earthen dikes. The marsh is a critical stopping place for 100 migratory bird species using the Pacific Flyway.

The outer campus is generally characterized by rolling terrain.

Regents and managed jointly by UCI and the University of California Natural Reserve System. (An additional area of the San Joaquin Freshwater Marsh owned and managed by the Irvine Ranch Water District is located northeast of Campus Drive.) The San Joaquin Freshwater Marsh is a remnant of a much larger marsh system that once dominated this portion of Orange County. The Bonita Creek wetlands corridor is located south of the campus. A 2,000-foot reach of San Diego Creek traverses the campus near the creek's inlet to Upper Newport Bay.

Climate

UCI experiences weather conditions characteristic of the Mediterranean climate in coastal areas of Southern California. Mean daily temperature ranges from a winter low of 42.4°F to a midsummer high of 81.8°F. The prevailing winds blow from the southwest off the Pacific Ocean and provide a cooling influence. They are normally mild, blowing throughout the day and dropping at sundown. Much stronger, hot Santa Ana winds from the northeast occur about six times a year, usually bringing dust from the inland mountains and deserts.

Rainfall at UCI follows the general pattern for the Los Angeles Basin, with an average annual expectancy of around thirteen inches. Heaviest rainfall occurs from December through February. There is seldom any significant precipitation from July through September.

UCI can experience ground fogs, particularly in the winter months. Although heavy, these are usually nocturnal and dissipate by mid-morning.

Because it lies near the coast, the UCI campus generally experiences good air quality. The prevailing southwesterly on-shore wind also serves to abate local smog intrusion.

Topography

The dominant land forms of the campus are rolling hills, gently rising ridges, and a few small arroyos. The ridgelines in the southeast area of the campus reach a maximum elevation of about 300 feet, sloping down to the lowest elevations of approximately 30 feet near the San Diego Creek. The mean elevation is approximately 150 feet in the central campus, 200 feet in the outer campus areas, and 50 feet at the North Campus. Higher coastal hills form a background to the south, while to the north are the vast flat lands of the coastal basin and the distant Santa Ana and San Bernardino Mountains.

Geology

Most of the campus lands are typical geologically of foothill formations in the San Joaquin Coastal Hills of Orange County. The formations generally tilt north and west. A cover of three to five feet of expansive topsoil occurs over most of the campus. There are a few major outcroppings of igneous and sedimentary rock.

Early geologic surveys discovered a fault trace of the Newport/Inglewood cluster across the UCI campus. It runs approximately northwest from the intersection of Culver Drive and Bonita Canyon Drive, past the Social Sciences Quad, under the Ring Mall bridges, and toward the Claire Trevor School of the Arts site. Beyond this location, the fault trace has not been mapped but it is presumed to exist. Although the fault trace is not reported to be active or potentially active, UCI has established a minimum 50-foot building setback on both sides of the fault.

A fault underlying coastal Orange County that could generate a 6.8- to 7.3-magnitude earthquake was reported in 1999 by a team of researchers led by a professor in UCI's School of Social Ecology. This "blind thrust" fault (an underground fault) is estimated to run about 24 miles from Huntington Beach to Dana Point beneath coastal mesas and the San Joaquin Hills located south of the UCI campus. It is not yet known when the fault last generated an earthquake, but researchers say it has the potential to produce moderate to large earthquakes at 1,650- to 3,000-year intervals.

Vegetation

UCI's central campus and developed areas of the outer campus have been extensively planted with a mix of exotic and native plant materials. Plantings in the central campus appear as an oasis of green—a virtual arboretum planted with ornamental trees and shrubs from all over the world. Outer campus areas, on the other hand, are characterized by native and drought tolerant landscape palettes. Undeveloped areas in the outer campus are primarily covered with exotic naturalized grasses that historically were used for grazing cattle, with some remnants of native grasses. Coastal sage scrub and related habitat types are located on the steeper terrain in the southern portions of the campus. Arroyos and other drainage areas contain riparian plant species. Ecologically sensitive areas are generally located in the outer campus, including UCI's Ecological Reserve which contains the majority of coastal sage scrub habitat remaining on the campus.

Containing over 11,000 trees and shrubs, Aldrich Park forms the central open space feature of the campus. This 16-acre park contrasts with the densely built Academic Core and provides a venue for passive recreation.

Site of the new Irvine campus, December 26, 1962. View is toward Upper Newport Bay and the City of Newport Beach.

PLANNING HISTORY

An appreciation of UCI's unique planning history is important in understanding its mission, physical development, priorities, and plans for the future. This section highlights key milestones in the establishment of the UCI campus from its beginning as the centerpiece of a new planned community in Orange County in the late 1950s.

Site Selection and Early Master Plan

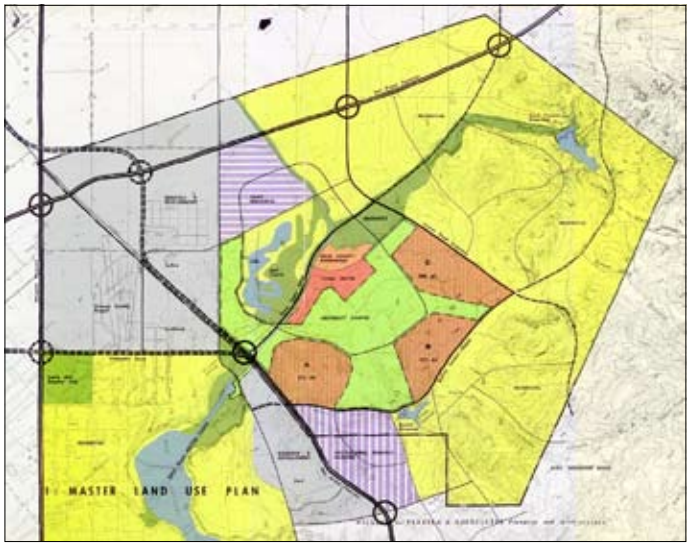
The post-World War II population boom in the United States was the impetus for the creation of UCI. California's population, like the nation's, increased significantly during this period, and a near-future need for additional academic institutions was widely foreseen. In the 1950s, the University of California projected it would require three new campuses to meet the increase in the State's population. After sites in Santa Cruz and San Diego were chosen, The Regents undertook a search to establish a campus site in the Southeast Los Angeles-Orange County area.

In 1958, The Regents considered 23 possible campus sites varying in size, shape, physical setting, availability, accessibility, relationship to the center of population, and potential for planned community development. One of the finalists was a site located on the Irvine Ranch, bordering Newport Beach and situated five miles inland from the Pacific Ocean. The Irvine Ranch site was particularly attractive because it had a single owner (The Irvine Company) and the transfer of land could be accomplished relatively easily. Additionally, since the area was to a large extent unpopulated, it would be optimal for the university-community environment that was envisioned. Owing, as well, to the site's strong "sense of place," The Regents in March 1959 tentatively approved the Irvine Ranch location for the new campus.

When the campus site was selected, the Irvine Ranch was a vast area of undeveloped ranch and agricultural land bisecting Orange County from north to south. The Ranch extended 22 miles through the heart of Orange County and comprised nearly one-fourth of the county's 786 square miles. In December 1959, the University of California and The Irvine Company jointly retained the firm of William L. Pereira & Associates as planning consultants to prepare a refined university community master plan that would serve as a framework for development. The resulting report, *A University Campus and Community Study,* completed

in May 1960 identified the boundaries for a 1,000-acre campus and provided a master land use plan for the new campus and its surrounding community. The report also defined physical planning principles and standards by which the development of the university community would be guided. An important concept of the master land use plan was the "areas of inclusion" immediately surrounding the proposed campus. Totaling 660 acres, the Inclusion Areas were to be reserved primarily for the development of economical housing for University students, faculty, and staff, and for the services necessary to create complete university-oriented neighborhoods in close proximity to the campus. Unique at the time, the Inclusion Areas concept was intended to alleviate the problems created by lack of space and inadequate housing for university purposes at the perimeter of a campus.

The Regents officially approved the campus site in July 1960 and The Irvine Company offered to deed 1,000 acres as a gift to the University. The Regents accepted this offer and a deed was executed and recorded on January 20, 1961. To ensure flexibility in planning, provisions were included to allow the University to make future land trades with The Irvine Company in establishing the final boundaries of the campus.

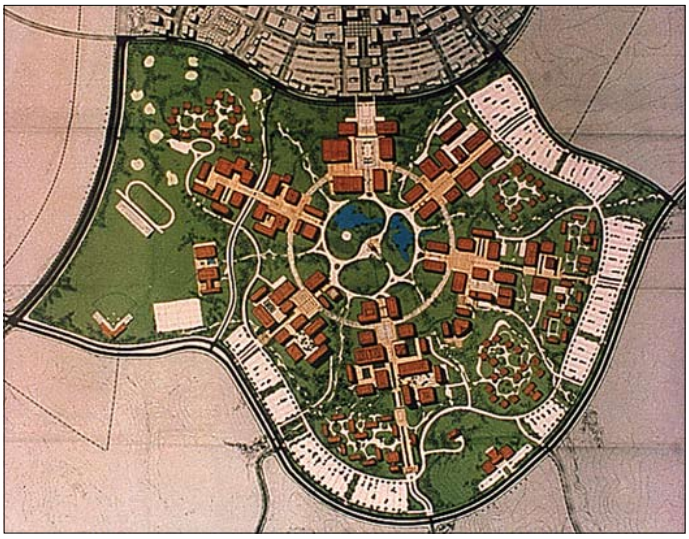


Master land use plan from A University Campus and Community Study, *prepared by William L. Pereira & Associates, May 1960. The campus and surrounding Inclusion Areas are located in the center of this plan.*

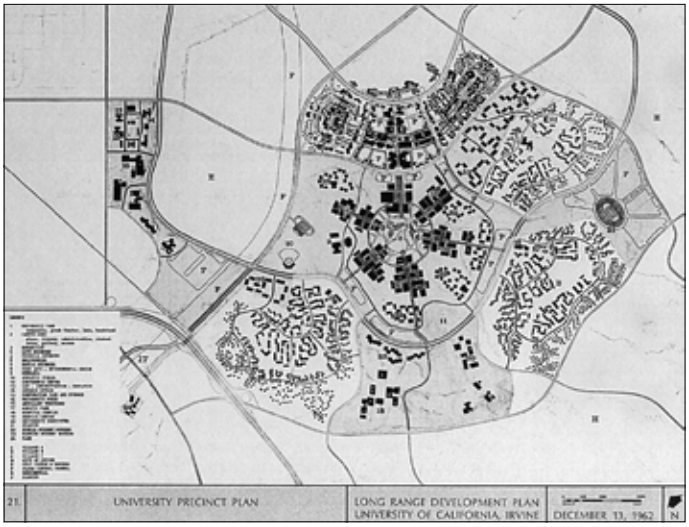
Relationship to the Community

In October 1960, William L. Pereira & Associates was retained as the master planner for all of The Irvine Company's lands and for the next two years Pereira coordinated plans for the development of the Irvine Ranch. This effort led to a general land use study of the southern sector of the ranch which included the UCI campus and portions of what was to become the City of Irvine. The "South Irvine Ranch General Plan" was adopted by the Orange County Board of Supervisors on February 26, 1964.

In the earliest stages of selecting the UCI campus, it was evident that one of its principal advantages was the opportunity to create a whole new city that would effectively meet the needs of the University. A stimulating and healthy urban environment is in itself an important ingredient in the growth of a university. Thus, from the beginning, the future City of Irvine was envisioned as a learning community in which "town and gown" would be inextricably linked. Pereira often spoke of his vision for the Irvine campus as the focal point for a "city of intellect." At other times, he referred to the campus and its surrounding



Early development plan showing the concentric rings and radial geometry in the central core of the UCI campus. Academic units are arranged around the six "spokes" emanating from the circular park in the center.



