

University of California, Santa Cruz
Long-Range Development Plan
2005–2020



September 2006

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Executive Summary

The *University of California, Santa Cruz, Long-Range Development Plan 2005–2020* (2005 LRDP) provides a comprehensive framework for the physical development of the UC Santa Cruz campus.¹ The 2005 LRDP supports UCSC's academic, research, and public service mission while maintaining the campus's strong traditions of environmental stewardship and sustainability.

The draft 2005 LRDP published in January 2005 accommodated a 3-quarter-average enrollment of 21,000 FTE in 2020 and was the basis for the subsequent environmental review. After the distribution of the draft Environmental Impact Report (DEIR) in October 2005 and following an 86-day public comment period, the campus chose to reconsider growth to 21,000 FTE during the 2005-2020 planning horizon and formulated this 2005 LRDP.

The draft EIR analyzed several alternatives to the LRDP project including reduced enrollment alternatives. After careful consideration and review of the comments received from the community and public agencies on both the draft LRDP and draft EIR including discussions with the UC Santa Cruz academic leaders and the UC Office of the President, EIR Alternative 2 (“Reduced Enrollment Growth”) is recommended. This 2005 LRDP reflects that alternative which accommodates a 3-quarter-average enrollment of 19,500 FTE on-campus students.

This document updates and supersedes the 1988 LRDP and plans for development sufficient to accommodate a projected fall-winter-spring on-campus enrollment of 19,500 full-time equivalent (FTE) students. This is an increase of 4,500 students in fall-winter-spring over the 15,000 enrollment projected in the 1988 LRDP, with associated increases in faculty and staff. It represents an increase of approximately 5,100 students over the 2003-04 total enrollment. This projection is based on UC Santa Cruz's aspirations to expand its academic, research, and professional programs and to increase its graduate student enrollment. It also reflects the projected higher education needs of California's population.

1. Including the university-owned property at 2300 Delaware Avenue, Santa Cruz.



The 2005 LRDP includes an overview of the context in which it has been prepared, including a discussion of UCSC's academic history and vision; physical setting; planning history; and planning principles. The Long-Range Development Plan 2005–2020 section of the document articulates a program of development and stewardship, including a land-use plan that meets the needs of proposed campus growth.

Under the 2005 LRDP, UCSC will continue to maintain significant portions of the campus as natural areas and open space. The plan projects that approximately 65 percent of new development will occur in the already developed portion of the campus through carefully sited infill projects, with the remainder allocated primarily to specified areas to the north of the developed campus. Sustainability of resources and of the site's ecological function continues to be a major underlying principle in campus planning, development, and operations.

The 2005 LRDP continues UCSC's development configuration which concentrates academic facilities at the campus center surrounded by the residential colleges, other housing, recreation facilities, and support programs. The 2005 LRDP allows for about 3,175,000 gross square feet of additional building space to accommodate UCSC's academic, research, and public service mission as enrollment grows.

The 2005 LRDP promotes a walkable campus by strengthening pedestrian corridors, proposing pedestrian bridges to connect new and existing development, and by identifying locations for new consolidated parking facilities at the perimeter of the academic core. Improvements to east/west campus circulation between Heller Drive and Coolidge Drive are also identified to reduce the number of private vehicles in the core and promote shuttle and transit ridership. The 2005 LRDP proposes new circulation improvements, including a road to the north to serve academic and support programs, extension of Meyer Drive, and a new access road from Empire Grade.

The 2020 planning horizon of the 2005 LRDP was chosen to match the original horizon of the City of Santa Cruz's new General Plan, underscoring the interrelatedness of UCSC and the greater community.



**ILLUSTRATIVE PLAN:
EXISTING CENTRAL AND
SOUTH CAMPUS**

2. Introduction

- a. Purpose and Scope
- b. Planning Process
- c. 2005 LRDP Objectives



a. Purpose and Scope

A Long-Range Development Plan is defined as “a physical development and land use plan to meet the academic and institutional objectives for a particular campus or medical center of higher education.”² It is updated periodically to meet changing needs and conditions. This process ensures that campus development supports academic, research, and public service goals, while also responding to UC systemwide policies and projected enrollment demand.

The *UC Santa Cruz Long-Range Development Plan 2005–2020 (2005 LRDP)* provides a comprehensive framework for the physical development of the UC Santa Cruz campus over a 15-year period. It includes a land-use map to guide capital construction and infrastructure development to accommodate a building program for campus growth. The 2005 LRDP accommodates a projected fall-winter-spring average student enrollment of up to 19,500 students through 2020 (an increase of approximately 5,100 over the 2003–04 total enrollment), with associated increases in faculty and staff.

Under the Master Plan for Higher Education, the University of California is asked to accommodate all eligible students from among the top 12.5 percent of high school graduates in California who choose to attend, as well as the top 4.5 percent of graduates from each high school, and eligible community college transfer students. Student enrollment demand for higher education in California is expected to increase significantly over the next fifteen years due to a number of factors, including: substantial state population growth; an increase in the proportion of college age students; and an increasing per capita participation in college education spurred in part by the economic boom of the 1990s. In response to this projected enrollment demand, the President of the University of California asked each UC campus to consider the feasibility of accommodating additional enrollment growth. Accordingly, UCSC is updating its planning to accommodate an enrollment of approximately 19,500 full-time equivalent (FTE) 3-quarter average on-campus students by 2020. In order to meet the academic goals and objectives of the campus in light of this proposed growth in student enrollment, UCSC is updating the 1988 LRDP—a physical plan that was designed to accommodate an on-campus enrollment of approximately 15,000 FTE students by 2004-05. LRDP Alternative 2 (“Reduced Enrollment Growth”) enables the campus to make progress toward articulated LRDP objectives for the 2005-2020 timeframe.

The LRDP's 2005 through 2020 planning horizon was selected, in part, to coordinate UCSC's planning horizon with that of the new City of Santa Cruz General Plan. City and county officials have participated in and were consulted during the planning process. While UCSC neither anticipates reaching the 2005 LRDP on-campus student enrollment nor constructing the full 2005 LRDP building program before 2020, attainment of campus enrollment of 19,500 students prior to 2020 would trigger the need for an LRDP revision at that time.

2. California Public Resources Code section 21080.09.

The 2005 LRDP is accompanied by the **2005 LRDP Environmental Impact Report (2005 LRDP EIR)**, as required by the California Environmental Quality Act (CEQA). The 2005 LRDP EIR presents detailed discussion of UCSC's existing environmental setting, the potentially significant environmental impacts of the 2005 LRDP, proposed mitigation measures, alternatives, and the cumulative effects of projected campus and regional growth. The 2005 LRDP (as well as a mitigation monitoring program) will be adopted following certification of the 2005 LRDP EIR by The Regents of the University of California.

UCSC's 2005 LRDP does not constitute a mandate for growth, nor is it a detailed implementation plan for development. It does not commit the campus to carrying out development on any given timeline. Each specific capital project proposal will be analyzed individually for consistency with the 2005 LRDP and 2005 LRDP EIR and will be subject to review under CEQA for any potentially significant environmental impacts not analyzed in the 2005 LRDP EIR.

The 2005 LRDP addresses only the development of the main UC Santa Cruz campus and the property at 2300 Delaware Avenue, Santa Cruz. It does not include UCSC-managed field and research facilities off the main campus site, such as Mt. Hamilton Lick Observatory or the Marine Science Campus, which has its own Coastal LRDP.

b. Planning Process

The 2005 LRDP is the product of a multi-year process that involved the faculty, administration, staff, and students of UC Santa Cruz, as well as local and regional officials and interested members of the community. This LRDP includes revisions to reflect EIR Alternative 2 (“Reduced Enrollment Growth”) analyzed in the draft EIR.

The process was initiated in fall 2003, with the appointment of the Strategic Futures Committee (SFC),³ which included a broad spectrum of faculty and academic administrators from across UCSC's divisions. The committee was charged with identifying the range of potential academic programs that might be considered by UCSC between 2005 and 2020. It was asked to articulate the academic rationale, principles and factors related to growth; identify significant or emerging academic directions; quantify physical requirements; define the qualities of the UCSC campus that should be addressed; and to recommend a student enrollment on which to base the 2005 LRDP.

The SFC recommended that the 2005 LRDP accommodate a total on-campus three-quarter-average enrollment of 21,000 full time equivalent (FTE) students. This projected enrollment includes an increase in the proportion of graduate and professional students to 15 percent of overall campus enrollment.

In developing this enrollment scenario, the SFC identified a rate of growth to balance the needs of UCSC's academic and research vision with the ability of the campus to reasonably accommodate growth. After reviewing comments received on the draft EIR and following discussions with the academic leadership, the campus chose EIR Alternative 2 (“Reduced Enrollment Growth”) analyzed in the draft EIR and as reflected in this LRDP to accommodate a 3-quarter-average enrollment of 19,500 FTE on campus students.

At the same time, a 2005 Long-Range Development Plan Committee was appointed and charged with overseeing the development of UCSC's updated LRDP. Reflecting UCSC's broad constituency, the LRDP Committee was made up of faculty, administrators, staff, and students, as well as representatives of the City of Santa Cruz, the County of Santa Cruz, the UC Office of the President, the UCSC Alumni Association, and the UC Santa Cruz Foundation.

Collaborating with the SFC, the 2005 LRDP Committee discussed campus land-use options related to various enrollment scenarios, including implications for the surrounding community. Throughout this process, the committee's work was informed by a strong sense of stewardship for UCSC's distinctive natural environment.

The work of these two committees was supported by Cooper, Robertson & Partners, a firm of architects and campus planners, and a team of subconsultants selected by UCSC to assist in updating the campus's LRDP.

3. Strategic Futures Committee reports: <http://planning.ucsc.edu/SFC/>. An archive of the website is available at UCSC McHenry Library Special Collections.

The 2005 LRDP Committee held a series of well-publicized public workshops⁴ during the 2003-04 academic year and fall 2004, and also consulted with UCSC students, faculty, and staff through a series of meetings, presentations, and town hall gatherings. Topic-based committee work groups prepared white papers⁵ addressing the following key issues:

- Campus and Community
- Housing and Student Life
- Infrastructure and Technology
- Land Use and Environment
- Transportation and Circulation

The white papers provided brief summaries of the 1988 LRDP, existing conditions, key physical issues, and possible approaches for addressing these issues. The *Campus and Community White Paper* covered a broader range of issues. In addition, a group of students met informally and developed a *Student Involvement White Paper*, which was presented to the 2005 LRDP Committee.

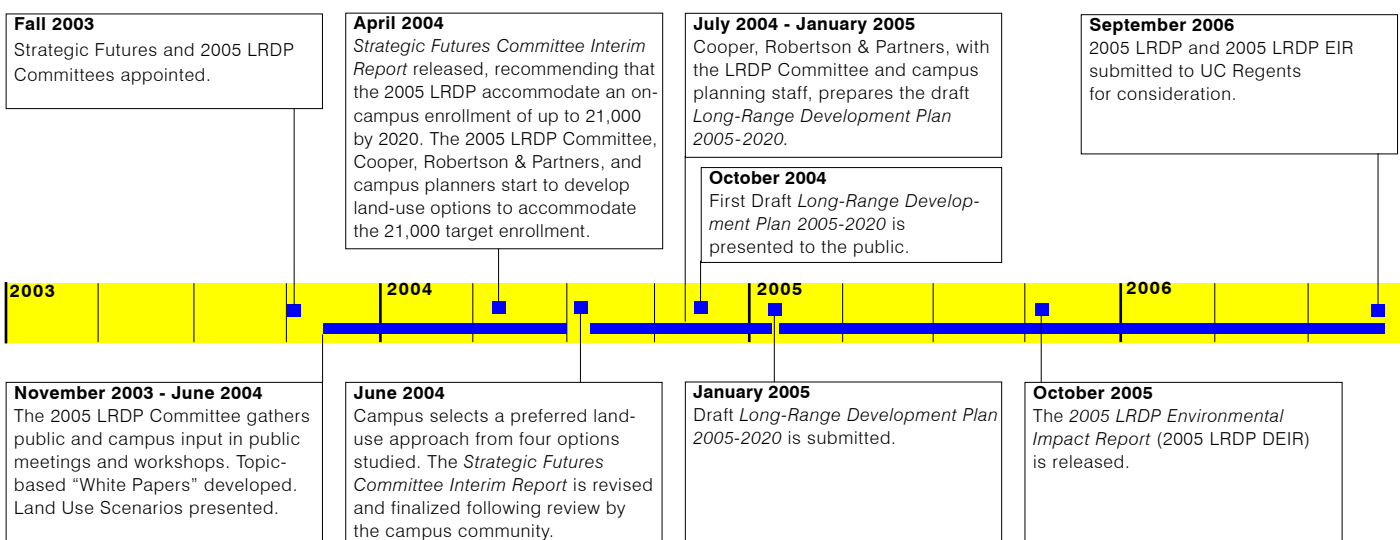
Throughout this process, regular press releases kept the campus and broader community informed of opportunities to become involved in campus planning, including five LRDP public workshops. Periodic updates were posted on UCSC's Long-Range Development Plan website.⁶ The major milestones in UCSC's 2005 LRDP process are reflected in the following timeline.

4. Refer to Appendix B for a list of public workshops.

5. The white papers are available at UCSC McHenry Library Special Collections.

6. <http://lrpd.ucsc.edu>. An archive of the website is available at UCSC McHenry Library Special Collections.

2005 LRDP TIMELINE



c. 2005 LRDP Objectives

The 2005 LRDP describes a physical planning framework that supports the three elements of the University's mission: teaching, research, and public service. This framework, that will guide development at UC Santa Cruz, is founded on the following LRDP objectives:

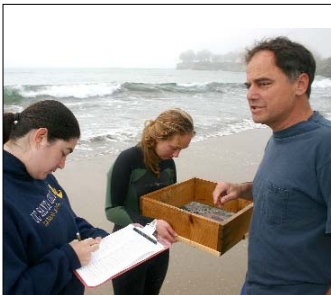
Provide for instruction, research, support, residential facilities, and infrastructure needed to:

- Accommodate anticipated enrollment growth and program development;
- Support the breadth and depth of undergraduate and graduate academic programs and professional degree programs;
- Accommodate the expansion of high-quality research programs;
- Allow the campus to expand its contribution to the public cultural life and economic well being of the region through public programs, events, and services.