Conceptual development plan from 1963 LRDP shows the relationship between campus land, the Inclusion Areas, and the University Town Center.

community as "the city of tomorrow," one that he projected would reach a population of 100,000 by 1990. The areas surrounding the campus were planned to include industrial zones, residential and recreational areas, commercial centers, and greenbelts. The villages of Turtle Rock, University Park, Culverdale, the Ranch, and Walnut were completed by 1970. On December 28, 1971, the residents of these communities voted to incorporate the City of Irvine in order to control the future of the area and protect its tax base. This action resulted in a substantially larger city than that envisioned by the original Pereira plan.

The mutual dependence between the UCI and its community has cemented the City of Irvine's reputation as an important planned community. With a 2009 population of over 212,000 and encompassing more than 65 square miles, Irvine is one of the nation's largest planned urban communities.

UCI's First LRDP

In January 1962, The Regents appointed Daniel G. Aldrich as founding chancellor of UCI, a decision that had a profound effect on plans for the fledgling campus. Chancellor Aldrich was firmly committed to a land grant model and his imprint is evident in UCI's inaugural academic plan, which proposed programs that would serve not only the local community but also the State, the nation, and the world. Notably, the resulting document, entitled *A Provisional Academic Plan,* was carefully interwoven with the physical plan for the campus.

One of the innovative ideas incorporated into UCI's academic structure was creating and maintaining an academic environment conducive to interdisciplinary instruction and research. The question then became: What kind of physical plan should UCI have to facilitate the integration of academic disciplines? The answer suggested by UC President Clark Kerr was to devise a scheme with academic disciplines arranged around a series of concentric circles. Pereira and Aldrich developed this basic plan into six spokes emanating from the center of a circle and culminating in six quadrangles, each representing an academic unit, at the rim of the circle. At the center of the circle was planned a 16-acre park to offer relief from the densely built-up areas to be developed around it. The circle unified the central campus both functionally and aesthetically. This arrangement also shortened the distance between each of the quads and enabled orderly incremental growth out from the core.

These and other planning elements were incorporated into the final version of the *Provisional Academic Plan* which was renamed the *Long Range Development Plan* and approved by The Regents in June 1963. The 1963 LRDP identified campus development required to accommodate an enrollment of 27,500 students by 1990. The Inclusion Areas were a significant feature of the planning program; provisions were made for the University to acquire these areas in the event The Irvine Company was unable, or unwilling, to develop them within a five-year timeframe.

Subsequent LRDPs

With the knowledge that increasing land values around UCI eventually would preclude the University from purchasing significant amounts of land for student, faculty, and staff housing and for other University-related purposes, The Regents purchased 510 acres of land within the Inclusion Areas from The Irvine Company in January 1964. The purchase agreement included covenants that required this land to be used for "University" or "University-oriented" purposes only. "University-oriented" purposes were broadly defined to include but not be limited to "housing for University students, faculty and staff, neighborhood shopping areas, hospital, medical and related facilities, churches, social clubs, schools, quasi-educational facilities, educational and non-profit research enterprises and all similar services and facilities incident to a complete University community." (The remaining 150 acres of the Inclusion Areas retained by The Irvine Company were placed under reciprocal development restrictions.)

A revised LRDP was approved by The Regents in March 1970, necessitated primarily by the purchase of the Inclusion Areas by the University and the relocation of the California College of Medicine to the campus. The updated LRDP envisioned the development of University-related residential neighborhoods in the Inclusion Areas, including elementary schools, parks, and commercial facilities. The 1970 LRDP successfully served as a guide to the development of the campus for nearly two decades.

By the late 1980s, a number of factors supported a decision by the University to reexamine and update the LRDP. Among these was a slower rate of campus growth than previously projected, as well as an agreement between the University and The Irvine Company entered into in 1988 that amended deed restrictions concerning the use of the Inclusion Areas in order to permit income-generating development supporting UCI's academic programs, subject

When UCI admitted its first class in 1965, 1,589 students began their work on a university still very much under construction.

UCI central academic core in 1968.

The academic core, shown here in 2002, currently accommodates nearly five million square feet of academic and support space (Photograph by Paul R. Kennedy).

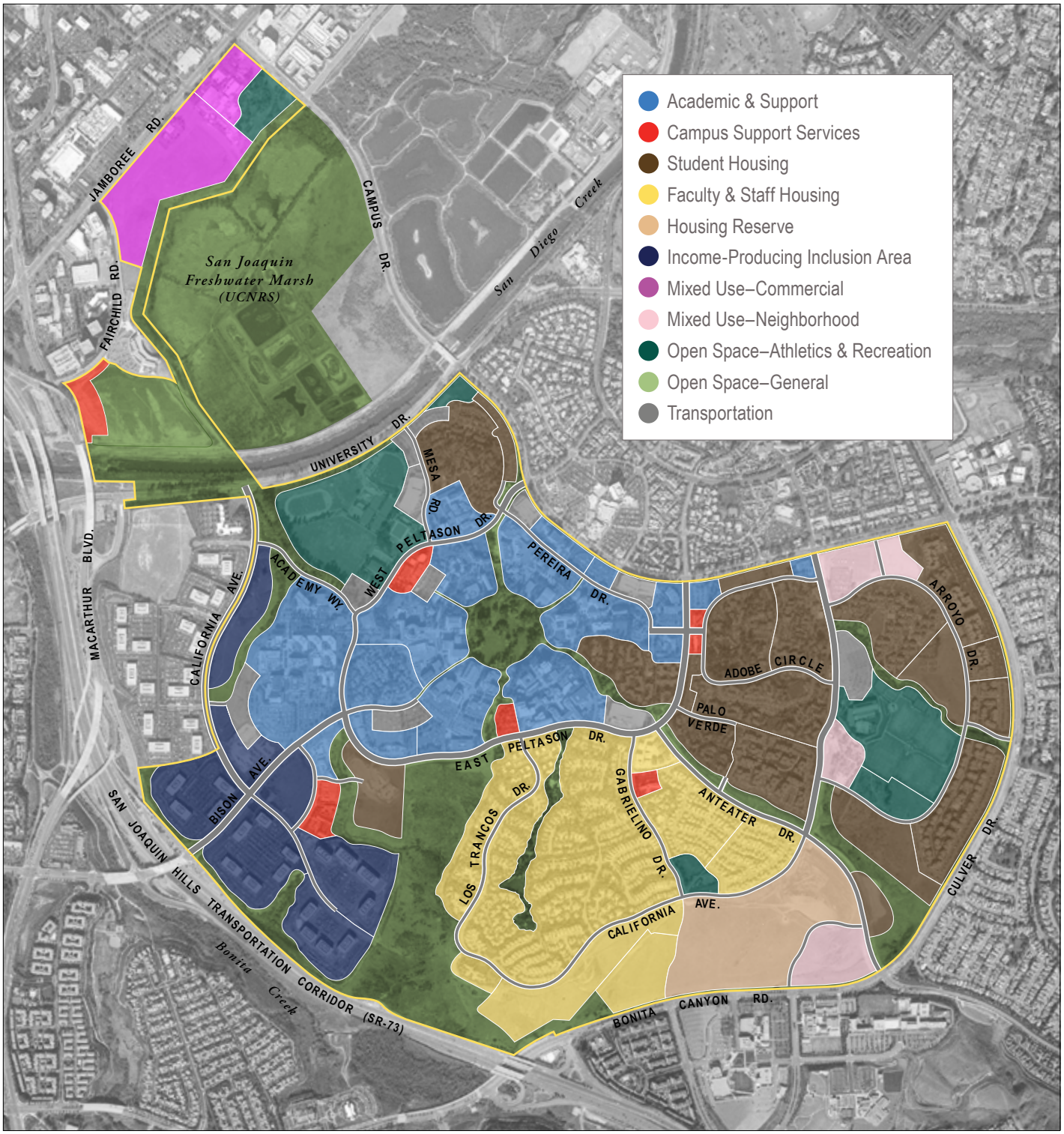
to certain terms and conditions. Reflecting a new growth plan of 26,050 students by the planning horizon year of 2005-06, the updated LRDP, approved by The Regents in September 1989, called for a reduction in the planned density of student housing to be more in line with market preferences; consolidated parking within the campus core into a series of parking structures; realigned several campus roadways to improve traffic flow and to accommodate land use changes; organized and preserved UCI's open space resources by designating two major greenbelt corridors; and identified on-campus convenience commercial uses to supplement the adjacent University Town Center development. Between 1990 and 2002, The Regents approved several minor amendments to the 1989 LRDP which reestablished, reinforced, and clarified the basic planning concepts mandated in UCI's original LRDP.

Periodically updating an LRDP provides The Regents an opportunity to make certain that physical plans remain solidly based on academic program goals. Thus, when UCI launched a strategic planning initiative in 2004 to affirm a roadmap for continued academic development, it was only natural that the campus also reevaluate the LRDP. The most recent LRDP update, approved by The Regents in November 2007, responds to the goals outlined in the strategic academic plan and continues the planning framework established in the founding 1963 LRDP while being responsive to changing needs and opportunities. Key characteristics of the 2007 LRDP are described in the following section.

PROJECTED CAMPUS GROWTH

The LRDP contains a framework of policies and guidelines to accommodate an identified level of enrollment and physical development. As a long-range planning document, the 2007 LRDP identifies a horizon year of 2025-26. With UCI's land area, the 2007 LRDP could accommodate a three-term average enrollment of 37,000 students with only a modest change in current standards of density and land use. While current University and State demographic projections suggest that UCI may not reach this level of enrollment by 2025-26, the 2007 LRDP identifies the physical development needed if UCI eventually grows to this extent. This built-in flexibility extends the plan's usefulness should the campus need to respond to future growth demands that exceed current projections.

In support of projected enrollment growth, the 2007 LRDP accommodates a 103 percent increase in academic



Land use plan from 2007 LRDP.

In 2007, UCI opened the first automobile hydrogen fueling station in Orange County. When used to deliver energy, hydrogen produces zero or very low emissions.

and support space at UCI, compared with existing (2005-06) development, to support projected program expansion and new academic programs (see *Table 1-2*). The 2007 LRDP also accommodates expanded campus support services, additional income-producing uses in the Inclusion Areas, and new mixed use development at UCI.

Reflecting the importance of affordable, on-campus housing to attract students of the highest caliber, as well as to provide a complete university experience, the 2007 LRDP enables a significant expansion of on-campus student housing to accommodate 50 percent of enrollment. The campus has also prioritized the creation of university housing as a recruiting incentive and retention tool for faculty and nationally recruited administrators and professional staff. The 2007 LRDP provides flexibility to expand on-campus faculty and staff housing to 1,700 dwelling units.

The 2007 LRDP includes an expanded UCI transportation demand management program consistent with UC policies for sustainable transportation practices. The plan also describes on-campus roadway improvements needed to meet long-term needs, including new roadway links, widening of existing campus roadways, and intersection modifications to improve service levels.

The 2007 LRDP reinforces UCI's commitment to integrate the natural setting and built environment of the campus. This commitment reflects both the academic mission of the campus and UCI's planning tradition. The built form and the open space amenities of the campus combine to establish a strong sense of place and help to facilitate a cohesive campus community. They also help to foster a highly interactive social life among faculty, students, staff, and the local community.

KEY DESIGN CHALLENGES AND OPPORTUNITIES

The original design concept for the UCI campus promoted by William L. Pereira provided a strong vision and unique physical form to support UCI's academic structure. The blueprint for the central campus, distinguished by the organization of the various academic disciplines into clusters or "quads" linked by circular and radial malls around a central park, remains as the framework upon which current and future academic expansion will occur. The key design challenge for new projects is to retain and strengthen the core values and goals that embodied the original plan, while being responsive to the changing needs of UCI and the community. UCI's fundamental planning

UCI Development Accommodated in 2007 LRDP

Land Use Category	Actual 2005-06[1]	2007 LRDP 2025-26	Growth Accommodated Over Actual
Academic and Support Space (Gross Square Feet)			
Academic Quads[2]	3,411,300	7,094,000	3,682,700
Health Sciences	743,300	1,461,000	717,700
Gateway/Administration[3]	683,200	1,346,000	662,800
North Campus	32,400	0	(32,400)
Total Academic and Support Space	*4,870,200*	*9,901,000*	*5,030,800*
Campus Support Services (Gross Square Feet)	241,200	393,800	152,600
Student Housing (Beds)			
Academic Core[4]	4,331	5,027	696
Outer Campus[5]	6,491	12,610	6,119
Total Student Housing	*10,822*	*17,637*	*6,815*
Faculty and Staff Housing (Dwelling Units)	1,108	1,250 to 1,700	142 to 592
Income-Producing Inclusion Area (Gross Square Feet)	1,244,600	1,924,600	680,000
Commercial Mixed Use			
Office/Research & Development (Gross Square Feet)	0	950,000	950,000
Multi-Family Residential (Dwelling Units)	0	435	435
Neighborhood Mixed Use			
Neighborhood Commercial (Gross Square Feet)	0	90,000	90,000
Parking (Spaces)[6]	12,600	16,500	3,900

[1] Including projects under construction.

[2] Consisting of the Social Sciences, Engineering/Information and Computer Sciences, Physical Sciences, Biological Sciences, Humanities, and Arts quads.

[3] Contains UCI's central administration, Langson Library, the Student Center and other student services, and the Irvine Barclay Theatre.

[4] Consisting generally of housing for lower-division undergraduate students.

[5] Consisting generally of housing for upper-division undergraduates, graduate students, and students with families.

[6] Number of parking spaces provided for UCI commuters and visitors.

Table 1-2.

Krieger Hall.

Gateway Study Center.

These examples epitomize the original modernist buildings constructed in the Academic Core in the 1960s (Photographs by Julius Shulman).

principles—and the organizing concepts that are derived from them—are discussed in the following section.

Unlike campuses that are unified by a single, controlled architectural style, UCI is characterized by a diversity of architectural expressions—ranging from the original monumental modernist buildings in the inner campus core, to the modern and post-modern idioms that distinguished the 1980s and 1990s, to the contextual architecture of more recent construction. Future buildings will continue to be developed using a contextual approach, providing a more consistent design vocabulary and a cohesive campus image. In addition, at UCI unity and coherence will be derived from color and materials, sensitivity to climate factors, building scale and siting relationships, outdoor public spaces, and landscape themes. This Physical Design Framework document addresses the opportunities presented by these elements.

The landscape guidelines are significant in establishing the character and identity of the UCI campus. Introduced to what originally was barren rangeland, the campus landscape has now produced an impressive arboretum effect incorporating both native and exotic plant species. Within the central campus, the landscape is dominated by groves of eucalyptus and pine trees that provide identity to the setting as well as a tranquil environment for learning and interaction. The main direction for future landscape entails two approaches. The first utilizes landscape in more formal ways to help define major vehicular and pedestrian circulation, to unify and compliment the urban character sought in the academic core, and to develop more individual identity and "sense of place" for the various subsectors. The second expands the informal character of the major open space areas into the outer campus to enhance and conserve a more natural appearance. Both approaches provide opportunities for landscape to meet campus sustainability objectives.

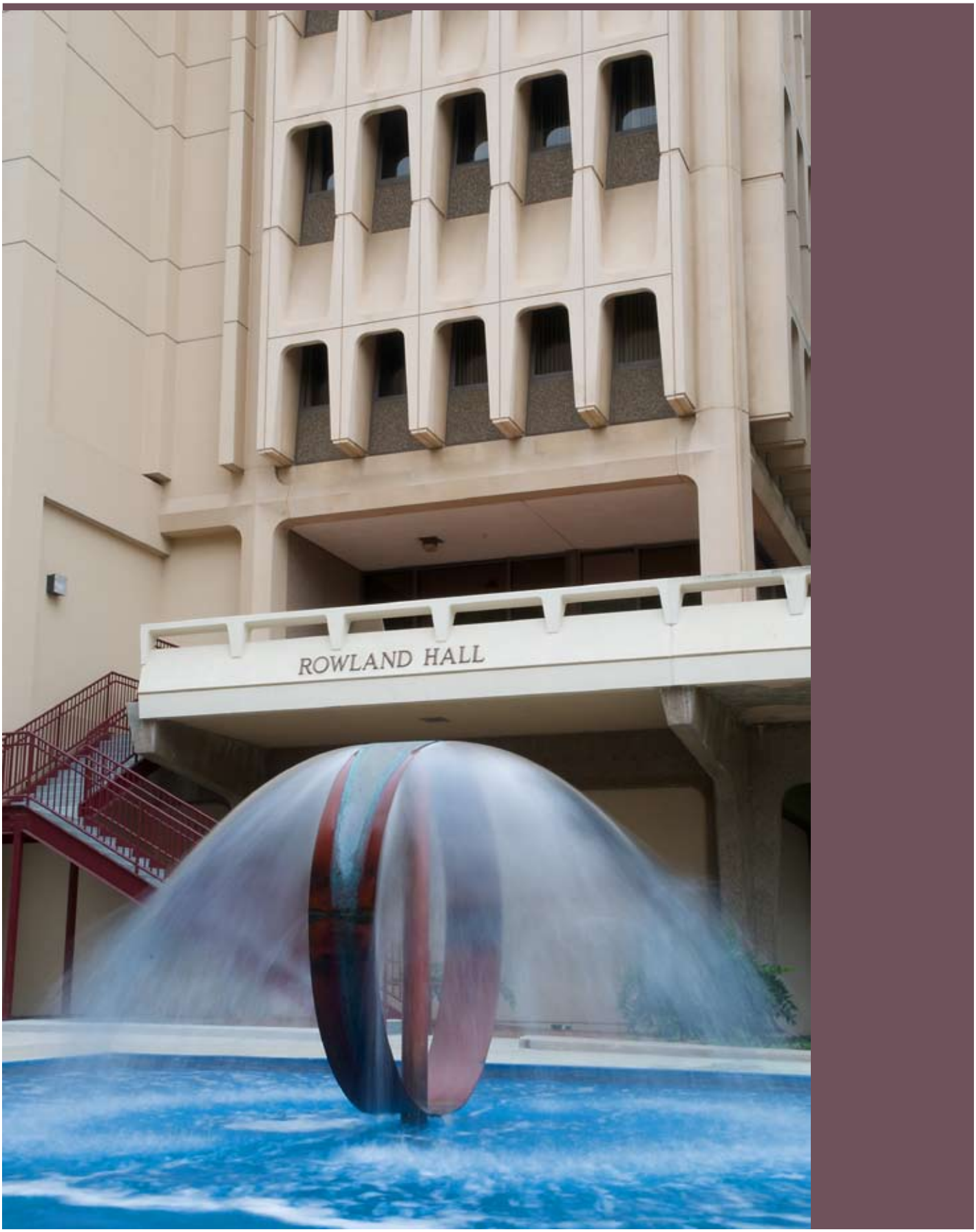
California Institute for Telecommunications and Information Technology.

Anteater Instruction and Research Building.

Natural Sciences II.

Art, Culture, and Technology.

Recent contextual architecture at UCI provides a consistent design vocabulary and a cohesive campus image (Photographs by Hedrich Blessing).


ROWLAND HALL

PLANNING & DESIGN PRINCIPLES

2

Remarkably, development of the UCI campus has proceeded in a manner generally consistent with the inaugural LRDP prepared by William L. Pereira in the early 1960s. This stability can be attributed not only to UCI's genesis as part of a greater master planned community, but also to an enduring set of goals that has guided the evolution of the campus plan. These core values—most recently described in UCI's 2007 LRDP—embody the aspirations of the Irvine campus and provide the foundation for the present Physical Design Framework. Three major principles derived from the 2007 LRDP guide development of the campus: create places that support the mission of the University; build a cohesive academic community; and promote environmental quality.

1. Create Places that Support the Mission of the University

To create an environment that facilitates learning, advances innovative research, and promotes public service, campus buildings and landscapes need to evoke a sense of continuity and stability while also being flexible and adaptable. Because collaboration is a key to innovation and discovery, the physical environment should also support academic and social interaction. These characteristics are detailed below:

Longevity. Campus buildings and landscapes should be designed to evoke a sense of permanence. An investment in quality will set superior places apart from the ordinary. Design decisions should be based on long-term values rather than on popular trends. This includes exercising the planning discipline needed to optimize valuable campus land resources and to ensure that long-term goals are not jeopardized by short-term needs.

Pictured left: Rowland Hall.

Pictured above: View of Physical Sciences quad from the Ring Mall.

Humanities Instructional Building. Campus buildings evoke a sense of continuity and stability (Photograph by Hedrich Blessing).

This coffee kiosk serves as a focal point in the Engineering/Information and Computer Sciences quad and provides opportunities for social interaction. The scale of the kiosk relative to the surrounding buildings makes it more inviting and contributes to a sense of place.

Flexibility. Longevity is enhanced by the creation of spaces that are easily adaptable to meet future program needs. Campus buildings and landscapes should be designed to accommodate future requirements without major new investment.

Interaction. Strengthening interdisciplinary collaboration is a key objective in UCI's strategic plan for academic development. The physical environment should provide ample opportunity for intellectual and social interaction. Establishing connections between buildings and the various campus sectors is an important component in supporting interaction and dissolving traditional institutional boundaries.

2. Build a Cohesive Academic Community

A vibrant campus experience is derived, in part, from a sense of belonging to a community, by identifying with people who have similar objectives, and through an understanding of one's place in the campus environment. Physical expressions of identity and connectivity are important facilitators in the establishment of cohesive communities.

Identity. Creating a meaningful campus environment that people can identify with can be accomplished in many ways. UCI recognizes that there are opportunities for strengthening campus life through the development of centers of activity, including mixed use, commercial retail, and cultural and recreational facilities that promote social interaction on campus and bring the off-campus community onto the campus. Place identity can be derived from a consistent architectural vocabulary and a coherent approach to color, materials, public space, and landscape. Place identity is also facilitated by ensuring that human scale and human comfort are maintained in all sectors of the campus.

Connectivity. UCI provides opportunities to learn, live, and work within a diverse set of neighborhoods across a large land area. The LRDP promotes the development of a cohesive community through a unified land use plan that links these various sectors together. Pedestrian paths, bicycle trails, bridges and undercrossings, open space corridors, and other linkages establish travel patterns, bring people together, and strengthen a sense of community on campus.

3. Promote Environmental Quality

Sustainable campus development and operations provide a means to stabilize campus budgets, increase environmental awareness, reduce the environmental consequences of University activities, and provide educational leadership for the 21st century. Environmentally sensitive development also recognizes and preserves the heritage of the campus, including its architectural and ecological legacy.

For years, UCI has been a leader in pursuing energy-efficiency and energy infrastructure innovations, even before the "green movement" took hold. The campus has championed a number of other green design features as well, such as operable windows, long-life durability of materials, native and drought-tolerant plant materials, generous daylighting, no use of rain forest woods, and many other green practices and design features.

Sustainability. UCI is committed to sustainable practices that minimize the campus' "ecological footprint" and to conserving finite resources for future generations. The 2007 LRDP mandates that campus planning efforts should endeavor to limit environmental impacts on the local community; that development and operations will be environmentally sound within all sectors of the campus, consistent with the University of California's Policy on Sustainable Practices; and that portions of the campus with significant natural features will be preserved as permanent open space. Sustainable practices are employed at UCI in areas such as green buildings, energy efficiency, renewable energy, transportation management, emissions reductions, waste management, and dining operations. The campus has also established progressive practices for sustainable grounds management in order to conserve and maximize resources—including recycling plant waste into mulch, reducing fertilization, implementing water saving measures, and using reclaimed water extensively for irrigation—and to promote increased species and age diversity of plant material.