Develop facilities to foster a dynamic intellectual and social community, specifically:

- Locate new facilities on the main campus to build on the established foundation of human and physical resources already in place and to encourage interdisciplinary collaboration;
- Provide facilities and spaces that will enrich the collaborative learning environment for the on-campus student community and encourage academic, personal, and social development.



Develop a physical environment that will support educational opportunities for an increasingly diverse population.

Retain flexibility that will allow continuing evolution of the campus over time in response to changing demographics, societal needs, technological developments and new external challenges.



Respect and reinforce the Physical Planning Principles and Guidelines to maintain the unique character of the UC Santa Cruz campus.



3. Planning Context

- a. Section Overview
- b. UC Santa Cruz and the University of California
- c. Academic and Research Programs
- d. UC Santa Cruz Physical Planning History
- e. UC Santa Cruz as Part of the Regional Community
- f. Existing and Approved Development
- g. Campus Physical Setting



a. Section Overview

This section provides an overview of the UCSC campus, including its history, original vision, physical setting, and achievements. It summarizes UCSC's role as part of the larger University of California system; as a nationally prominent research institution; as part of the greater Santa Cruz community; and as a physical place.

As a public academic institution, the University of California must be responsive to changing demographics, societal needs, technological developments, economic conditions, and resource constraints. Since the UCSC campus was established in 1963, California has developed into the world's fifth largest economy, with the most culturally and ethnically diverse population in the U.S.⁷ The state's population has doubled to approximately 35.5 million,⁸ and the enrollment of the UC system has more than tripled (from approximately 65,000 to more than 208,000).⁹ The City and County of Santa Cruz have also undergone significant growth, and that expansion has been closely intertwined with the development of UCSC.

With California's growing population and changing demographics have come many pressing problems related to housing, transportation, resource use, and environmental quality. The past 40 years have also seen advances that could not have been foreseen by the campus's original planners, including the widespread use of computers, the rise of the Internet, advances in the technology fields, increased attention to sustainable growth, and an increasingly diverse population.

In light of these many changes, UCSC's success in realizing the major elements of its original 1963 Long Range Development Plan is a testament to the founders' vision, and it also underscores the success of UCSC's ongoing academic and planning efforts. The challenge of the 2005 LRDP is to develop a cohesive physical plan, while retaining the flexibility to address unexpected opportunities and changes.

7. State of California Commerce and Economic Development Program, 2003.

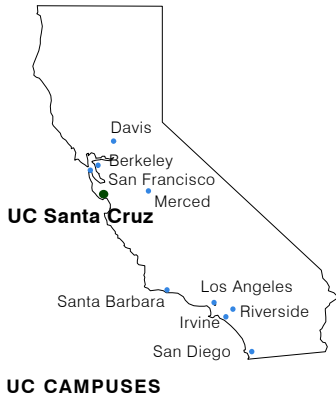
8. U.S. Census Bureau, 2004

9. UC Office of the President, Fall 2003



Aerial view of the UC Santa Cruz campus looking toward the City of Santa Cruz and Monterey Bay

**b. UC Santa Cruz and
The University of
California**



Since its founding in 1868, the University of California has become one of the world's premier public universities, establishing ten distinct campuses united by excellence and strengthened by diversity. Within that rich tradition, the UC Santa Cruz campus was established in 1963. At the time, the vision for UCSC was quite experimental and unique to the system—to combine the University of California's renowned strengths in scholarship and research with a strong commitment to undergraduate education. Integral to that vision was a campus structure that offered students the best of both worlds—the resources and academic rigor of a major research university, combined with small residential colleges that provided supportive living and learning communities. The goal, in the words of Clark Kerr (then President of the University of California), was to create a campus that would "seem smaller even as it grows larger."

The site selected for the new campus was a 2,000-acre portion of the historic Cowell Ranch overlooking Santa Cruz and the Monterey Bay. Expansive meadows at the campus's main entrance gradually transition to the rugged redwood forests of the Santa Cruz mountains, providing an incomparable natural setting. Often called the most spectacular university site in the world, the campus landscape has played a vital role in shaping UCSC's physical and academic development.

As part of the University of California system, the UC Santa Cruz campus shares the overarching UC mission to provide teaching, research, and public service for the people of California. Under the California Master Plan for Education, UC draws students from the top 12.5 percent of California high school graduates, making it the state's premier institution of higher learning. In the UC system, growth is being handled in various ways, including the establishment of a new campus at Merced, increasing the number of summer classes, and offering more off-campus opportunities through programs like Education Abroad. In addition, the campuses are seeking to expand their regular school-year enrollments. Each campus is planning for a reasonable share of the increase.



UCSC campus site, circa 1962. Contemporary images from original negatives by Ansel Adams, UCR/California Museum of Photography, Sweeney/Rubin Ansel Adams Fiat Lux Collection, UC Riverside.

c. Academic and Research Programs



UC Santa Cruz recognizes that excellent undergraduate education, strong graduate and professional programs, and dynamic research activities are all essential and mutually supportive elements of a comprehensive modern university. Strong graduate and professional programs support research initiatives and invigorate undergraduate education. Quality research programs provide optimal training for graduate students and also offer early research opportunities for undergraduates. Research excellence provides the intellectual vigor and academic stature necessary to attract top faculty and students.

Though UC Santa Cruz is a relatively young campus, it has already established itself as a world-class institution that balances its commitments to undergraduate education, graduate training, and research. Undergraduates pursue 52 majors in the humanities, physical and biological sciences, social sciences, arts, and engineering. Graduate students work toward certificates, master's degrees, or Ph.D. degrees in 33 academic fields. In 2003-04, the campus enrolled approximately 14,400 students (FTE)¹⁰, including 1,300 graduate students, with a total of 750 budgeted faculty FTE.

In order to increase the depth and breadth of disciplinary and interdisciplinary education and research, and hence advance in stature as public research university, the campus will need to expand existing graduate and research programs as well as develop new programs, schools and research institutes. This will enable advances in basic and applied research, increase opportunities for graduate training, and provide research experiences for undergraduates. Through the direct benefits of research and scholarship at UCSC and by training new generations of leaders, the campus will continue to serve the people of California.

¹⁰. Includes approximately 300 students enrolled in off-campus programs.



**d. UC Santa Cruz Physical
Planning History**

In the 1950s, the University of California initiated an extensive search for new campus sites. The historic Cowell Ranch near Santa Cruz was chosen in 1961, and a distinguished team of designers and planners set to work on the new campus. The first UCSC LRDP was completed in 1963, and construction of the campus began in 1964.

1963 LONG-RANGE DEVELOPMENT PLAN

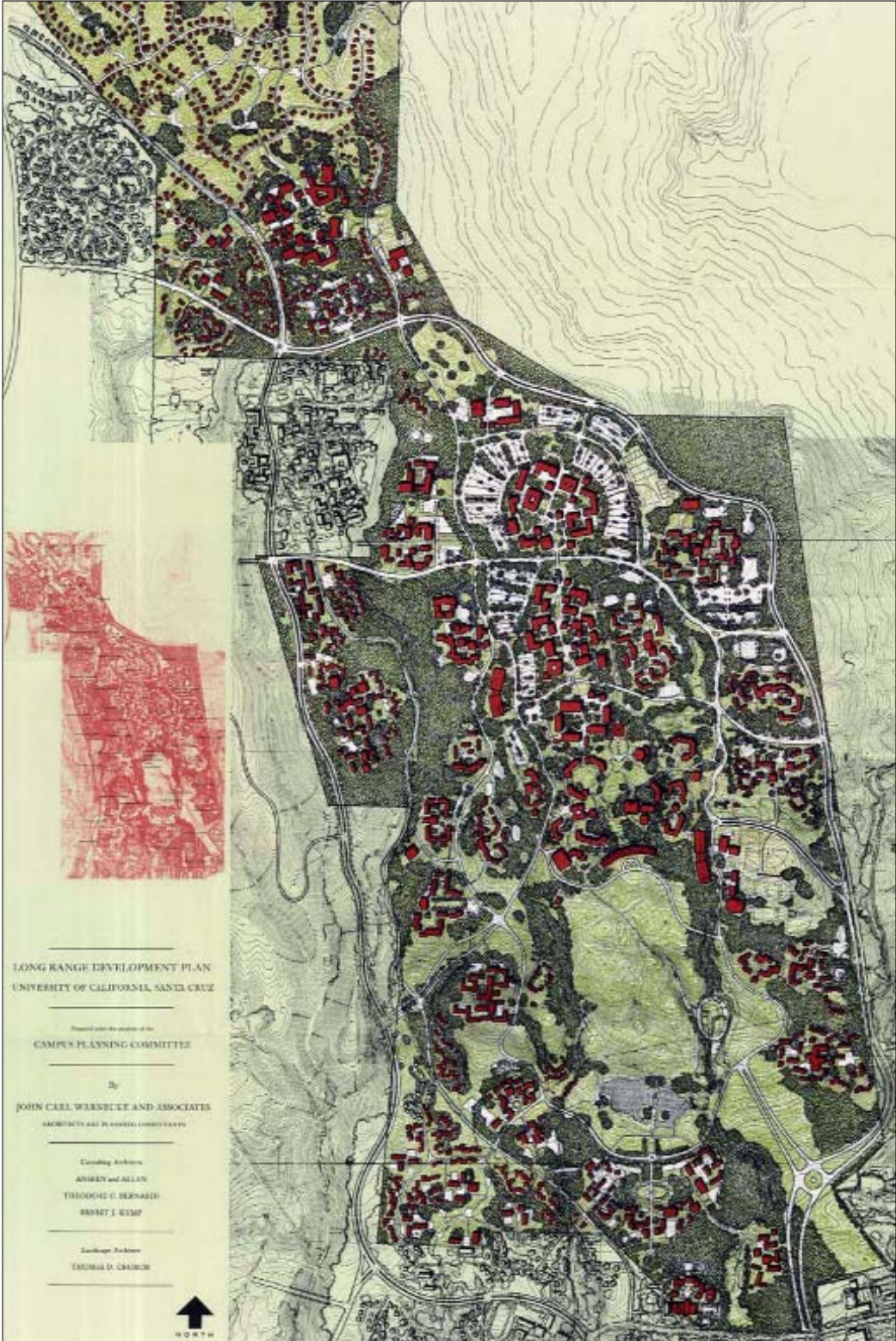
UCSC's *1963 Long Range Development Plan* responded to the opportunities and challenges presented by both the new campus's innovative collegiate structure and the large and geographically diverse Cowell Ranch site. In their thoughtful approach to this task, the early planners established the basic values and stewardship guidelines that continue to guide campus development.

The 1963 LRDP assumed that the campus would grow to an enrollment of 27,500 by 1990 to accommodate the anticipated "baby boom" and accelerated migration into California. It described a campus that would eventually consist of up to 20 residential colleges and ten professional schools extending the full length and breadth of the campus. It called for housing at least 50 percent of the student body and faculty on or near the campus.

The 1963 plan defined the following planning premises:

- A moderately dense central academic and research core encircled by lower density development consisting of self-contained colleges and professional schools
- A commitment to environmental stewardship, including the protection of significant natural features (such as the expansive meadow at the base of the campus) and establishment of natural reserve areas
- Ongoing cooperation with the surrounding communities with the goal of "mutually advantageous growth"

FIGURE 1
1963 LRDP LAND-USE PLAN



UCSC campus site, circa 1962. Contemporary image from original negative by Ansel Adams, UCR/California Museum of Photography, Sweeney/Rubin Ansel Adams Fiat Lux Collection, UC Riverside.



1971 LONG-RANGE DEVELOPMENT PLAN

The first revision of the original LRDP was adopted in 1971. Like the earlier document, it assumed an eventual enrollment of 27,500, but suggested a longer time frame for achieving that target (2000 or beyond). The 1971 plan also called for a denser central core to increase community cohesion, pedestrian convenience, and environmental protection.

The 1971 LRDP identified significant natural resource areas. It also designated three large Inclusion Areas to accommodate activities that, while not directly related to academic activities of the campus, would provide facilities or services advantageous to the functioning of the campus community.

1978 LONG-RANGE DEVELOPMENT PLAN

In the late 1970s, state budget cutbacks and reduced enrollment forecasts resulted in a scaling back of UCSC's expansion plans. The *1978 Long Range Development Plan* was set in a framework of more limited projected growth than either of the previous plans. It called for intensification of development in the campus core to enable UCSC to accommodate an enrollment of 7,500.

Following the lead of its 1971 predecessor, the 1978 plan identified three large Inclusion Areas and added a fourth. Proposed building sites were tightly circumscribed, and much of the remainder of the campus was identified as Reserve Areas. Energy conservation, preservation of the natural environment, and close community relationships were cited as key campus planning objectives.