Preservation. As UCI continues to grow and mature, the value of campus open space will increase. The LRDP preserves a network of open spaces to connect the various sectors of the campus and to support multiple objectives, including passive open space, habitat management, recreation, and water quality. In addition, the campus should strive to preserve other elements of historical or cultural significance.

Over the past 15 years, UCI has hosted numerous volunteer tree plantings that provide additional native habitat and aesthetic value for the campus, as well as advance campus sustainability objectives. With a nonprofit partner, UCI has established an on-campus tree nursery that has contributed thousands of trees to the campus and the surrounding community (Photograph by Andrew Herndon).

The five planning sectors. The Academic Core functions as the heart of the campus with the East Campus, South Campus, West Campus, and North Campus comprising the outer campus.

The Academic Core is urban in character and intensely developed to conserve land resources (Photograph by Paul R. Kennedy).

FUNDAMENTAL ORGANIZING CONCEPTS

The overarching principles described above provide the basis for several paradigms that serve to organize the UCI campus and determine its form. They contribute to the creation of a cohesive campus and bring clarity to UCI's identity. These organizing concepts are unique to UCI's specific setting and originate from the 1963 LRDP, although some elements have been updated to accommodate evolving academic program goals and priorities.

The Urban Core and Suburban Outer Campus

As established in the 1963 LRDP, UCI's primary teaching and research facilities are concentrated in a 343-acre core strategically located on the campus edge adjacent to the University Center, a privately-owned complex containing restaurant, retail, office, and theater uses serving UCI and the local community. A pedestrian bridge between the Academic Core and the University Center serves to connect UCI with the community and promotes the town-gown relationship. The Academic Core functions as the heart of the campus with the East Campus, South Campus, West Campus, and North Campus comprising the outer campus. Uses in the outer campus sectors—including University housing, community support facilities, recreation and open space, and private industry—support the academic functions in the Core. The formal, concentric ring and radial geometry of the Core is contrasted by the more informal character of the outer campus sectors, where roadways and open space corridors adapt to the natural terrain and development patterns are more organic. The Academic Core is urban in character and intensively developed to conserve land resources and to facilitate pedestrian and bicycle circulation. The outer campus is characterized by lower development intensity and provides open space for recreation and environmental preservation. Due to the scale of the outer campus areas, each sector establishes its own identity of place by applying architectural and landscape themes and sensitively adjusting to topographic and natural features.

A Community of Sectors

For planning purposes, the 1,475-acre campus is segmented into distinct sectors to provide human scale and perceivable development clusters. The five planning sectors—Academic Core, East Campus, South Campus, West Campus, and North Campus—share some common characteristics such

as defined edges and points of entry and some special focus or center. Development in the sectors will be clustered to efficiently utilize the land resource. Each sector will have an individual identity characterized by special architectural and landscape themes. Public spaces such as malls and plazas will vary from sector to sector and form "armatures" that are as important as individual buildings. The five sectors are connected both programmatically and physically to promote cohesiveness and interaction. Physical linkages include pedestrian pathways, bikeway systems, roadways, transit and shuttle service, and a network of open space connections.

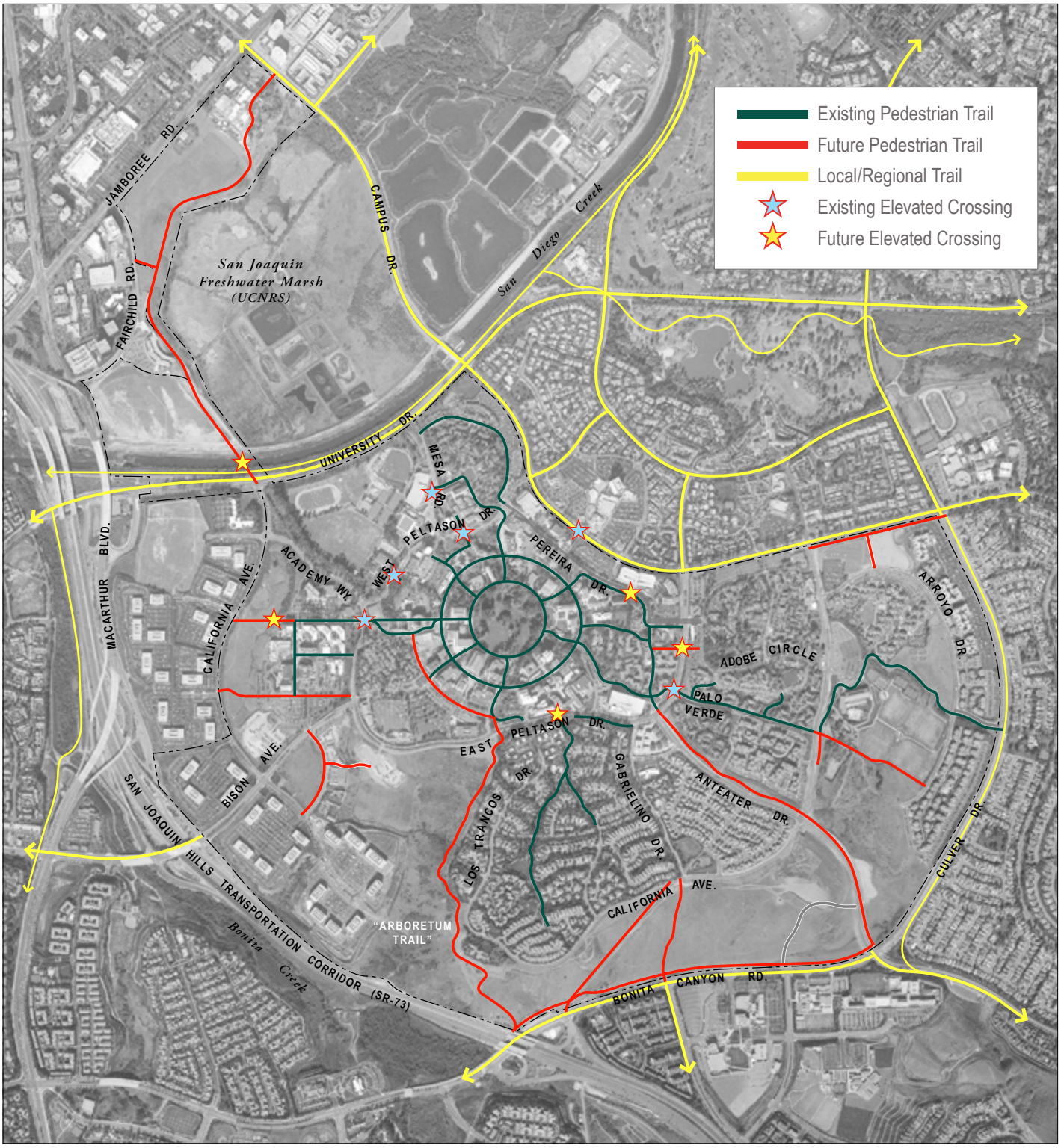
All development, redevelopment, and building and grounds management on campus occur in relationship to a neighborhood or sector and conform to specific sector guidelines as described in Part 3 of this Framework document.

Circulation Linkages

UCI is served by an extensive network of pedestrian, bicycle, transit, and roadway facilities. The various components—roads, paths and their associated view axes; entries and arrival points; and street landscape—are all essential to the campus' overall coherence and to the creation of a sense of place. The circulation network assumes a radial-centric pattern reflecting the form established by the original campus plan. On-campus circulation facilities connect the individual planning sectors and in turn are linked to regional pedestrian and bike trails, regional bus transit routes, and local, State, and federal highways.

- *Pedestrian Circulation:* Pedestrian circulation in the Academic Core reflects the concentric ring and radial geometry established in the original plan. This pattern requires a hierarchical distinction between the rings, radials, and secondary malls; clear definition of space through landscaping, paving, and other site elements; and clear links to perimeter parking structures serving the Core. Pathways in the major open space areas of the Core (e.g., Aldrich Park) should be informal in character. Likewise, pathways within the outer campus should follow meandering alignments reflective of the land form and open space areas. Sidewalks associated with roadways will follow roadway alignments.
- *Bicycle Circulation:* The use of bicycles for off-campus commuting and intra-campus circulation is promoted to reduce the use of private vehicles. At present, bicycles

The Ring Mall serves as the primary pedestrian pathway in the Academic Core and links the academic quads.



Existing and proposed pedestrian circulation network from 2007 LRDP.

are permitted on all campus roadways and pedestrian paths, except the Ring Mall. On-street bike lanes are provided on most campus roadways, and UCI's network of off-street bicycle trails and grade-separated roadway crossings is being expanded in multiple phases. Some bicycle paths should be integrated into the open space corridors that extend into the outer campus. Bicycle/pedestrian conflicts should be minimized by a variety of means to physically separate or distinguish travel paths, such as hedges, curbs, special paving, bollards, and signage.

- *Campus Roadways:* UCI is served by four radial roads—California Avenue/Academy Way, Mesa Road, Anteater Drive, and Bison Avenue—that connect to the primary loop road (West/East Peltason Drive) within the central campus. This system channels incoming vehicles directly into parking facilities located at the perimeter of the Academic Core, enhancing the pedestrian experience on campus. Campus roadways should vary in character and scale relative to their function and traffic load. Each roadway should be identified by an individualized landscape treatment. Campus entries should be provided with enhanced landscaping and monument signage. Points of arrival within the Core occur where the radial roads terminate at Peltason Drive; these locations should be accented by special landscaping and directional signage and, in some cases, a landmark building site.
- *Transit Facilities:* The Orange County Transportation Authority offers bus transit service to UCI and areas surrounding the campus. UCI also operates a private shuttle service for the benefit of its students and employees. Shuttle routes currently serve the Academic Core and on- and off-campus student housing areas. The campus will continue to expand on-campus shuttle service to all parts of the developing campus.

ZotWheels stations located across the campus allow students, faculty, and staff to borrow bicycles through the first automated bike-sharing program in the University of California system.

Campus Vistas

One's visual experience of the UCI campus occurs primarily while moving along the various pedestrian and bicycle paths and roadways. The experience varies from axial vistas or "view corridors" down circulation routes, to panoramic views over a wide viewing angle, to near-range vistas of memorable campus spaces and buildings, to zones of view penetration or "windows" into the campus from surrounding roadways and pathways. Visual access to the campus is strategic to the orientation and individual

Aldrich Park is a major determinant of UCI's visual structure and identity. Views into Aldrich Park should be preserved and enhanced.

Campus open space network from 2007 LRDP.

enjoyment of the campus environment. Existing campus views should be protected and enhanced by special landmarks, building setbacks, and appropriate landscape. In some cases, it might be desirable to screen views of structures or service areas.

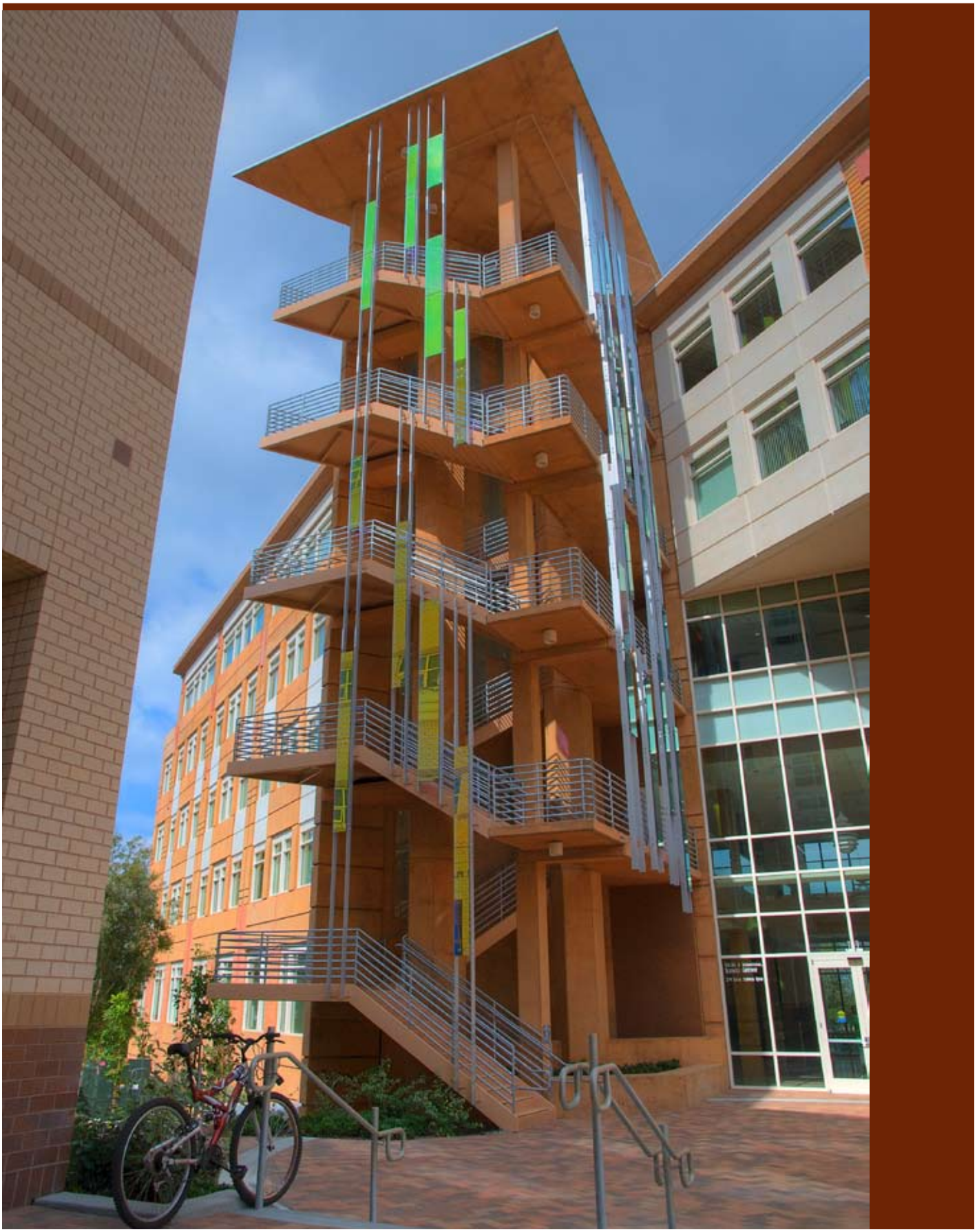
A Network of Open Space

Open space plays a vital role in university life and in the educational experience at UCI. Due to Southern California's Mediterranean climate, outdoor activity occurs virtually year-round on the campus, and the availability of open space is essential. In addition, open space is a major determinant of UCI's visual structure and image. The spatial distribution and interconnection of open spaces work together to form a system that has a powerful effect on the visual cohesion of the campus, whether developed through landscaping or left in a natural state.

Aldrich Park forms the central open space feature of the campus. This 16-acre park contrasts with the densely built Academic Core and provides a venue for passive recreation. The open space network within the Academic Core radiates from Aldrich Park and consists of an interlinked system of tree-lined pedestrian malls and public spaces, small gardens and parks within the academic quads, and greenbelts. In the outer campus neighborhoods, the open space network includes both formal and informal open space such as pedestrian malls, greenbelts and pedestrian paseos, neighborhood and community-level parks, habitat corridors, and informal open space corridors linking campus land use areas.

UCI's open space network includes 135 acres within the outer campus enlisted in a 37,000-acre reserve established by the Natural Community Conservation Planning (NCCP) program for the central/coastal Orange County subregion. This land is committed to habitat conservation and management and is administered in cooperation with other regional landowners as apart of the non-profit Nature Reserve of Orange County.

UCI's Ecological Reserve is among 135 acres of campus land enlisted in a 37,000-acre reserve established by the Natural Community Conservation Planning (NCCP) program for the central/coastal Orange County subregion. The NCCP provides long-term, regional protection of natural vegetation and wildlife diversity.



PLANNING & DESIGN GUIDELINES

3

As described in the previous chapter, the UCI campus is a community of five planning sectors: the Academic Core functions as the nucleus of the campus with the East Campus, South Campus, West Campus, and North Campus comprising the outer campus. Descriptions of the sectors and key planning objectives for each area are provided below. These are followed by general parameters for site planning, architecture, landscape, and circulation. The purpose of the guidelines is to provide broad direction for carrying out UCI planning and design principles.

The five planning sectors.

ACADEMIC CORE

Containing approximately 343 acres, the Academic Core accommodates the primary teaching and research facilities to support the academic mission of the campus. This sector also contains lower-division undergraduate housing, the Crawford intercollegiate athletics complex, support facilities, and parking.

Pereira's 1963 concept for the Academic Core was derived from the primary disciplines in UCI's inaugural academic plan—the five schools within the College of Letters and Sciences (Social Sciences, Physical Sciences, Biological Sciences, Humanities, and Fine Arts) plus a professional School of Engineering. In his plan, these academic units were distributed into five "quads," with a sixth quad (Gateway) identified for central administration, student services, and support uses. A circular pedestrian "Ring Mall" over 5,000 feet in circumference links the six quads and surrounds a 16-acre central park (in 1984, the park was renamed "Aldrich Park" in honor of UCI's first chancellor). A secondary circular walkway within the park, referred to as the "Inner Ring," provides pedestrians with another way to traverse the Core. With lecture halls, classrooms, and other undergraduate teaching facilities concentrated near

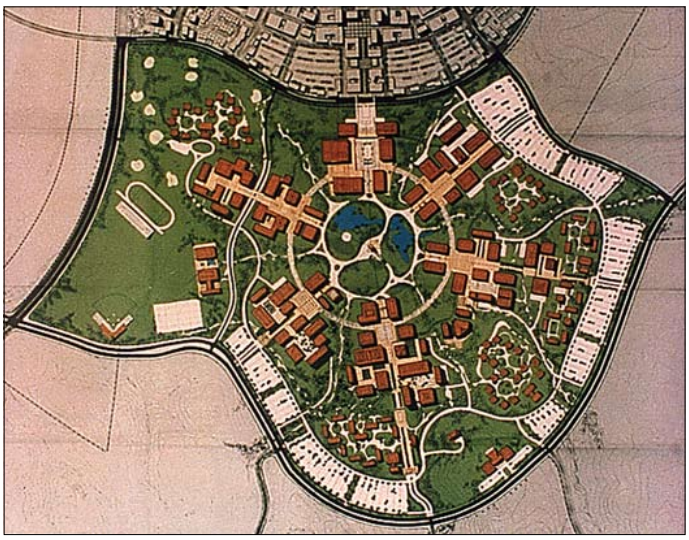
Pictured left: Social and Behavioral Sciences Building.

Pictured above: Humanities Gateway Building.

Key Planning Objectives for the Academic Core

1. Promote efficient use of valuable campus land resources through site planning and density guidelines.
2. Retain a human-scale pedestrian environment as the Academic Core becomes more urban.
3. Infill and redevelop underutilized sites.
4. Site buildings in a manner that reinforces circulation and defines public spaces.
5. Build and reinforce pedestrian and bicycle connections.
6. Develop high-quality public open spaces (e.g., plazas, courtyards, and seating and dining areas) at varying scales to promote interaction.
7. Reinforce pedestrian malls and academic quads with theme trees and other organizational landscape systems to improve orientation and wayfinding.
8. Limit vehicular traffic and parking to the perimeter of the Core to promote pedestrian quality and human scale.
9. Preserve the pastoral quality of Aldrich Park while adopting features to enliven this setting and promote greater community interaction in the park.
10. Provide food service and other support facilities to serve the campus daytime population.

Table 3-1.



Concept plan for Academic Core from the early 1960s showing the strong geometry established by William Pereira. Development of the Core has been remarkably consistent with the original plan (compare with illustration at right).

the Ring Mall, the radial concept was intended to allow a 10-minute walk between opposite ends of the Ring Mall to facilitate class changes.

Extending outward within each quad is a radial spine, or "Radial Mall," along which individual academic and support elements can expand. Pereira's concept concentrated undergraduate education in the inner concentric area, and more specialized graduate education extended outward along the radial spines. This allowed the graduate zones to relate both inward toward undergraduates (teaching assistance), and outward toward special institutes (research/community service) through which learning could be applied to real world problems.

In the four decades following adoption of the 1963 LRDP, development of the Academic Core has generally conformed to the original Pereira concept. Consistent with this tradition, the Framework retains and strengthens the established planning paradigm established by Aldrich Park, the Ring Mall, and the academic quads organized along the Radial Malls. New academic facilities in the Core will be constructed on undeveloped or underutilized land areas, and may include infill opportunities or redevelopment of low-density or obsolete facilities. Through higher density, the Academic Core will continue to evolve a more urban character, characterized by mid-rise buildings averaging four to six stories which would be a similar height and scale as envisioned in the initial 1963 LRDP. The Framework preserves the concept of focusing lectures halls, classrooms, and other facilities that serve high-traffic undergraduate uses near the Ring Mall. Lecture halls, classrooms, and other academic and support facilities will also be located along the perimeter of Aldrich Park near the boundary of the Inner Ring to bring activity to the park.

UCI will require significant expansion of academic space within the Core in order to meet long-term teaching and research needs. This includes growth in existing academic programs, facilities to support new programs, and space for future opportunities.

Consistent with UCI student housing objectives, on-campus housing for freshman is provided in the Academic Core in order to more actively engage first-year students in academic life. UCI's goal is to provide on-campus housing for all freshmen who want it. Expansion of residence halls in the Academic Core will accommodate this demand.

The Crawford Hall intercollegiate athletics complex will continue to expand within the boundaries of its existing 47-acre site in order to accommodate the growing needs of

Academic Core planning concept. Academic quads are arranged around Aldrich Park and are interconnected by the Ring Mall. Radial malls bisect each quad and provide a linkage between the inner campus and the perimeter of the Academic Core. Note that parking structures are located at the perimeter in order to reduce congestion in the Core and to enhance the pedestrian experience.

Key Planning Objectives for the East Campus

1. Develop a 24-hour academic residential community to include housing, support uses, open space, and circulation linkages.
2. Implement plans that reinforce the Anteater Recreation Center as the functional and symbolic "heart" of the community.
3. Build individual neighborhoods at an appropriate scale to maintain identity and facilitate socialization among residents during the academic year.
4. Accommodate an appropriate development density to enable UCI to house 50 percent of its on-campus student enrollment.
5. Construct high-quality student residences to attract and retain the best students.
6. Provide common areas such as active and passive open spaces at both the community and neighborhood levels to encourage gatherings, interaction, and recreation.
7. Provide pedestrian and bicycle amenities and incentives to reduce dependence on the automobile for intra-campus travel.
8. Offer services to advance campus residential life, including recreation, meeting space, food service, retail, and mixed use.
9. Preserve and enhance arroyos and other natural features to serve as greenbelts and to provide water quality benefits.
10. Provide landscaped edge buffers to limit potential impacts to off-campus communities.

Table 3-2.

UCI's athletics programs. Redevelopment of existing low-rise structures at this complex will likely be required in the future.