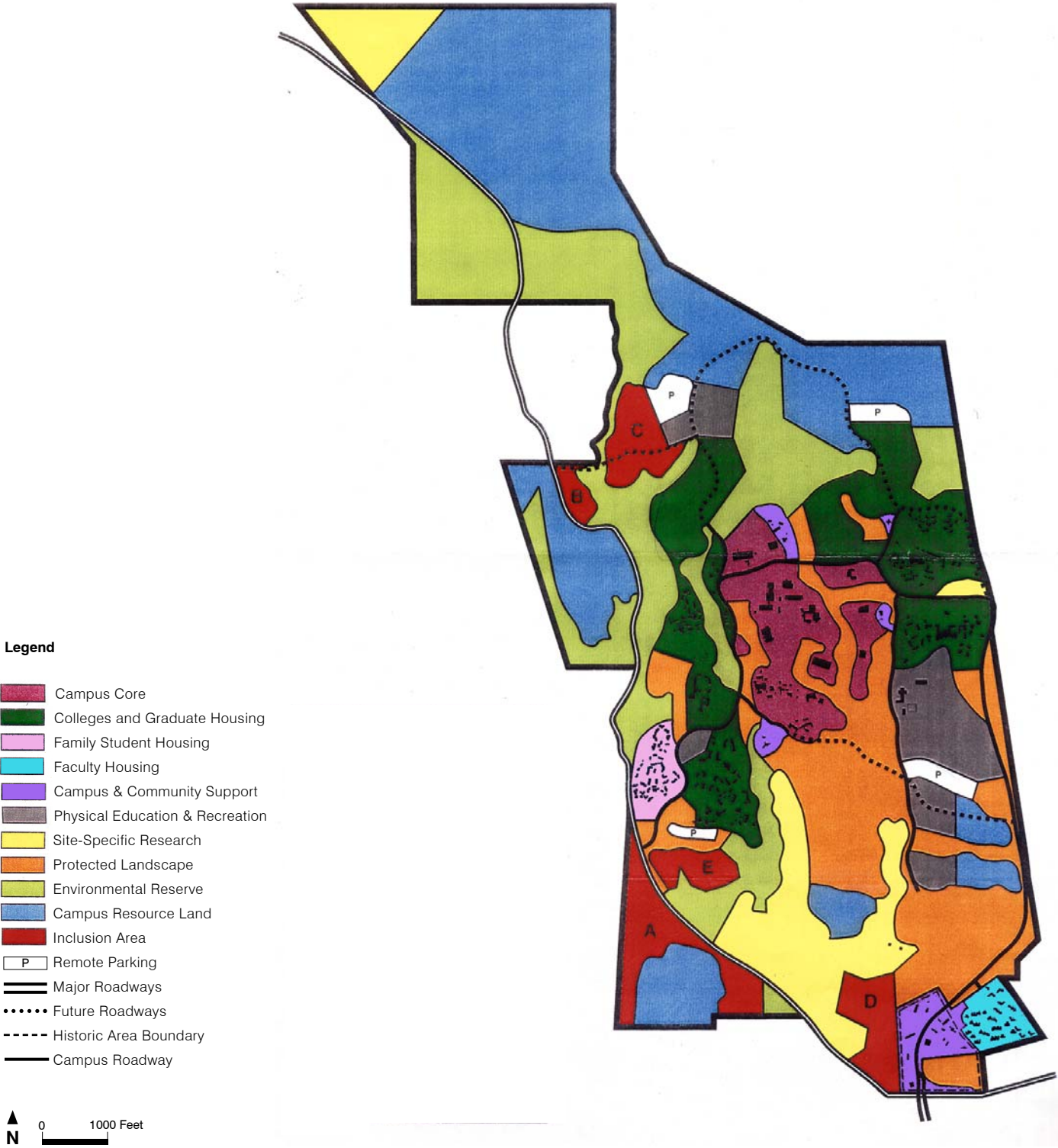
1988 LONG-RANGE DEVELOPMENT PLAN

UC Santa Cruz's most recent LRDP, prepared in 1988, was predicated on the campus's 1985 *Twenty-Year Academic Plan*, which established objectives through 2004-05. The academic plan projected an enrollment of 15,000 (including 15 to 20 percent graduate students) by 2004-05. The 1988 LRDP reaffirmed UCSC's commitment to:

- A concentrated, pedestrian-friendly academic/research campus core, surrounded by distinctive residential colleges
- The role of the colleges as important centers of intellectual and residential life
- Preservation of the natural setting

The 1988 LRDP assumed 7.5 million gross square feet of building area; 12 residential colleges; and up to 8,400 parking spaces. It also set out general guidelines that limited development in certain natural areas from development, including establishment of the Campus Environmental Reserve, designed to protect natural features of particular teaching and research value to the campus. Protected Landscapes were established to protect certain environmental resources, including wildlife corridors and vegetation with ecological or aesthetic importance (see Figure 2, 1988 LRDP Land-Use Plan). Campus Resource Land, located primarily in the northern portion of the campus, was designated for possible future development, but was to be maintained almost entirely in its natural state under the terms of the 1988 LRDP.

FIGURE 2
1988 LRDP LAND-USE PLAN



e. UC Santa Cruz as Part of the Regional Community



Regional Context

The UC Santa Cruz campus is located within Santa Cruz County at the northern end of the Monterey Bay, approximately 70 miles south of San Francisco, 30 miles southwest of San Jose, and 30 miles north of Monterey. The campus is surrounded on three sides by open space which is protected in its natural state and administered by California State Parks and the City of Santa Cruz. Of UCSC's 10.6-mile perimeter, 1.75 miles adjoin the developed city. Approximately 53 percent of campus land, including most of the developed area, is located within the Santa Cruz city limits, and the remainder of the campus lies in the unincorporated area of Santa Cruz County (see Figure 3, Campus Boundaries).

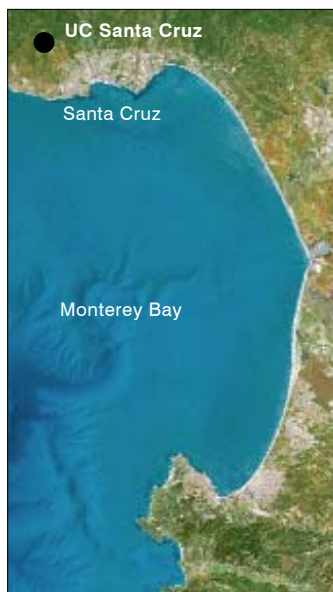
As a constitutionally autonomous state entity, the University of California and its campuses are governed by state law and Regental policy, and are not subject to local land-use regulations. UC Santa Cruz is an integral member of the regional community, linked by physical proximity, economic interdependence, shared resources and infrastructure, as well as by a rich shared cultural life. UCSC is therefore committed to working closely with local municipalities to address the potential impacts of campus growth.

The University contributes significantly to the region's economy. UC Santa Cruz is the largest single employer in Santa Cruz County. The total economic impact of UCSC is much greater than the sum of direct expenditures made by UCSC and its affiliated organizations and populations. Each dollar spent locally cycles through the area economy, generating additional income and employment.

UCSC's 1988 LRDP called for increased planning consultation and review with the City of Santa Cruz, and that recommendation has led to formal "town-gown" collaboration. Regular meetings are held between the chancellor and the mayor to ensure overall planning coordination. City, county, and UCSC staff work together on an ongoing basis to address specific issues affecting the community.

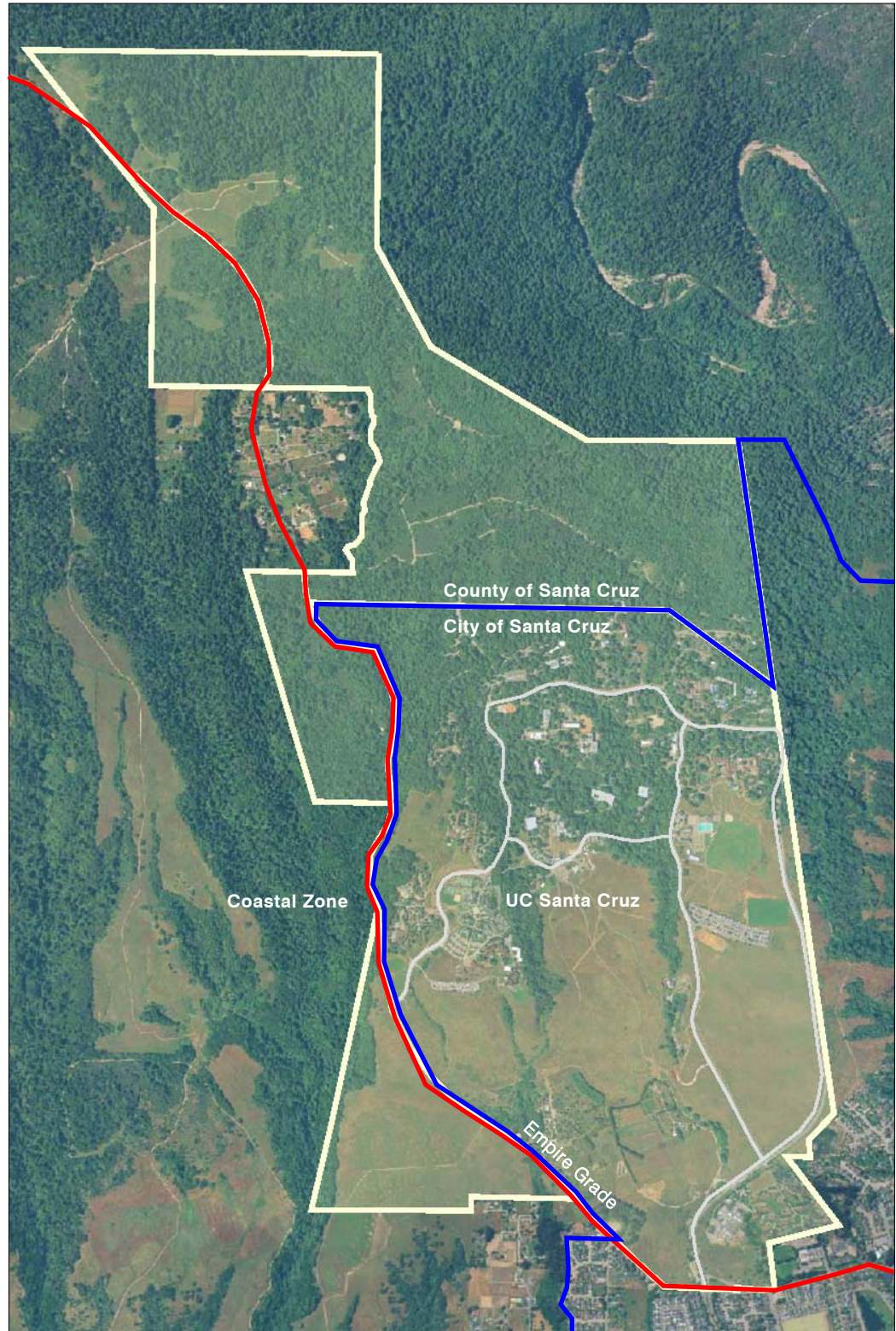
As the regional population increases, addressing the following key issues is essential to the planning processes of UCSC and the city:

- Resources and infrastructure capacity (such as water, sewer, and utilities)
- Housing
- Traffic and transportation



UCSC site on Monterey Bay

FIGURE 3
CAMPUS BOUNDARIES



RESOURCES AND INFRASTRUCTURE

UC Santa Cruz receives water and sewer treatment services from the City of Santa Cruz. Water supply has been identified as a key issue. While the City of Santa Cruz water supply system is essentially the same as in 1960, the service population has increased 190 percent and is expected to increase. In normal and wet years, the water supply system is capable of meeting the needs of the current population, but even without population increases, the system is highly vulnerable to shortages in drought years.¹¹

UCSC's 1988 LRDP introduced a two-pronged approach to water issues—conservation to reduce water usage and University Assistance Measures to help the city improve its infrastructure. In calendar year 2003, UCSC's water usage was approximately 19 percent greater than in 1986–87, a period during which enrollment increased by 60 percent.

HOUSING

Rapidly increasing housing demand along much of the California coast (including Santa Cruz), coupled with limited supplies and a shortage of vacant land, make housing supply and affordability critical issues for the entire region. UCSC growth increases the pressure on the housing supply, and high housing costs make it more difficult to recruit students, faculty, and staff.

UCSC has worked to develop the housing needed to keep pace with enrollments. Between 1996–97 and 2005–06, the campus will have added housing for 2,153 students and 144 units for employee housing.

11. City of Santa Cruz 2005-2020 Draft General Plan and Coastal Program Background Report, March 2004

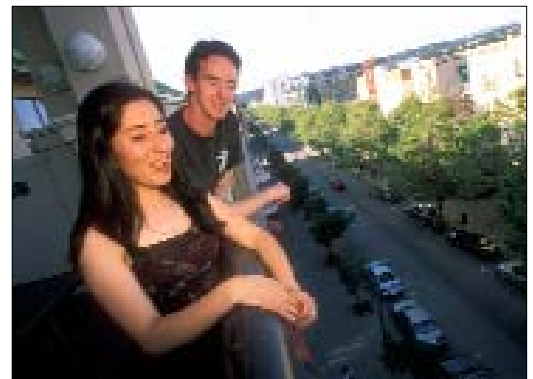
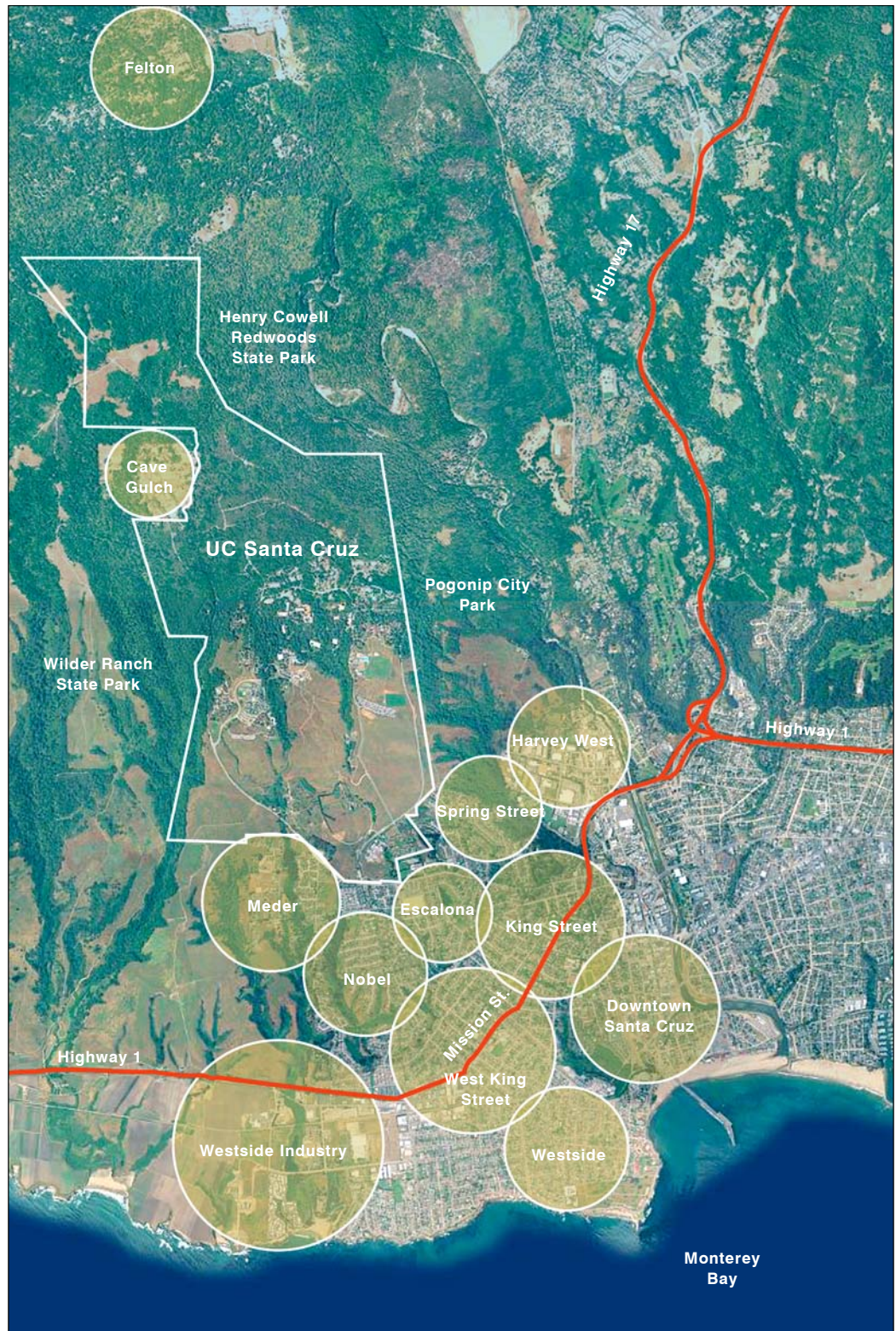


FIGURE 4
NEIGHBORHOOD SETTING



TRAFFIC AND TRANSPORTATION

One of the most critical planning challenges facing the region is that the number of automobile trips continues to increase faster than the growth of the population.¹² Projected increases in UCSC's population will increase pressure on citywide transportation systems, especially on the west side of Santa Cruz. The UCSC campus is served by a handful of streets which pass through residential neighborhoods, as shown in Figure 4, Neighborhood Setting. Further, the campus core is located more than a mile from the main entrance, and dramatic elevation changes over that distance present challenges for those traveling to the campus by bicycle or foot.

UCSC has taken an aggressive approach to reducing automobile use. It has one of the most successful university based alternative transportation programs in the country, with more than 55 percent of all "person trips"¹³ to and from the campus made via some alternative to a single occupant vehicle. This success has been achieved through a broad range of transportation management strategies, including convenient shuttle and public transportation services; a network of pedestrian and bicycle paths; parking management; and a program of incentives to reduce employee and student automobile use.

Parking is a closely related issue and remains a challenge for the UCSC campus. Parking restrictions (such as not providing parking permits for first and second-year campus resident students) have been effective in limiting on-campus automobile use, but have also resulted in the use of neighboring residential streets for parking during the day as well as for some long-term and overnight use. The City has instituted a residential parking permit program in a number of neighborhoods near the campus.

12. City of Santa Cruz 2005-2020 Draft General Plan and Coastal Program Background Report, March 2004

13. UCSC Transportation and Parking Services Modal-mix Studies 2003-04



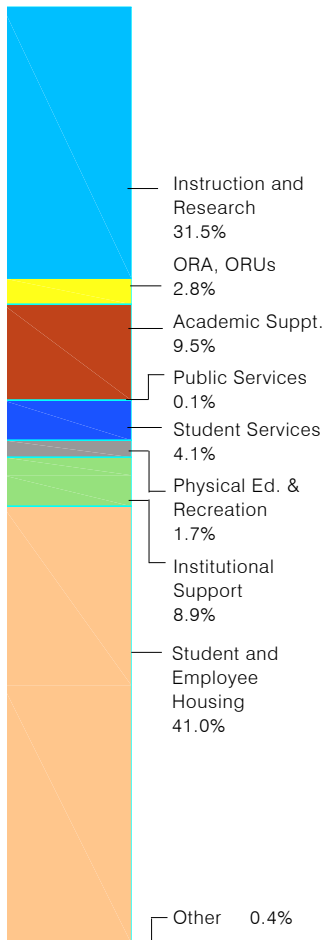
f. Existing and Approved Development

The developed area of the UC Santa Cruz campus (existing and approved)¹⁴ includes 3,113,000 assignable square feet (ASF) and 4,825,000 gross square feet (GSF)¹⁵ in 420 separate buildings within 116 building complexes. This includes existing buildings and projects approved and funded after adoption of the 1988 LRDP. Campus space is classified into eight major program categories, shown below.

**TABLE 1
EXISTING AND APPROVED
CAMPUS DEVELOPMENT**

Program Classification	ASF	GSF
Instruction and Research (I & R)	913,900	1,522,500
Organized Research Units & Organized Research Activities	86,700	136,500
Academic Support	322,000	459,000
Public Services	1,400	2,400
Student Services	134,700	200,500
Physical Education and Recreation	56,800	82,000
Institutional Operations	164,000	428,300
Student and Employee Housing	1,419,600	1,973,000
Other	13,900	20,800
Total On-Campus Space	3,113,000	4,825,000

**TOTAL ON-CAMPUS
SPACE, EXISTING AND
APPROVED**



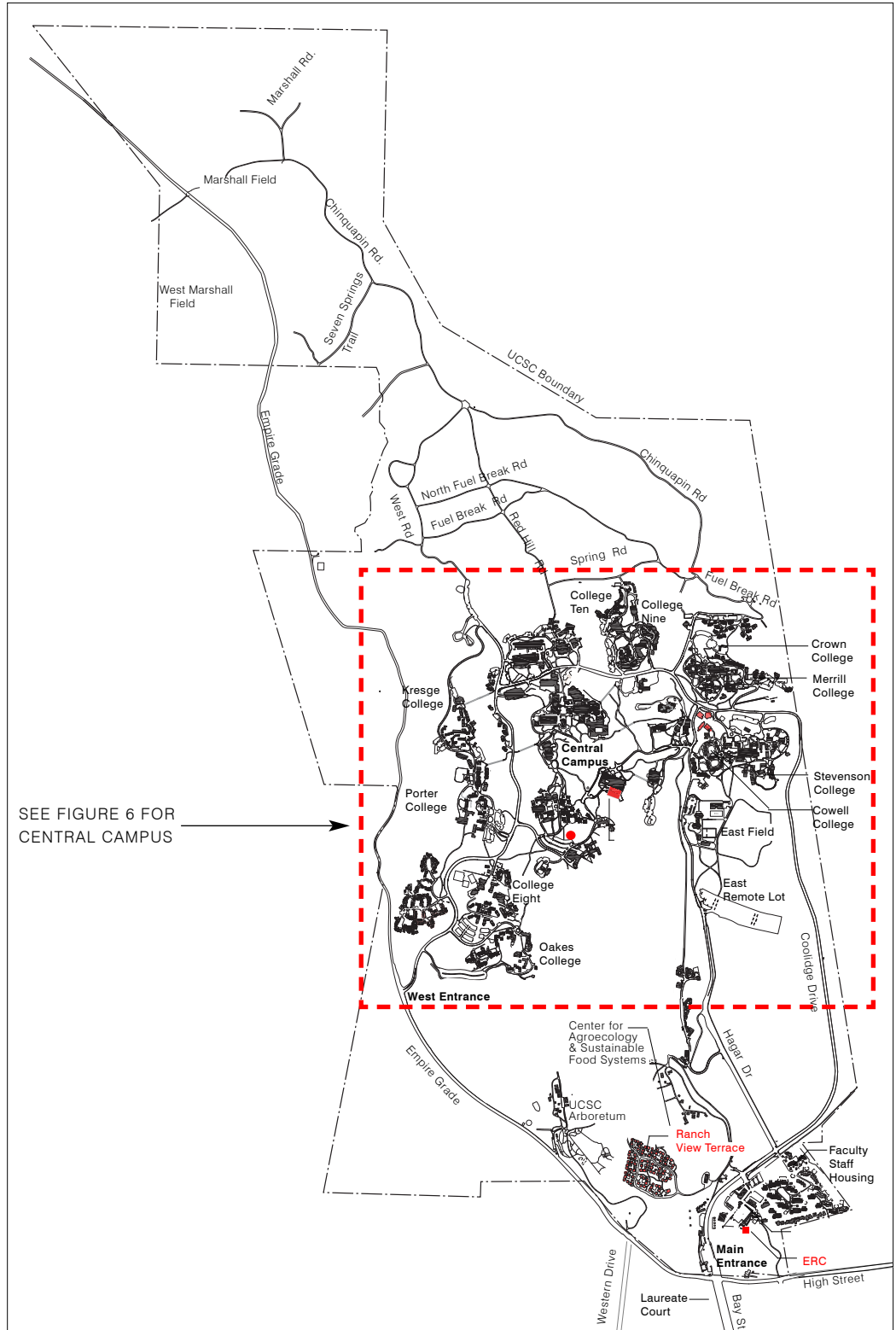
Existing and approved on-campus space is shown by building and program classification in Appendix A. On-campus space is supplemented with space the campus owns or currently leases off-campus, consisting of 471,000 ASF and 618,000 GSF in 96 buildings within 29 complexes.

The amount of space that can be used for programs (functions) or assigned to occupants is known as assignable square feet. Gross square feet is the sum of all areas, finished and unfinished, on all floors of an enclosed structure. It includes the assignable square feet, circulation and mechanical areas, custodial services and public toilet areas, structural elements, and one-half of covered unenclosed areas.

14. See Appendix A
15. 1988 LRDP allowed up to 7.5 million gsf.



**FIGURE 5
EXISTING AND APPROVED
DEVELOPMENT**



g. Campus Physical Setting

The 2,000-acre UCSC campus is located 70 miles south of San Francisco in the County of Santa Cruz between the northwest edge of the City of Santa Cruz and the Santa Cruz Mountains. The city borders the northern edge of the Monterey Bay (see Figure 7, Physical Context), which is part of the Monterey Bay National Marine Sanctuary, a federally protected marine environment. Both the Marine Sanctuary and the Santa Cruz Mountains are known for their habitat richness and diversity.

The campus is bounded by Pogonip City Park and Henry Cowell Redwoods State Park to the east, private land holdings to the north, and Wilder Ranch State Park to the west. As a central link between the city and state parks, the campus recognizes its role in conserving open space for habitat continuity. UCSC and the state and city parks have worked collectively to maintain recreation links, monitor rare species, and create and manage restoration areas.

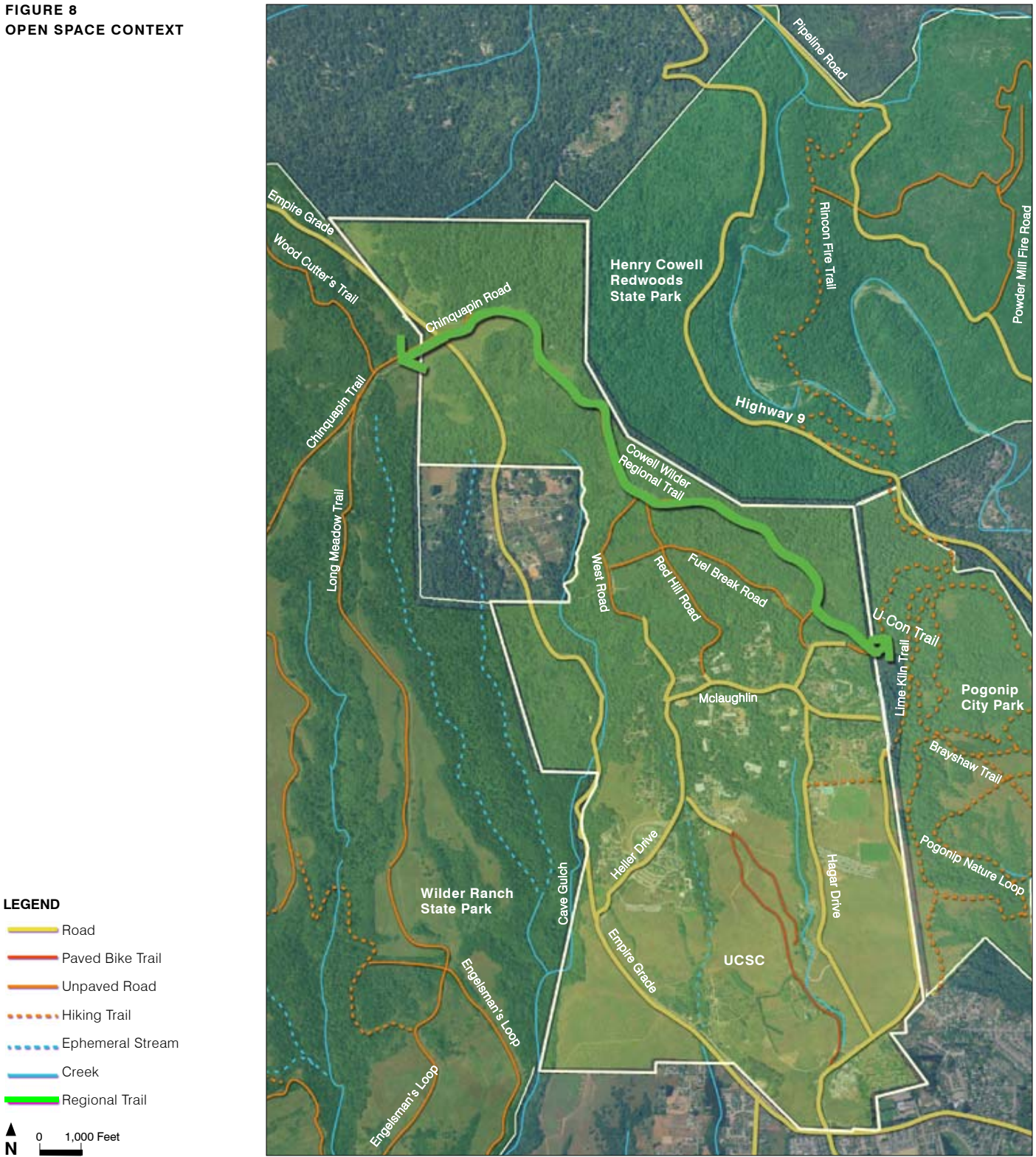
**FIGURE 7
PHYSICAL CONTEXT**



CAMPUS SITE SUMMARY

Area	2,030 Acres
Width	1.30 Miles
Length	3.26 Miles
Perimeter	10.6 Miles

**FIGURE 8
OPEN SPACE CONTEXT**



In addition to its role as part of a regional ecosystem, UCSC is an important link in the local network of recreational trails and fire roads. The University Connection (known as U-Con) Trail provides a critical east-west link across the northern campus for the Cowell Wilder Regional Trail, used by hikers, bicyclists, and equestrians (see Figure 8, Open Space Context).