Campus support functions will grow in the Academic Core, including the expansion of Facilities Management activities at the Central Plant and the consolidation of services currently located at the North Campus corporation yard, the Central Plant, and the Bison Avenue maintenance yard. Facilities Management administrative office space, trade shops, shop stores, and equipment and vehicle storage will eventually be consolidated on the main campus, possibly as part of a future joint-use parking structure. Services such as shipping, receiving, mail, document distribution, records, and fleet services also will be relocated to the main campus. Relocating and consolidating these and other support functions to the main campus will promote greater land use efficiency, reduce vehicle trips on local streets, and bring needed services closer to campus customers.

EAST CAMPUS

The approximately 430-acre East Campus sector accommodates a large student residential community comprised of a variety of housing and support facilities for undergraduate, graduate, professional, and student families. A key feature of this sector is the Anteater Recreation Center (ARC), a complete state-of-the-art sports and fitness facility. In addition to indoor facilities and a lap and leisure pool, the ARC includes sport fields, tennis courts, a roller hockey rink, and basketball courts.

A primary objective is to create a 24-hour academic residential experience on the East Campus. This will be achieved by providing high quality housing, residential support uses, and a social center to a critical mass of student residents. The planning concept for this sector identifies a center or "heart" consisting of the ARC and future support facilities, including food service, meeting space, retail, and other uses to serve the campus community. The plan concentrates student neighborhoods around the ARC and the central green space formed by the ARC playfields. Bicycle and pedestrian trails and an on-campus shuttle system link the East Campus to the Academic Core, eliminating the need for most residents to commute by automobile. To achieve UCI housing goals, new student housing will be developed at average densities of approximately 90 beds per acre or higher. This would require that most new residential buildings be planned at four stories or higher.

East Campus planning concept. Student housing is arranged around the Anteater Recreation Center which serves as the heart of the East Campus community. Pedestrian and bicycle connections, as well as an established shuttle service, facilitate student travel to and from the Academic Core.

Key Planning Objectives for the South Campus

1. Develop an outstanding academic community-in-residence on the campus to support the recruitment and retention of faculty and staff.
2. Create a community that is compatible with its setting and a special place to live and visit.
3. Retain the quality and character of the existing University Hills community.
4. Integrate parks and other open space amenities into the community for active and passive recreation.
5. Create community facilities to encourage neighborhood interaction.
6. Provide paseos, trails, parkways, and other elements to maintain a pedestrian-oriented community.
7. Enhance pedestrian and bicycle circulation and open space linkages to promote non-vehicular travel to the Academic Core, other campus sectors, and key off-campus locations.
8. Preserve, enhance, and manage natural resources located in the NCCP reserve.
9. Develop an appropriate edge condition along the boundary of the campus to buffer campus residents from potential visual and noise impacts.
10. Provide an adequate buffer zone between the ecological reserve and residential areas.

Table 3-3.

University Hills residential community.

SOUTH CAMPUS

Containing approximately 328 acres, the South Campus accommodates existing and future faculty and staff housing. Development of University Hills (the name given to this residential community) commenced in 1983 following the establishment of the Irvine Campus Housing Authority (ICHA), a nonprofit corporation created by The Regents for the purpose of fostering and encouraging the development of affordable faculty and staff housing on the UCI campus. Since then, ICHA has overseen the development of over 1,100 for-sale dwellings and apartment homes and administers a faculty and staff housing program that has become a model nationwide.

This sector also includes UCI's Ecological Reserve, located adjacent to University Hills and containing significant coastal sage scrub habitat. In 1996, the University enlisted the Ecological Reserve and additional campus lands in a 37,000-acre reserve established by the Natural Community Conservation Planning (NCCP) program for the central/coastal Orange County subregion. The purpose of the NCCP is to provide long-term, regional protection of natural vegetation and wildlife diversity through establishment of the NCCP habitat reserve, while allowing compatible land uses and appropriate development and growth on lands outside the reserve for agencies and landowners enrolled in the program. Campus land included in the NCCP reserve must be preserved and managed as habitat. Activity in the NCCP reserve will continue to include habitat management, restoration, monitoring, and field research endeavors, as well as passive recreation and teaching.

The planning concept for the South Campus focuses on establishing an informal residential character, with community development, street patterns, and landscaping designed to reflect the rolling topography and adjacent open space resources. The plan encourages visual and functional access to open space from dwellings as well as the development of community facilities to enhance the potential for social contact. Numerous views exist because this sector contains the highest elevations and most dramatic land forms on the campus. Bicycle and pedestrian trails provide connections to the Academic Core.

WEST CAMPUS

The approximately 230-acre West Campus sector is planned to include the Health Sciences complex, University Research Park and other prospective income-producing

Inclusion Area development, future academic and support uses, and student housing.

The 45-acre Health Sciences complex houses teaching, research, and clinical uses associated with the College of Health Sciences and related biomedical programs. UCI projects a substantial expansion in health sciences space to support new instructional programs, increased research activity, and growth in outpatient services on campus. The complex is organized into two primary zones to facilitate orderly incremental growth: a northern zone dedicated to College of Health Sciences instructional and research facilities, as well as campus outpatient services; and a southern zone to accommodate the UCI Biomedical Research Center, a public-private collaboration between UCI and businesses involved in biomedical, biotechnological, and health care services. Pedestrian malls connect each zone to the Academic Core, and the two zones are themselves linked by a major spine running north-to-south. The planning concept includes the development of public open space along the pedestrian malls to encourage interaction. Private sector uses with program relationships with the Health Sciences are located proximate to the complex.

University Research Park (URP) consists of privately-developed facilities housing businesses that focus on emerging and important technologies such as biomedical technology, biomedical devices, computer hardware and software, communications, electronics technology, pharmaceutical development, and other technology-based activities. As a project in the Inclusion Areas, key criteria in the selection of tenants within URP include their interest in and capacity to interact productively with academic programs at UCI, as well as their ability to establish the community as a center for advanced technology. Situated on both the UCI campus and privately owned land, URP involves approximately 86 acres of campus land. Located immediately adjacent to the West Campus are 97 acres owned by The Irvine Company. Planning objectives for development within these two areas includes contributing to a coordinated image of URP as an integrated part of the UCI campus and as a high-quality business location. In addition, the establishment of physical connections to the campus will help to strengthen the functional relationships between URP tenants and UCI programs.

The planning concept for the West Campus also accommodates new space to support future growth in academic programs along Bison Avenue, in an area closest to the Academic Core. If needed to support campus goals,

Key Planning Objectives for the West Campus

1. Develop an integrated complex of biomedical research, teaching, and clinical facilities within the Health Sciences organized along common pedestrian malls.
2. Promote efficient use of valuable campus land resources through site planning and density guidelines.
3. Retain a human-scale pedestrian environment as the West Campus becomes more urban.
4. Reinforce pedestrian malls and destinations with theme trees and other organizational landscape systems to improve orientation and wayfinding.
5. Retain and strengthen pedestrian and bicycle linkages between the West Campus and the Academic Core.
6. Provide convenient patient and visitor access and parking while preserving a pedestrian-oriented campus environment.
7. Develop high-quality public open spaces and gardens at a variety of scales conducive to learning, academic and social interaction, and a contemplative healing environment.
8. Preserve the most valuable portions of existing arroyos and other natural features as open space amenities.
9. Improve pedestrian connections and support services to promote interaction between UCI and tenants in University Research Park, and to reinforce the sense that URP is an extension of the campus.

Table 3-4.

University Research Park.

Key Planning Objectives for the North Campus

1. Support UCI and community residential goals by creating a work-live environment within a mixed use setting.
2. Recognize and be sensitive to the site's location between its urban neighbors and the San Joaquin Freshwater Marsh.
3. Adopt an architectural and landscape vocabulary that promotes an affinity with the UCI campus.
4. Provide physical linkages to the main campus, including a pedestrian bridge and bicycle and pedestrian trail connections.
5. Minimize development impacts to the San Joaquin Freshwater Marsh.
6. Incorporate planning and design features for the North Campus consistent with it being an important gateway between the City of Irvine and the UCI campus.

Table 3-5.

A buffer zone has been established along the edge of the North Campus to protect nearby natural resources from future development.

this sector could also accommodate a multi-purpose facility for campus activities near the intersection of Bison Avenue and California Avenue.

The 2007 LRDP identifies a new student residential community on the West Campus, adjacent to the Ecological Reserve and separated from other West Campus uses by a large arroyo. This community would replace the existing Campus Village apartments in the Academic Core which are planned to be redeveloped for academic use.

NORTH CAMPUS

Containing approximately 144 acres, the North Campus accommodates mixed use and campus support facilities, and contains substantial open space resources. Separated from the main campus by the San Joaquin Freshwater Marsh, a 202-acre reserve administered by the UC Natural Reserve System, this sector includes the UCI Arboretum as well as a closed municipal landfill that UCI enlisted in the NCCP Reserve in 1996.

The planning concept for the North Campus focuses on mixed-use development consisting of both commercial and residential components. A primary objective is to implement development that represents the best possible relationship between UCI's academic goals, the character of the site, and appropriate integration with the surrounding community.

Consistent with a 1989 Memorandum of Understanding between UCI and the UC Natural Reserve System, a 150-foot buffer zone has been established between future North Campus development and the San Joaquin Freshwater Marsh to preserve the ecological integrity of the reserve, meet the biological needs of species existing in or dependent upon the reserve, and protect the reserve from the intrusion of exotic species. Buildings and parking facilities are prohibited within this setback. Fuel modification activities to reduce wildland fire risk, maintenance and other associated activities, and walking trails are permitted within the buffer zone. Proposed bicycle and pedestrian trails will provide connections to the main campus.

The North Campus is also intended to accommodate campus support uses—including grounds and building maintenance, and equipment, material, and vehicle storage functions currently located on other campus sites—on a site located along Fairchild Avenue and MacArthur Boulevard. Because a portion of this site is located on the surface of

a closed municipal landfill, use of this site for campus support services will involve fulfillment of regulatory and engineering requirements pertaining to the reuse of landfills. In addition, because a portion of the site currently overlaps the NCCP Reserve, a minor amendment to the NCCP Reserve boundary in consultation with State and federal regulatory agencies would be required to implement this planned use. If an adjustment to the NCCP boundary does not occur, sites for campus service functions would be limited to areas outside of the current Reserve.

The bluffs along UCI's North Campus as viewed across the San Joaquin Freshwater Marsh.

The Parkview Classroom Building, sited along the inner ring in Aldrich Park, engages the park and encourages visual and social interaction (SP-5).

This major public space is defined by the manner in which the Social Science Plaza buildings are sited (SP-14).

PLANNING AND DESIGN GUIDELINES

The guidelines for site planning, architecture, landscape, and circulation contained in the following sections provide parameters for the development of new facilities, exterior renovations, and ongoing management of grounds and buildings at UCI. The intent of these parameters is to provide general guidance to support the campus planning and design vision, rather than to provide specific prescriptions. The following guidelines pertain to the Academic Core and the planning sectors that make up the outer campus. Additional guidelines specific to the academic quads within the Core may be found in the individual quad studies provided in the Appendix.

SITE PLANNING GUIDELINES

Guidelines for site planning and site development focus on the following objectives:

- To ensure that facility siting, site planning, and other improvements to campus land support academic and social interaction and exhibit a quality to facilitate the highest levels of teaching, research, and campus life.
- To manage building siting and density in a manner that conserves valuable land resources, provides a sense of community, and preserves human scale.
- To practice site planning and facility design that establishes, preserves, or reinforces important public open space, circulation routes, and vistas in order to promote connectivity and wayfinding on the campus.
- To encourage sustainable site development by managing density, preserving open space, optimizing natural resource conservation and quality, and promoting increased pedestrian, bicycle, and transit modes of travel.