CAMPUS LANDSCAPE AND OPEN SPACE

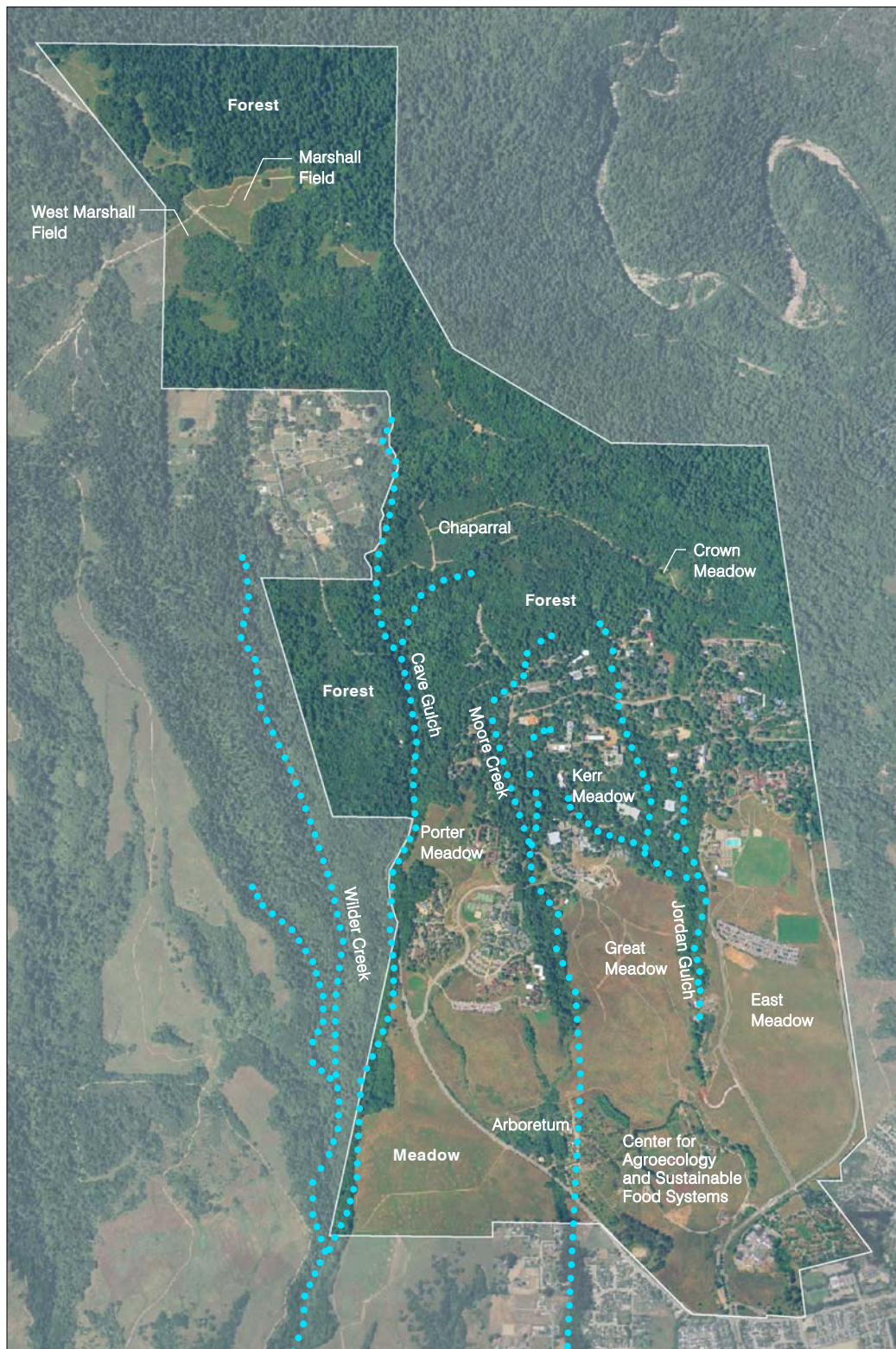
The natural landscape is the formative, iconic element of the UCSC campus and the dominant component of its powerful array of open spaces. Connected by paths and bridges, building clusters are carefully integrated into the topographic and natural features of the campus—between the ravines, hidden within the forest, or lining the edges of the meadows (see Figure 9, Campus Natural Features).

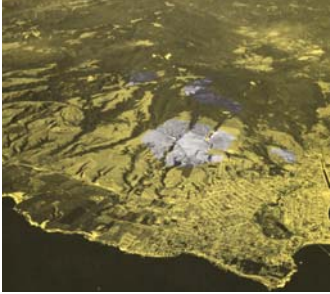
Courtyards are the most common type of developed open space. Small and varied in form, they are highly used social spaces, often closely associated with a college or academic discipline, and occasionally with food service. There are relatively few large gathering areas, such as Quarry Amphitheater, or Quarry Plaza. Field recreation areas include the playing fields north of the East Meadow and the smaller informal fields such as those near College Eight.

A web of pathways connects the many parts of the campus creating a pedestrian experience that is rich and varied. A journey might follow a sidewalk, a forest path, a bridge, a service road, or a pedestrian courtyard street as one passes through an episodic sequence of developed and natural areas. North/South routes cover significant changes in elevation. While east/West routes follow the contours, they must traverse the gulches and are marked by a series of pedestrian bridges, as Figure 10 shows.



FIGURE 9
CAMPUS NATURAL FEATURES





University of California South Central Coast Campus Site Selection Study 1959

TOPOGRAPHY

Topography is a determining factor in the development of the UC Santa Cruz campus. It presents a clear structure that creates the drama of the landscape and directs past and future campus development. From the main entrance at the south, the land elevation rises nearly 900 feet to the far north end of the campus in a series of stepped terraces. Several drainages have scoured ravines down the slope, which divide the central and south campus into three zones in the east/west direction. In places at Moore Creek, Jordan Gulch, and Cave Gulch, these ravines are as much as 70 feet deep and 350 feet wide. The combination of the terraced land and the ravines make the campus setting unique and poses particular challenges for circulation and siting of development.

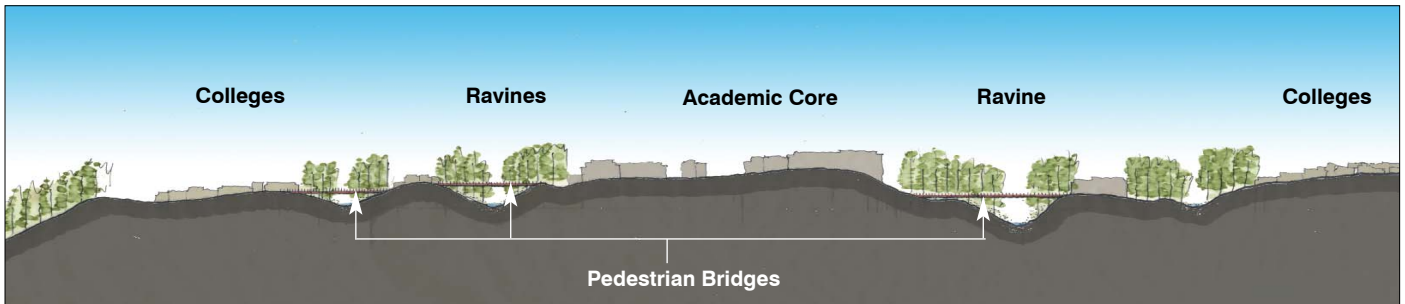


FIGURE 10
SITE SECTION ACROSS RAVINES (EAST/WEST)

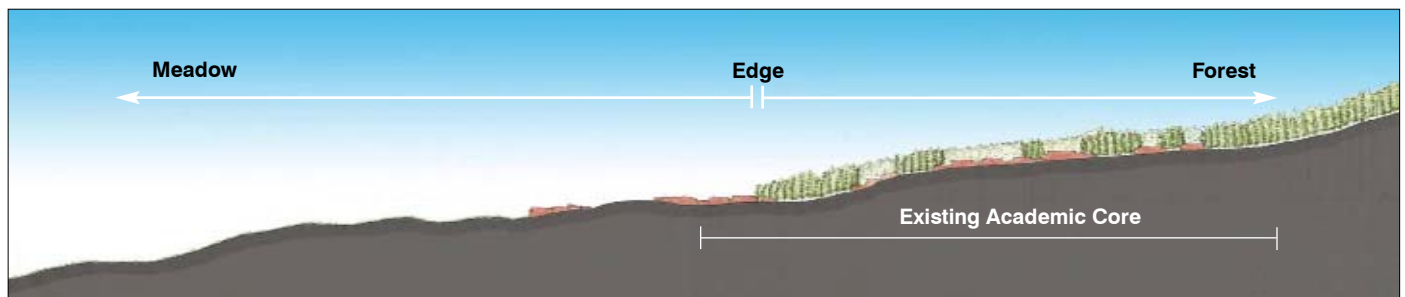
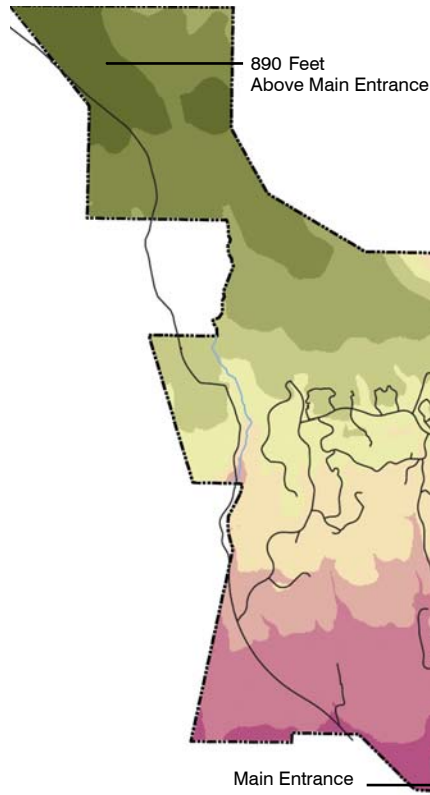
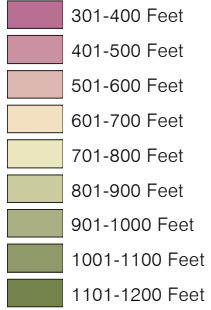


FIGURE 11
SITE SECTION DOWN SLOPE (NORTH/SOUTH)

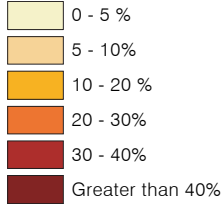
**FIGURE 12
ELEVATION (LEFT)**

Legend



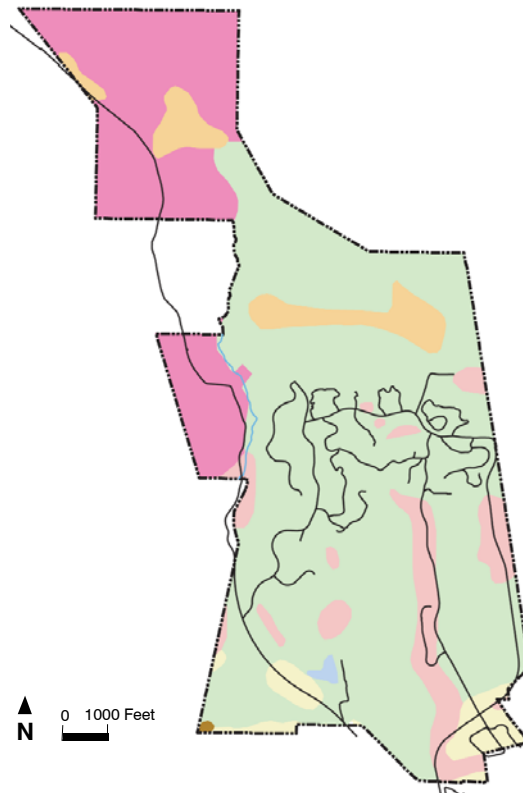
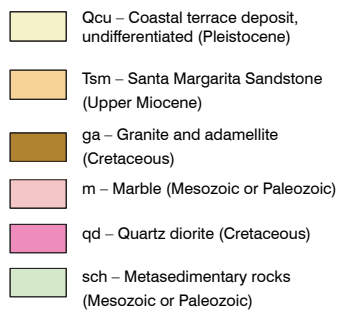
**FIGURE 13 (RIGHT)
SLOPES**

Legend



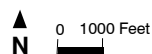
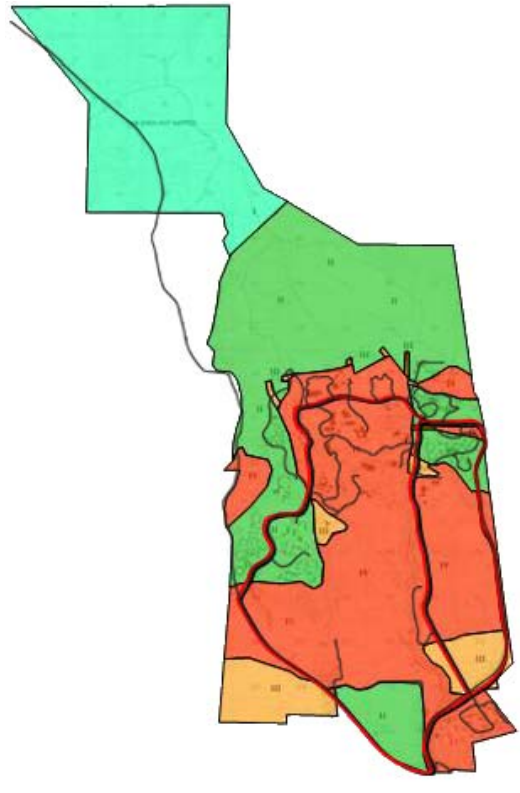
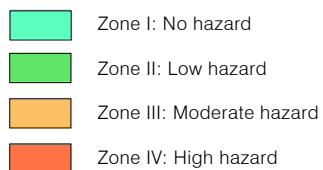
**FIGURE 14 (LEFT)
GEOLOGY**

Legend



**FIGURE 15 (RIGHT)
KARST HAZARD MAP**

Legend



GEOLOGY

The UCSC campus lies on the southeastern end of Ben Lomond Mountain, a major ridge of the Santa Cruz Mountains. Ben Lomond Mountain rises in a series of step-like terraces from sea level in the City of Santa Cruz to an elevation of almost 2,600 feet at the summit to the northwest. The UCSC campus spans a number of these marine terraces.

Campus bedrock consists of two major types: marble terrane that underlies most of the campus, including the central, developed portion of campus, and a granitic terrane that underlies the area north of the Cave Gulch neighborhood and forms intrusions into marble bedrock in several north-central and southern campus locations (See Figure 15, Geology). Karst features, including ravines, sinkholes, and caverns, are readily apparent in the lower and central campus, developed as a result of the dissolution of marble along fractures, joints, and faults. This condition can have important implications for building development. Figure 16 shows how the hazard of encountering karst formations varies throughout the campus.

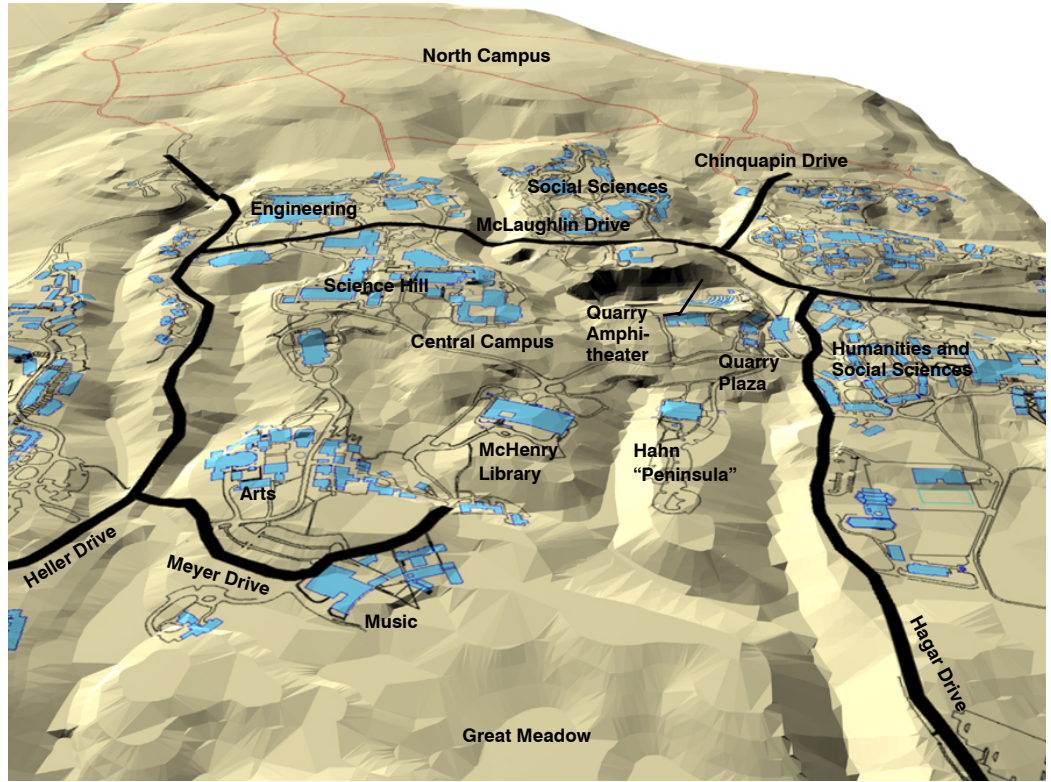
"Mima mounds" are an unusual geologic feature found in the northwestern and southwestern portions of the campus. These low, flattened mounds, 30 to 60 feet in diameter, are separated from each other by depressions that form vernal pools during the rainy season, and which remain moist into mid-summer.

Although campus bedrock is highly faulted, there is no evidence that these faults have been active since Holocene times (within the last 10,000 years). Earthquake fault rupture and soil liquefaction are not considered campus geologic hazards. However, campus structures could be expected to undergo severe shaking during earthquakes centered on the nearby San Andreas fault (12 miles to the northeast of the campus) or on the San Gregorio-Hosgri fault system (10 miles to the southwest).

SOILS

Campus soils are characteristically derived from underlying rock. Calera soils are marble-derived clay loams found in wooded areas of the western campus. Granite-derived Diamond Springs and Holland loams located in the northern campus and the area immediately south of the Cave Gulch neighborhood support grasses, oaks, and pines. Pinto Loams, derived from Quaternary marine deposits, are commonly found in the lower campus meadows, with scattered patches occurring in the central campus meadows and forests. Sandy loams, derived from sandstone, are found in northern campus lands supporting chaparral, oaks, and pines. Felton loams, derived from mica schists, support both grasslands and forests in the central campus.

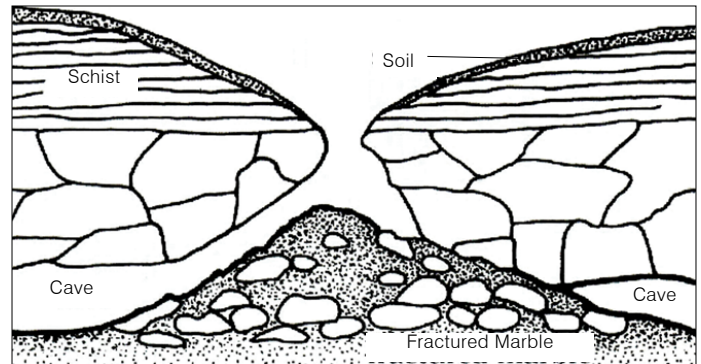
FIGURE 16
TOPOGRAPHY OF THE DEVELOPED
CAMPUS



Sinkhole



Sinkhole Formation



HYDROLOGY

It is estimated that the mean annual runoff from the campus varies from eight inches on the lower campus to sixteen inches on the upper campus. In general, drainage on the upper campus is by surface runoff, although some rainfall in that area is captured by a porous sandstone formation that in turn supplies springs and seeps on and off campus. Surface runoff on much of the central and lower campus is significantly less than runoff on other nearby lands due to the subsurface drainage system provided by campus sinkholes and subterranean solution channels.

CLIMATE

The campus climate is characterized by warm, dry summers and mild, rainy winters. High temperatures and low precipitation are the norm from approximately April through August. The months from November through March are dominated by cooler temperatures and heavy rains. Though winters are typically mild, colder winds from inland regions with more continental climates can result in short-term cold snaps. Both summer and winter temperatures are moderated by the marine influence, and summer fog is a common occurrence. Winds are generally northwesterly and seldom reach severe intensities; in addition, much of the campus is sheltered from prevailing winds by hills and trees.

Rainfall averages approximately 30 inches per year. Over the past 25 years, it has ranged from 15 inches in 1989 to 59.8 inches in 1983. Rainfall levels vary considerably on campus with elevation; the lower campus receives an average 30 inches of rainfall annually, while the upper campus receives 40 to 45 inches. Average evapotranspiration is an estimated 36.6 inches.¹⁶

VEGETATION

Four broadly defined vegetation communities predominate on campus: grasslands, redwood forest, mixed evergreen forest, and chaparral. Other localized and ecologically unusual or regionally uncommon plant communities in the north campus include coastal prairie and vegetation habitats that have developed around forest springs or seeps.

The grasslands on campus are primarily found on the lower campus, which is dominated by rolling, gently sloping meadows divided by two north/south canyons with densely forested slopes. These meadows, originally composed of native perennial bunch grasses, now contain mostly introduced Mediterranean annual grasses. The patches of native grasslands in this area are synonymous with the coastal prairie mentioned above, and are considered a sensitive habitat type. Meadows or openings in the redwood forests of the north campus also support coastal prairie communities.

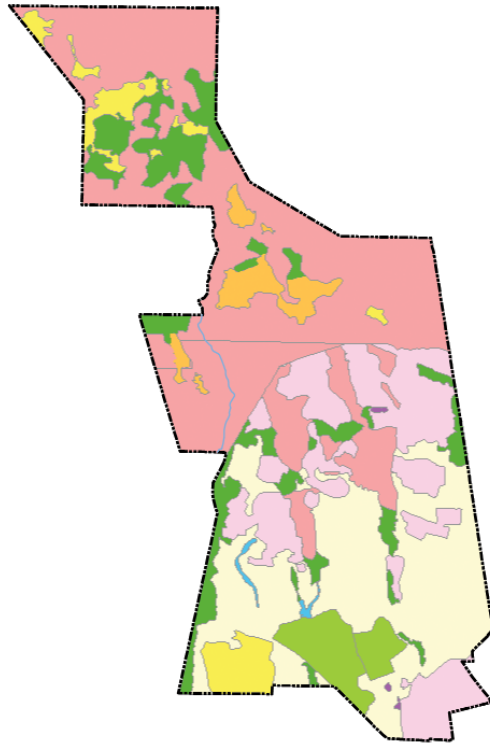


16. Urban Water Management Plan 2001

**FIGURE 17 (LEFT)
VEGETATION**

Legend

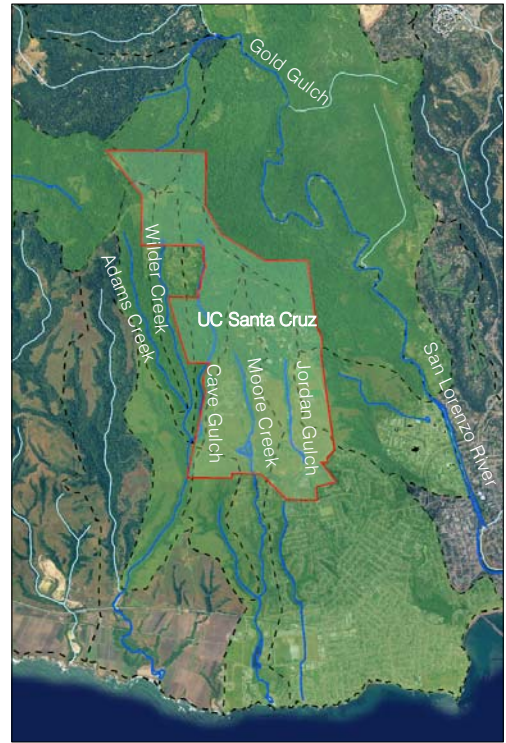
- Chaparral - Manzanita
- Developed
- Evergreen
- Arboretum/Irrigated Farm areas
- Native Coastal Grasses
- Northern Coastal Scrub
- Non-Native Grassland
- Riparian
- Redwood



**FIGURE 18 (RIGHT)
CAMPUS WATERSHEDS**

Legend

- Watersheds



Closed canopy redwood forests predominate in areas between buildings in the developed core campus, with patches of grassland and mixed evergreen vegetation also occurring. Mixed evergreen and redwood forests, with an associated highly diverse understory, are found on the steeply sloped land immediately to the north of the developed campus, and numerous springs and seeps in the area support distinctive assemblages of plant species. Virtually all of the redwoods are second-growth trees, since old-growth stands were heavily logged from early settlement times until the early 1900s. Mixed evergreen forests on campus are dominated by coast live oak, California bay, tanbark oak, madrone, and Douglas fir.

A band of chaparral vegetation occurs north of the developed campus. This community is dominated by dense large shrub stands of manzanita, with ceanothus, oaks, and knobcone pine also present. The remainder of the undeveloped north campus lands is vegetated primarily with mixed evergreen forests, although stands of dwarf redwood forest, redwood forests, and grasslands also occur.

Santa Cruz Manzanita



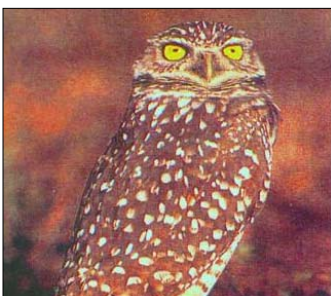
One plant listed by the State of California as endangered, San Francisco popcorn flower (*Plagiobothrys diffusus*), is reported to occur in meadows on the north campus. No other rare or endangered plant species listed by the state or under the federal Endangered Species Act have been found on campus, although three, Santa Cruz manzanita (*Arctostaphylos andersonii*), Point Reyes horkelia (*Horkelia marinensis*), and Marsh

Microseris (*Microseris paludosa*), fit the definition of “endangered, rare, or threatened” species under the California Environmental Quality Act (CEQA). The Santa Cruz manzanita is widespread but unevenly distributed in the chaparral communities of the north campus area. The Point Reyes horkelia occurs in scattered patches in Marshall Field area. Marsh *microseris* was found in the south part of the campus in 1986 but not located in 2002 surveys.