Academic Core

SP-1 Promote individual identity among the academic quads through building mass and form; creating distinctive malls, plazas, courtyards, and other public open space; and introducing topographic variation.

SP-2 Intensify physical development within designated quads through a process of infill and expansion to conserve land resources. Identified infill sites may be used to satisfy the need for surge space or for smaller building projects in order to preserve

larger building sites for more substantial building programs.

SP-3 Building density (expressed as Floor Area Ratio, or the ratio between gross building area and net site area) should vary among and within the academic quads depending on space needs, available site area, and specific adjacency requirements.

SP-4 Encourage the adjacency of related functions to facilitate interaction between academic disciplines.

SP-5 Site academic support facilities that generate significant pedestrian traffic (e.g., lecture halls, food facilities) along the edge of the Ring Mall and the inner ring around Aldrich Park to activate these primary pedestrian pathways and to facilitate convenience and clarity of access.

SP-6 In general, buildings should be set back a minimum of 25 feet from the Ring Mall to allow sufficient space for theme tree planting. Exceptions may occur under special circumstances, such as where buildings engage major public open space.

SP-7 Maintain a pedestrian scale for all new development. Instructional facilities should be sited to allow students a 10-minute walk between class changes.

SP-8 Development should relate functionally and visually to adjacent open space areas.

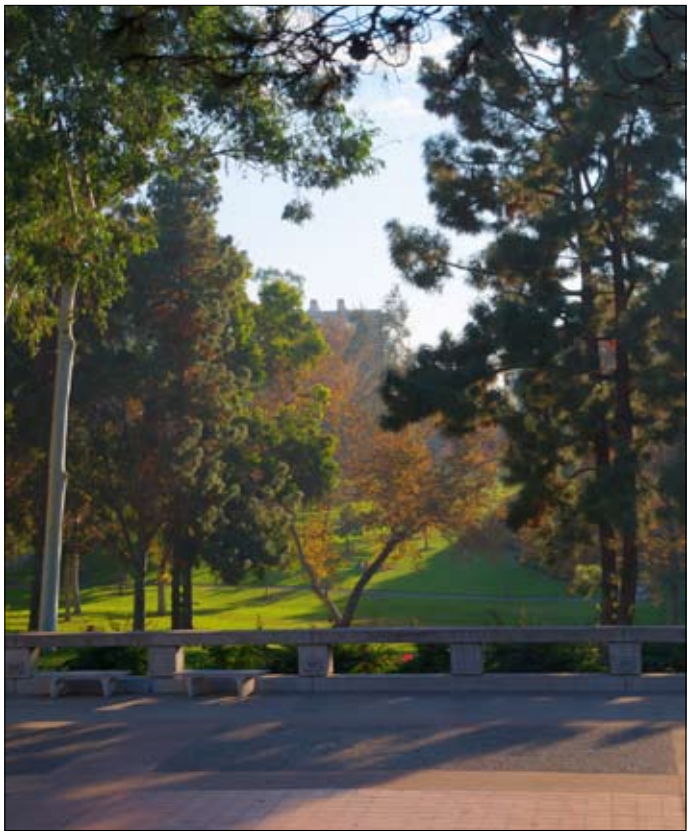
SP-9 Maintain view corridors along the radial malls inward toward Aldrich Park and outward to the edge of the Academic Core or to visual terminus points where the malls change direction.

SP-10 Establish 60 feet as the minimum allowable distance between frontage buildings along the radial malls, although variable dimensions should be encouraged to create more stimulating spatial sequences within an individual quad.

SP-11 Provide well-defined path links from the Ring Mall plazas to drop-off points along Peltason Drive and to parking structures serving the Academic Core.

SP-12 Develop "pedestrian friendly" spaces that can accommodate informal student and faculty interactions.

SP-13 Promote walkability and interaction through the use of wide pedestrian sidewalks and pathways.



Views into Aldrich Park are preserved from the Gateway radial mall (SP-9).

This wide pedestrian pathway approaching the School of Social Ecology promotes walkability and interaction (SP-13)

Croul Hall, Natural Sciences II, and Natural Sciences I (left to right). As shown, the buildings are set back sufficiently from the Ring Mall to accommodate theme planting (SP-6) and the building forms reinforce the radial geometry of the Ring Mall (SP-19). Despite the relatively high development density required to conserve valuable land resources in the Academic Core, a pedestrian-scaled environment is maintained by varying building mass and form and creating distinctive malls, plazas, courtyards, and other public open space (SP-1) (Photograph by Hedrich Blessing).

SP-14 New facilities should be designed and sited to *define* space rather than act as objects in the landscape that merely "sit in space."

SP-15 Maintain pedestrian and bicycle connections between the academic quads and undergraduate housing located in the Academic Core.

SP-16 Site buildings to minimize the solar shading of exterior public spaces.

SP-17 Create usable outdoor spaces in the design of building edges as well as by being mindful of human scale.

SP-18 Consistent with the original campus plan, create a vertical landmark in Aldrich Park to punctuate the Academic Core and provide a campus icon.

SP-19 Reinforce the radial geometry of the Ring Mall by using straight, staggered, or curved building forms parallel to it.

SP-20 Buildings should be sited to frame important view corridors.

SP-21 Grading in the academic quads may employ geometric forms and contours for a more urban character. However, when present, grading should blend into adjacent natural open space areas.

SP-22 Gateway Quad should serve as the primary activity center in the Academic Core. A concentration of student support facilities, libraries, administrative uses, and cultural venues will enhance campus life and promote town-gown relations between UCI and the surrounding community.

Outer Campus

SP-23 Sensitivity to natural features and topography should be reflected in site planning.

SP-24 Campus housing should be clustered into neighborhoods to maintain identity at smaller scales and to provide integrated, local open space for recreation and social interaction.

SP-25 Views of large parking lots should be screened from the primary campus roads.

SP-26 Contour grading should be employed to blend site grading into the natural contours of adjacent open space areas.

SP-27 In hillside areas, landscape should be employed to soften the impact of development on skyline ridges.

An attractive outdoor space is created at the edge of the Rockwell Engineering Center (SP-17).

Arroyo Vista undergraduate housing is clustered as a distinct neighborhood with its own local open space amenities (SP-24) (Photograph by Hedrich Blessing).

The design of Bren Hall typifies the expression of tripartite building layering, with clearly defined base, mid-section, and roof (A-4) (Photograph by Hedrich Blessing).

The Humanities Instructional Building reinforces the Ring Mall plaza and its transparent facade encourages social interaction. (A-8).

ARCHITECTURAL GUIDELINES

Architectural guidelines focus on the following objectives:

- To employ enduring designs for campus buildings that evoke a sense of permanence.
- To develop a unified campus vernacular or theme stressing consistent material, color, and tripartite architectural layering.
- To strengthen interdisciplinary collaboration by providing opportunities for intellectual and social interaction.
- To reinforce UCI's commitment and leadership position in green building design.

Architectural and Spatial Identity–Academic Core

A-1 Academic buildings should primarily employ flat roofs; however top-level or service penthouses may have raised roof forms (e.g., hip, flat, vaulted, gable) set back from a perimeter parapet to maintain a relationship to the original campus buildings.

A-2 Locations for landmark "feature" buildings (as opposed to more basic campus development) should be established in the individual quad studies.

A-3 Employ simple geometric forms (exception for special landmark sites) and express floor levels with consistency of colors, patterns, and windows.

A-4 Express the basic building layers (i.e., base, mid-section, and roof). Incorporate elements in building elevations to create rhythm and interest (e.g., punched openings, engaged columns, or textured surfaces).

A-5 Arcades and loggias should be encouraged for external circulation around buildings as a beneficial climatic response.

A-6 Solar shading and reveals in window fenestration should be employed to articulate building scale and to mitigate climatic factors.

A-7 Buildings taller than 75 feet should utilize setbacks on upper floors adjacent to principal malls to maintain a pedestrian-related scale.

A-8 Buildings should relate to adjacent outdoor spaces with elements such as trellage, arcades, and comfortable seating that encourages social interaction.

A-9 Building entries should be clearly defined, provide a gracious welcome, and relate to primary public circulation. Build entries with openings that allow visual connections with the interior (e.g., stairs, elevators, classrooms, and lounges).

A-10 Provide interior spaces that bring the exterior into the building.

Architectural and Spatial Identity–Housing

A-11 Alternative residential prototypes should be encouraged to provide individual character, choice, and variety among neighborhoods.

A-12 Sloping roof forms and more intimately scaled building mass and detail should be encouraged to distinguish housing from academic buildings.

A-13 Solar shading and reveals should be utilized for climate mitigation.

Architectural and Spatial Identity–R&D

A-14 Research and Development areas should be perceived as an extension of the campus.

A-15 Use simple geometric forms and express floor levels and structure with an overall horizontal emphasis.

A-16 Flat roof forms should be predominant with accent forms on special elements (e.g., vertical circulation, entries, and atrium skylights).

A-17 Facades should express building function and structure, and scale articulation through reveals, mullions, setbacks, and change of plane.

Architectural and Spatial Identity–Parking Structures

A-18 Design structures as neutral elements in the campus image; however the same care should be taken with detailing of exterior walls and massing as with academic buildings.

A-19 Vertical circulation elements should be clearly expressed and easy to locate.

A-20 Soften the elevations of parking structures facing primary pedestrian pathways, housing areas, or major public spaces by incorporating occupied building space and/or architectural or landscape screening onto the structure.

Outdoor loggias or porticos, such as those incorporated into the facade of Social Science Plaza B, help to define exterior circulation around buildings and provide shelter from inclement weather (A-5).

The entrance to the California Institute for Telecommunications and Information Technology allows a visual connection to both the interior and exterior of the building (A-9) (Photograph by Hedrich Blessing).

The Multipurpose Academic and Administration Building serves to de-emphasize the elevation of the adjacent 1800-space Social Sciences parking structure (A-20).

Biological Sciences 3 employs simple geometric forms (A-3).

Vista del Campo student housing is intimately scaled (A-12) (Photograph by A.F. Payne Photographic, Inc.).

Architectural Design Elements–Academic Core

A-21 The primary material palette should be concrete and concrete, brick, or stone masonry.

A-22 Secondary materials may vary by quad as defined in the individual quad studies.

A-23 The primary color and accent color(s) should vary by quad to enhance place identity as defined in the individual quad studies.

A-24 Maximize visible ground-level activities for information, interest, discovery, and nighttime security especially along the Ring Mall, radial malls, and plazas.

A-25 Locate service docks away from major building entries.

A-26 Screen service dock areas with landscaping or solid walls, or by recessing them into building envelopes.

A-27 Screen mechanical equipment on roofs from view.

A-28 Lower buildings should employ baffles or louver elements to screen overhead views of rooftop mechanical equipment from taller adjacent buildings.

Architectural Design Elements–Housing

A-29 The primary material palette should be plaster and brick or concrete masonry. Exposed sloping roofs should employ terra cotta colors.

A-30 Primary colors for new outer campus sites should be medium to strong earth tones varied by residential complex to contrast with the lighter colors in the Academic Core.

Architectural Design Elements–R&D

A-31 Glazed area should not exceed 50 percent of wall area to maintain compatibility with campus architecture.

A-32 Primary materials should be concrete, concrete masonry, lightweight reinforced concrete panels, and stone veneer.

A-33 Secondary materials may be tile, stone, or brick.

A-34 Primary colors should be medium earth tones to blend into the basic color of the drought-tolerant landscape within bordering open space areas.

Typical material palette for buildings in the Academic Core (A-21).

A-35 Mechanical penthouses should be integrated into the overall architectural design and material/color vocabulary.

Architectural Design Elements–Parking Structures

A-36 Primary materials should be concrete and concrete masonry, in neutral earth tones or light beige colors, with complimentary accent colors employed on vertical circulation, entry elements, and barrier railings.