WILDLIFE

The UCSC campus supports a wide range of wildlife. Various wildlife species are associated with the distinct plant communities found on campus. Campus mixed evergreen forests support a range of mammals, reptiles, cave species, and birds. The redwood forests are visited by many wildlife species. Campus grasslands support rodents, rabbits, and insects, which in turn are preyed upon by birds (including raptors), bats, and terrestrial predators (including coyotes and mountain lions). The chaparral supports reptiles, small birds, and predators such as the bobcat and the gray fox.

Top: Ohlone tiger beetle
 Middle: California red-legged frog
 Bottom: Western burrowing owl



Two important bird species which are known to occur on campus in limited numbers are the golden eagle (*Aquila chrysaetos*), protected by federal law and found foraging primarily in the southern end of campus near large open grasslands, and the Western burrowing owl (*Athene canicularia*), a state species of special concern. Both of these species are found in association with the open grasslands in the southern portion of the campus.

The Ohlone tiger beetle (*Cicindela ohlone*) is a federally endangered species and occurs in scattered patches of coastal prairie located on both the northern campus and in the mima mound area of the southern campus. The California red-legged frog (*Rana aurora draytonii*) is a federally threatened species that breeds in a pond at the Arboretum and occurs in the Moore Creek drainages.

Special-status species known or expected to occur in the UCSC region include the monarch butterfly (*Danaus plexippus*: wintering habitat protected by California Department of Fish and Game), and raptors such as the bald eagle (*Haliaeetus leucocephalus*: federally protected); white-tailed kite (*Elanus leucurus*: FSC); American peregrine falcon (*Falco peregrinus*: federal species of concern (FSC) and state endangered); Cooper's hawk (*Accipiter cooperi*: California species of special concern CSC); sharp-shinned hawk (*Accipiter striatus*: CSC); northern harrier (*Circus cyaneus*: CSC); and merlin (*Falco columbarius*: CSC). With the exception of merlin, which are only expected to occur in the area during winter, all of these raptors could potentially be found nesting and foraging within the UCSC campus area in grasslands (or other open country), riparian, open water, and/or wetland habitats.



SCENIC RESOURCES

UCSC occupies a magnificent site that provides a broad spectrum of visual images. Long-range views are impressive and memorable, both from the forest edge on the upper campus looking downward to the ocean and the city and from the lower campus looking upward. From most viewpoints along the forest edge on the upper campus, sightlines are unbroken and sweeping. Prominent upper campus viewpoints are the Cowell College plaza, Baskin Visual Arts, University House, the knoll at Porter College, and the field at Oakes College. From the lower campus, points along Empire Grade, Coolidge Drive, and Hagar Drive offer panoramic views across the grasslands to the forested background. In addition, the campus is regarded as an important visual resource for the city, especially as an open backdrop to the developed areas of western Santa Cruz. Short-range views on campus are influenced by topography and vegetation type, with the visual impression formed not from broad panoramas but from relatively close-range detail.



PREHISTORIC CULTURAL RESOURCES

There is evidence of human activity on the campus lands as far back as 1,200 to 5,000 years ago. While the seasonal hunter-gatherer lifestyle of the Ohlone people left little in the way of built or structural artifacts, the Ohlone did practice centuries of yearly brush burning. This practice encouraged the growth of preferred food sources and reduced the risk of larger forest fires. It also created the strongly delineated line between forest and meadow that remains the seemingly natural landscape we see today. There are other signs



of the Ohlone people's presence throughout the campus lands, including shell middens, small artifacts, burial grounds, and village sites. While this LRDP has avoided known cultural resources areas when planning development sites, they are not mapped here in an effort to protect them from disturbance.

HISTORIC CULTURAL RESOURCES

In 1851 Isaac Davis and Albion Jordan purchased a 160-acre site in Santa Cruz County, near the corner of what is now known as the intersection of Bay and High Streets, and constructed three limestone processing kilns still extant on the UCSC campus. Lime was a primary ingredient for mortar and plaster, important building materials in the nineteenth century.



A successful limestone operation hinged on several factors including a good supply of limestone, a local fuel supply for the kilns, a means of transportation, and most importantly a local market in which to sell the products. Santa Cruz was an ideal location, offering excellent limestone deposits, extensive strands of redwood trees, proximity to water and land routes, as well as access to a port city, San Francisco. By the 1880s, the Davis and Cowell Lime Company was the largest limestone operation of its kind on the West Coast, employing 175 workers.



By the beginning of the twentieth century lime was in lesser demand, and its production costs were increasing. Several factors contributed to the decline of lime production, including deforestation. As a result of commercial lumbering and lime production, no large virgin redwood trees have been identified on campus.

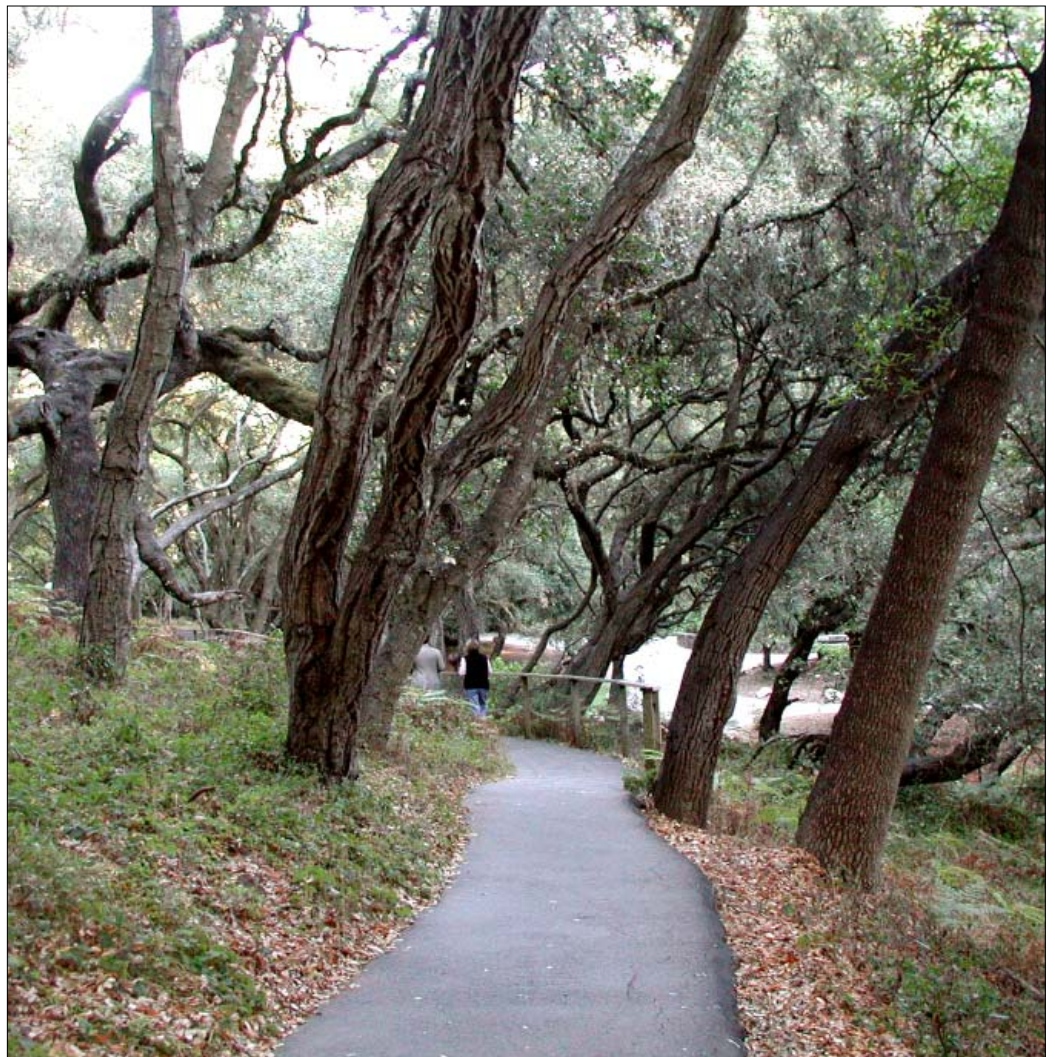


In 1906, the enterprise closed its kilns at the Bay and High Street Santa Cruz location, though the land continued to be used for agricultural purposes until the establishment of the University of California, Santa Cruz, in the 1960s. The extant clusters of historic mining and lime-production-related buildings on the lower campus serve as a reminder of the industrial history of this site.



4. Physical Planning Principles and Guidelines

- a. Section Overview
- b. Sustainability
- c. Land-Use Patterns
- d. Natural and Cultural Resources
- e. Access and Transportation
- f. Campus Life
- g. The Santa Cruz Community



a. Section Overview

Throughout the history of UC Santa Cruz, the campus's physical planning approach has carefully balanced its academic, research, and service mission with a commitment to careful stewardship of the remarkable site entrusted to the campus. The 2005 LRDP will be guided by the planning principles outlined below. These principles are intended to protect the campus's extraordinary natural and cultural features, while at the same time incorporating those features into a built environment that, when taken as a whole, maintains UCSC's unique character, community, and quality of life. The principles in this section are not intended to serve as planning restrictions, but will guide future planning of individual projects whenever feasible.

At the heart of UCSC's approach to physical planning is a commitment to sustainable development. In its planning, design, construction, and operations, UCSC will strive to achieve more sustainable outcomes for the campus and community. It will incorporate sustainable design measures in new and existing buildings whenever economically feasible, and will actively explore and implement new technologies and strategies that promote resource sustainability for the campus and surrounding communities.



b. Sustainability

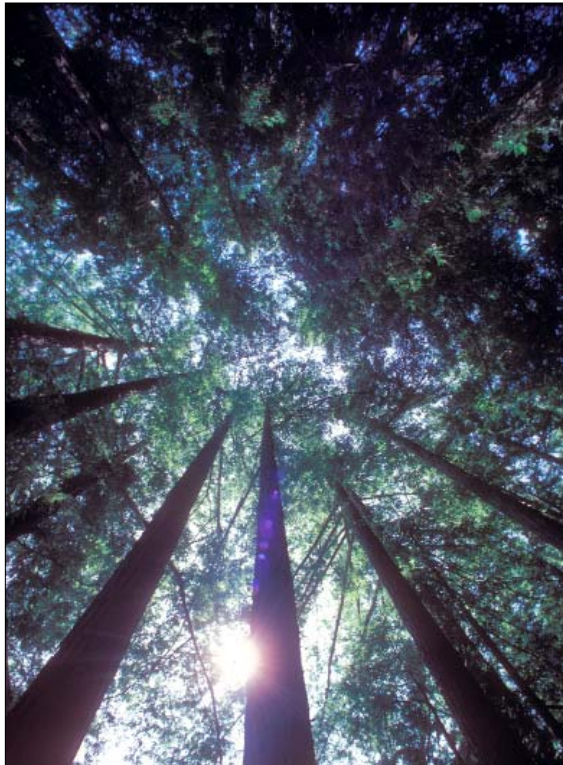
Sustainability refers to principles of physical development, institutional operation, and organizational efficiency that meet the needs of present users without compromising the ability of future users to meet their needs—particularly with regard to the use of natural resources.

Promote sustainable practices in campus development: The campus will strive to balance concentrated development with sensitivity to the natural environment and will explore site design options that meet current needs without foreclosing future options. To the extent possible, buildings will incorporate flexibility to be adapted for other program uses in the future.

Promote sustainable practices in campus operations: The campus will continue to promote and explore sustainable practices including recycling, energy conservation, alternatives to single-occupant-vehicle transportation, and water conservation, among others.

Encourage broad-based sustainability initiatives: The campus will continue to develop campuswide sustainability awareness through education and outreach programs.¹⁷ The campus will work to form partnerships with the City of Santa Cruz, the County of Santa Cruz, and other communities to identify shared strategies that address common goals.

17. Examples: Blueprint for a Sustainable Campus and Chancellor's Sustainability Action Council.



c. Land-Use Patterns

Respect the natural environment and preserve open space as much as possible:

Development will rely on careful infill and clustering of new facilities to promote efficient land use, retain valuable visual and environmental features, and encourage a pedestrian-friendly campus. Within the overall context of infill and clustering, sites will include a reasonable "buffer" between new buildings and major roads where possible.

Integrate the natural and built environment: New development will respond to the aesthetic qualities of UCSC's unique natural environment through siting, development patterns and architecture that are sensitive to the natural setting. In forested areas, buildings generally should not protrude above the surrounding tree canopy; in visually sensitive areas, interruption of prime viewsheds and viewpoints will be minimized.

Maintain UCSC's core configuration: Development will follow UCSC's traditional land-use pattern, which is a core of academic and administrative buildings surrounded by the residential colleges and other housing and support facilities. This pattern facilitates pedestrian and bicycle travel and maximizes interaction among members of the campus community. New colleges will be located as close to the core as possible without compromising sites for future academic and research facilities.

Encourage sustainability and efficiency in building layouts: Buildings shall be configured simply, to balance programmatic goals with sensitivity to the natural and/or built context. Efforts will be made to reduce building footprints and increase building height, where feasible.



d. Natural and Cultural Resources

Respect major landscape and vegetation features: Development will be sensitive to preservation of UCSC's distinctive physical features, including ravines, major grasslands, chaparral, and areas of redwood and mixed evergreen forests.

Maintain continuity of wildlife habitats: To the extent possible, development will minimize interruption of wildlife movement and fragmentation of habitats.

Design exterior landscaping to be compatible with surrounding native plant communities: As much as possible, landscaping will favor the use of native plants, as well as non-invasive, drought-tolerant, and fire-resistant species.