A-37 Design exterior skins to screen views of cars from adjacent buildings.

A-38 Utilize vertical circulation elements (e.g., stairs, elevators) to create places for pedestrian amenities and secure areas on the ground floor.

A-39 Restrict ramped floors to interior bays, when possible, to avoid discordant effect on facades.

LANDSCAPE GUIDELINES

Landscape guidelines focus on the following objectives:

- To provide a strong landscape framework that establishes the character of the campus site, unifies campus sectors and buildings, and defines circulation routes.
- To apply the concept of "campus as arboretum" by utilizing a rich variety of plant species—both native and exotic—that are environmentally suitable to the site conditions and to increase species diversity.
- To provide rich outdoor spaces to support teaching, research, and campus life.
- To promote environmental quality through the selection of native and drought tolerant plant species, functional zoning of landscape types, and sustainable landscape management and urban forestry practices.

Academic Core

L-1 Landscaping in the Academic Core should be more formal and urban in character as opposed to the outer campus neighborhoods where the landscaping is informal and open.

L-2 The Academic Core will incorporate a higher proportion of ornamental plant species reflecting the urban character of the Core, transitioning to less resource-intensive planting in the outer campus landscape zones.

Landscape in the Academic Core is more formal and urban in character (L-1).

L-3 Provide a consistent theme tree along the Ring Mall and other major pedestrian malls to facilitate orientation and wayfinding.

L-4 Distinct theme landscaping should be used in each academic quad to help establish place identity.

L-5 Deciduous trees should be used in public spaces to provide summer shade and winter solar penetration.

L-6 Flowering trees and shrubs should be used to accent the predominantly green landscape of the Academic Core and to provide identity to the quads.

L-7 Functional zoning, water conservation, and other sustainable landscape maintenance practices must be exercised.

L-8 Provide variation in paving color and texture where appropriate. Warm colors should be used to provide richness and human scale, balanced with the use of lighter colors to reduce heat island effects. Use textured concrete with stone, brick paver, or tile accents on main pedestrian spines and asphalt paths within open space areas.

L-9 Vines should be used to enrich large, blank site walls and retaining walls.

L-10 Build on existing the landscape framework in order to define spaces and circulation patterns, provide scale and shade, and provide atmosphere, interest, and character.

L-11 Limit the use of turfgrass to functional areas (e.g., park space, high traffic areas, sitting areas). Use drought-tolerant groundcover or mulch in low-traffic areas.

L-12 Consistent with the concept of "campus as arboretum," encourage diversity in plant materials by using a wide variety of plant species.

Recreational Open Space

L-13 The overall planting should resemble a park with a rich diversity of native and introduced plant materials.

L-14 Aldrich Park and the radial open space corridors should primarily be planted in informal groves of sycamores, oaks, and pines to provide a framework planting augmented by a planting of secondary trees to provide accent color, interest, and diversity.

Designed by Maya Lin, the Arts Plaza contains many drought-tolerant plants native to Southern California (L-7) (Photograph by Hedrich Blessing).

Aldrich Park is preserved as UCI's primary open space area (L-15).

Landscape is used to characterize pathways and add interest to circulation links (L-10).

L-15 Preserve and enhance Aldrich Park and its sub-spaces as the primary campus open space. Designate significant existing trees in the park as campus heritage trees that are to be protected.

L-16 Transitional planting should occur between the large informal park areas and the more urban and manicured quad areas.

L-17 Landscape elements should be utilized to create beneficial micro-climates in public spaces by modifying the effects of sun and wind to increase comfort and encourage use.

L-18 Pathways should be informal and meandering in character.

Natural Open Space

L-19 The Ecological Reserve, outer campus arroyos, and the perimeter edge of the campus should utilize drought tolerant native and naturalized planting palettes (i.e., native grasses, shrubs, and trees such as willows, alders, sycamore, live oak, and coastal sage scrub).

L-20 Provide fuel modification zones and transitional landscape zones along development sites.

L-21 Pedestrian and bicycle trails should be restricted to the perimeter of ecologically sensitive areas in order to protect fragile vegetation and wildlife habitat.

L-22 Pedestrian and bicycle trails should be made of materials that blend into the native landscape (e.g., decomposed granite, asphalt, gravel) and should have meandering alignments related to the topography.

Circulation Landscaping

L-23 Street trees should have consistent themes to define circulation routes, promote identity and to assist in comprehending the campus' vehicular circulation system.

L-24 Roadways in the Academic Core should have a primarily formal streetscape pattern with regular-spaced single or double tree rows.

L-25 All major campus entries and important intersections associated with Peltason Drive and the radial roads should be accented by flowering trees or other accent landscape as well as monument and directional signage.

L-26 In general, roadways in the outer campus should have informal streetscapes composed of native or naturalized species and drought-tolerant ground covers or mulch.

Landscaping for Parking Lots and Structures

L-27 Surface parking lots should be heavily forested with evergreen canopy trees to reduce the negative visual and micro-climatic effects of large paved areas and parked automobiles.

L-28 A minimum of 50 percent of the total parking area shall covered by tree canopy within five years of planting.

L-29 All parking areas must be screened around their perimeters with either plant materials, walls, berms, or a combination thereof.

L-30 The visual impact of parking structures should be mitigated by creating screens of tall evergreen trees and shrub masses, incorporating occupied buidling space, constructing earthen berms, and/or depressing the bottom floor one-half level below grade.

CIRCULATION GUIDELINES

Guidelines for pedestrian, vehicular, and bicycle circulation focus on the following objectives:

- To promote the development of a cohesive community by strengthening the connections between the various campus sectors.
- To balance access and mobility requirements of the campus community with the need to support a quality pedestrian environment, maintain human scale, and achieve campus sustainability objectives.

Pedestrian Circulation

C-1 Establish separate pedestrian, bicycle, vehicular, and service pathways.

C-2 Use grade separation, curbs, bollards, pavement changes, planters, and tree rows to separate pedestrian zones from adjacent vehicular zones.

C-3 Reinforce mall connections between the academic quads and parking facilities in the Academic Core.

C-4 Amenities such as seating nodes, trash receptacles, and drinking fountains should be incorporated into pedestrian pathways.

University Hill's garden park supports a rich diversity of native and introduced plant species (L-13).

A pedestrian bridge above West Peltason Drive connects the Humanities and Arts quads (C-2) (Photograph by Hedrich Blessing).

C-5 Major pedestrian walkways should be no less than eight feet in width to allow walking in groups and to permit wheelchair passage.

C-6 Pedestrian bridges should be provided to link portions of the Academic Core separated by the Peltason Drive (e.g., Biological Sciences Quad, Health Sciences Quad, Humanities/Arts Quad) in order to reduce conflicts between pedestrians and vehicular traffic.

Vehicular Circulation

C-7 Develop a visual identity to express the campus roadway hierarchy (loop roads, radial roads, local streets, service drives, and parking access drives).

C-8 While the dimensions of roadway cross-sections should be based on projected traffic volumes, every effort should be made to maintain the pedestrian experience along campus roadways.

C-9 Provide service access to all buildings.

C-10 Disabled parking spaces should be integrated into new and existing service areas within the academic quads to facilitate convenience and safe access.

Bicycle Circulation

C-11 Provide an extensive network of off-street bike trails to serve the Academic Core and to connect the Core with the outer campus areas, especially the residential neighborhoods.

C-12 Provide on-street bike lanes on all campus roadways (except service roads).

C-13 All bikeways should be identified by posted signs and symbol stencils on the pavement.

C-14 Crossing points between bicycle and pedestrian ways should be clearly identified by posted signs and pavement markings for safety.

C-15 Provide secure bicycle racks or other storage systems throughout the Academic Core. Desirable storage locations include the intersections of bike routes and principal pedestrian malls (e.g., Ring Mall, radial malls).

C-16 Identify additional bicycle routes to the academic quads that minimize conflicts with pedestrian flow and increase cyclist access and convenience.

C-17 Provide secure bicycle racks in all student residential areas to encourage the use of bicycles for intra-campus circulation.

PHYSICAL PLANNING & DESIGN PROCESS

4

The capital planning process at UCI is a multifaceted process of assessment and refinement of needs, alternatives, and priorities in the context of anticipated funding. The Capital Planning unit spearheads the development of the ten-year capital plan, working with campus academic and administrative leadership to identify needs, opportunities, priorities and resources. The planning process for individual projects involves a team effort in which Capital Planning, Design & Construction Services, and Campus & Environmental Planning work with user groups to evaluate detailed space requirements, site alternatives, and construction costs in such a way as to provide the best project possible for the funding available. The capital program as a whole and individual projects within the program are regularly reviewed by campus leadership and others in the context of a variety of committees, as follows:

Capital Program Steering Committee

This committee provides input and oversight into the overall direction of the capital program. Membership includes the Vice Chancellors for Planning & Budget and Administrative & Business Services, the Vice Provost for academic planning, the Associate Executive Vice Chancellor for space management, and Capital Planning staff.

Planning Team

This group meets on a regular basis to update and advise the Executive Vice Chancellor and Provost on issues pertaining to the capital program, project planning, construction, space management, and land management. The membership consists of the Executive Vice Chancellor and Provost; the Vice Chancellors; an Academic Senate

Pictured left: Engineering III.

Pictured above: View of Engineering/ICS radial mall toward Aldrich Park.

representative; Design & Construction Services, planning and budget staff; and other key administrative leadership.

Design Review Team

The Design Review Team (DRT) reviews and advises on campus planning and design issues, including schematic building designs, landscaping, street furniture and signage, building modifications, and other proposals that would result in substantive changes in the appearance of the campus. DRT serves as a first review of proposals and may recommend approval of small projects; more substantial projects are forwarded to the Campus Physical and Environmental Committee for approval. Membership of the DRT consists of the Vice Chancellor for Administrative & Business Services; the heads of Facilities Management, Design & Construction Services, and Campus & Environmental Planning; and the Chair of the Academic Senate Council on Planning & Budget.

Campus Physical and Environmental Committee (CPEC)

CPEC reviews all items involving development of the campus and medical center, including reviewing and recommending changes to the Long Range Development Plan and the design of buildings, roadways and infrastructure, landscaping, and alterations to existing structures; reviewing and monitoring community planning activities that may affect University interests; and reviewing any project or item that would substantively affect the exterior physical appearance of either the campus or medical center. The committee is chaired by the Chancellor; other members include the Executive Vice Chancellor and Provost; every Vice Chancellor; the heads of Facilities Management, Design & Construction Services, and Campus & Environmental Planning; the Chair of the Academic Senate; the Chair of the Academic Senate Council on Planning & Budget; the Chair of the University Hills Homeowners Representative Board; the Director of the medical center; and student representatives.

Sustainability Committee

The purpose of this committee is to advise the Chancellor and other campus administrators on matters pertaining to sustainability and to promote environmental stewardship, sustainable development, and greenhouse gas emission reductions at UCI, including incorporation of sustainable practices into long-range planning and design. Composition of the committee includes staff

from the Office of Information Technology, Campus & Environmental Planning, Capital Planning, Design & Construction Services, Environmental Health & Safety, Facilities Management, Housing, Hospitality & Dining Services, Materiel & Risk Management, and Parking & Transportation Services, along with faculty and student representatives.

Building Advisory Committees

For each major building project, programmatic and design input is overseen by a project-specific committee of faculty, students, administrative leaders, and senior planning and design staff. These committees work closely with the appointed design professionals so that each project meets the predefined program goals and project objectives. In addition, Capital Planning, Campus & Environmental Planning, and Design & Construction Services collaborate to complete required project documentation, including project description and justification analyses, environmental impact assessments, site plans, design documents, construction schedule, and budget. Other campus consultants from Facilities Management, Environmental Health & Safety, Office of Information Technology, etc., also provide technical assistance and advice to the committees.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