Maintain natural surface drainage flows as much as possible: UCSC will use financially viable sustainable design strategies to manage storm water, thereby preserving groundwater supplies, major springs, seep zones, year round springs, and major drainage channels, while at the same time preventing slope erosion.

Protect historic and prehistoric cultural resources: UCSC will protect recorded archaeological sites from development and protect historic resources through reuse or adaptation of structures in the Cowell Ranch Historic District.



e. Access and Transportation

Promote a walkable campus: To the extent possible, the campus will provide new pathways and improvements to existing pathways to enhance the “walkability” of the campus. Improvements for bicycles and transit, combined with frequent internal shuttles and connecting off-campus bus service, will facilitate campus pedestrian circulation.

Discourage automobile use to and on the campus: UCSC will continue to expand its comprehensive program of Travel Demand Management strategies to encourage alternatives to single-occupant vehicle use. New bike routes and bike parking will be developed to encourage bike travel around campus.

Consolidate parking facilities at perimeter campus locations: To promote non-automobile transportation options in the core, the campus will continue to encourage the use of peripheral parking facilities with frequent shuttle service.

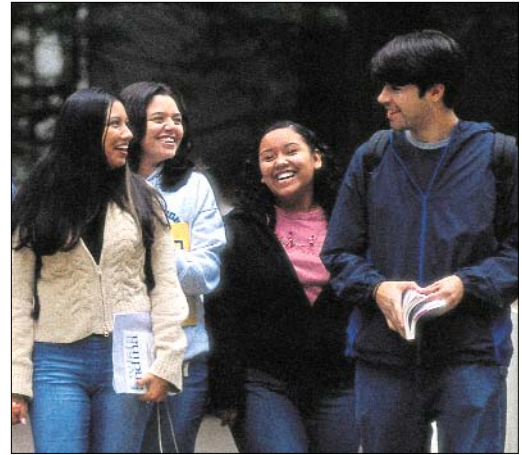


f. Campus Life

Enrich the academic experience for all students: Enrich the campus experience through the development of campus life facilities that support a variety of intellectual, educational, social, and recreational programs. UCSC's residential colleges will continue to provide supportive living/learning communities with a range of student services within the context of a major research university.

Offer university housing opportunities for students and employees: In addition to the housing offered in residential colleges, UCSC will provide a diversity of housing options for students and university employees. Housing will be developed to support the academic mission and to increase the regional housing supply.

Create an array of facilities that enrich the quality of campus life: The campus will develop academic support facilities to provide programs, services, and activities for all members of the university community. The campus will develop student services facilities and academic support facilities which enhance the academic experience, support the well-being of the academic community, support student success, and complement the residential colleges.



g. The Santa Cruz Community

Communicate and collaborate with the surrounding community: Ongoing communication and collaborative planning will enable UCSC and the surrounding communities (especially the City of Santa Cruz) to anticipate and address particular challenges and work together toward common goals. UCSC will continue its commitment to the annual Chancellor-Mayor public meeting to report on progress toward mutual goals and participate in joint efforts to address issues that concern the community.

Encourage the economic health of the surrounding community: Identify joint opportunities for encouraging business activities that generate local employment and expand the local tax base. Work closely with UCSC's neighboring communities to seek practical solutions to the challenges of growth and change.

Provide an accessible and welcoming public-service environment: UCSC will continue to welcome public participation and continue to provide opportunities for the public to enjoy performing arts and lecture programs and make use of the University Library, physical education and recreation amenities, and other campus resources.



5. UC Santa Cruz Long-Range Development Plan 2005–2020

- a. Section Overview
- b. Enrollment and Population
- c. Building Program
- d. Land-Use Plan
- e. Housing and Student Life
- f. Landscape and Open Space
- g. Circulation and Parking
- h. Utilities and Infrastructure



a. Section Overview

The following section describes an updated framework for the development of the UC Santa Cruz campus as it expands to a projected enrollment of up to 19,500 FTE students (fall-winter-spring three-quarter average). The 2005 LRDP reflects UCSC's academic, research, and service priorities and goals, as well as the campus's longstanding commitment to environmental stewardship and sustainable development. UC Santa Cruz is also dedicated to long-term community partnerships with the City of Santa Cruz, the County of Santa Cruz, and other municipalities and agencies to help build a productive future for the entire region.

The following topics related to projected campus growth are covered in this section:

- **Enrollment and Population:** Describes UC Santa Cruz's projected growth in the context of the state and the region, including a discussion of past and projected demographic trends
- **Building Program:** Delineates the projected space needed to support growth of UCSC's campus academic, research, and service functions
- **Land-Use Plan:** Indicates locations for projected campus development and areas to remain undeveloped under this LRDP
- **Housing and Student Life:** Identifies programmatic goals and physical planning considerations related to housing, academic support services and student life.
- **Landscape and Open Space:** Describes how projected development can be effectively integrated with the unique physical characteristics of the UC Santa Cruz campus
- **Circulation and Parking:** Discusses projected development of campus roads, parking facilities, transit improvements, bicycle pathways, and pedestrian circulation
- **Utilities and Infrastructure:** Addresses projected development of the physical framework required to meet future needs



b. Enrollment and Population

The 2005 LRDP accommodates an increase in student enrollment on campus to a fall-winter-spring three-quarter average of 19,500 FTE by the year 2020 (of which graduate and professional enrollments are anticipated to comprise 15 percent). This number reflects an average of the total number of FTE students enrolled at UC Santa Cruz during the fall, winter, and spring quarters of the academic year (FWS 3-quarter average). This enrollment projection includes only those students enrolled in programs on the main campus, and excludes students who attend in the summer and attend programs at off-site locations. Total enrollment was approximately 14,400 in 2003-04.¹⁸ Growth to 19,500 students would represent an increase of approximately 5,100 students over 2003-04 total enrollment. Additional faculty and staff will be hired to accommodate the growth in students and research.

DERIVATION OF THE ENROLLMENT PROJECTIONS

UC Santa Cruz has consistently articulated a campus vision that encompasses a breadth and depth of undergraduate academic programs, a fully developed range of graduate programs, appropriate professional programs, and a vibrant research enterprise. In addition, UCSC has a regional role as the UC campus serving Santa Cruz, Monterey and Santa Clara counties. Each of these elements results in drivers for future UCSC enrollment. The growth projections articulated in this LRDP were derived after careful consideration by the Strategic Futures Committee (SFC) of both internal programmatic aspirations and external drivers.

Although demand for a UC education would be consistent with a higher enrollment level, the campus has selected to base its 2005 LRDP on a fall-winter-spring 3-quarter average enrollment of up to 19,500 on-campus FTE students—representing a growth rate which it believes it can accommodate.

ACADEMIC PROGRAMS AS A DRIVER

A primary factor in assessing future growth is ensuring UCSC's role as a comprehensive public research university within the University of California system. This requires continued evolution and expansion of existing programs, maturation of others, and implementation of new areas of inquiry. An assessment of potential academic programs was developed after careful consideration of recently concluded 10-year divisional plans, new and existing program development, and faculty input.

STATE DEMOGRAPHICS AND ENROLLMENT DEMANDS

Enrollment pressures on the UC system are driven by a combination of factors including the number of high school graduates, their eligibility, participation rate (percent of eligible

18. Approximately 300 students were enrolled in off-campus programs.

students who elect to attend a UC campus), transfer enrollments, and demand for graduate and professional education (both by students and employers). Consistent with its intent to honor the state Master Plan for Higher Education, the UC system is committed to accepting students from the top 12.5 percent of California's high school class as well as accommodating the top four percent of each high school. Each UC campus shares in this responsibility and seeks to accommodate an appropriate proportion of those students who meet the university's eligibility requirements.

GROWTH IN SUMMER ENROLLMENT

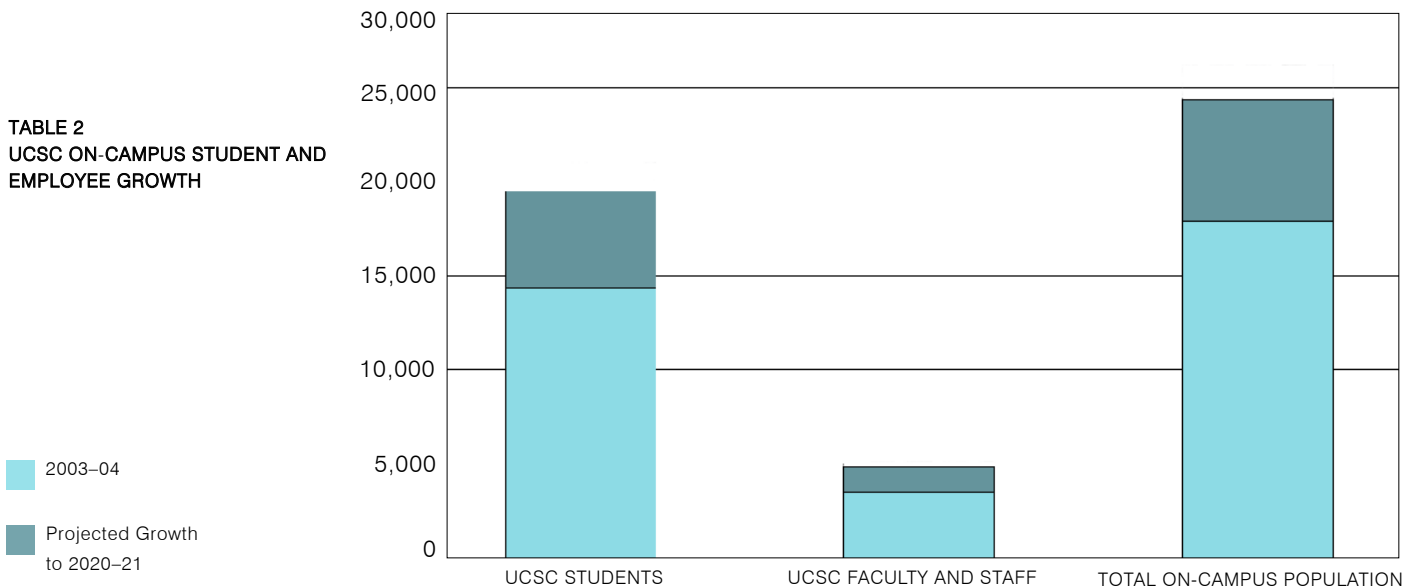
UC Santa Cruz plans to grow its summer programs in order to accommodate increased student demand and to provide opportunities to develop specialized programs. Currently, students enrolled in the summer term are drawn primarily from the campus fall-winter-spring population. Summer enrollments do create additional faculty workload and generate additional faculty positions.

Summer student population for 2020 is estimated at about 1,500 to 1,750 student FTE (about 6,700 to 7,850 individual students) spread out over multiple sessions throughout the summer.

GROWTH IN STAFF AND FACULTY

The number of faculty is projected to increase by about 360, in a direct relationship to the increase in enrollment. On-campus staff growth (which includes researchers and non-teaching academic positions) is expected to increase by roughly 980.

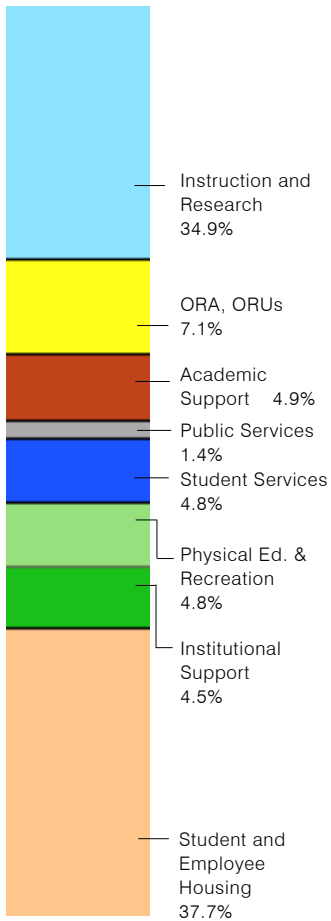
**TABLE 2
UCSC ON-CAMPUS STUDENT AND
EMPLOYEE GROWTH**



c. Building Program

The 2005 LRDP accommodates a building program that UC Santa Cruz will need to implement its academic, research, student life, and housing programs as the campus enrollment expands to support programs associated with 19,500 FTE. The campus's current buildings (existing and approved development) total approximately 3,113,000 assignable square feet (ASF) and (4,825,000 gross square feet (GSF)). The additional space needs described in this section total 2,122,000 ASF¹⁹ (3,175,000 GSF). Unforeseen changes in future institutional, resource or implementation actions may necessitate an adjustment in various sub-program space totals, however, under this LRDP the campus will remain within the total level of approximately 8.0 million GSF.

TOTAL ADDITIONAL ON-CAMPUS SPACE PROJECTED



Projected growth in new and existing academic and research programs will drive UCSC's space needs over the period envisioned by the 2005 LRDP. In addition, UCSC is currently short of space to meet the needs of its existing enrollment; therefore, the building program also reflects these unmet space needs. The property at 2300 Delaware Avenue will incorporate research and support uses, and may also be used for non-UCSC affiliated uses.

Facilities that directly support the university's academic mission—such as divisional space (Arts, Humanities, Physical and Biological Sciences, Social Sciences, and School of Engineering), classrooms, libraries, and support space—are primarily state-funded (although some of these facilities may also be gift- or grant-funded). Facilities that are ancillary to the campus academic mission—such as housing and food service space, recreation space, and student services spaces—are not traditionally or historically funded by the state. Other ancillary development, such as roads, parking, bridges, pathways, utility infrastructure, and playing fields are not included in this section.

**TABLE 3
PROJECTED CAMPUS SPACE DEMAND**

	Existing and Approved Space		Additional Space		Estimated Total	
	ASF	GSF	ASF	GSF	ASF	GSF
Academic, Support and Housing	3,113,000	4,825,000	2,122,000	3,175,000	5,235,000	8,000,000

Existing and Approved Space does not include 2300 Delaware Avenue.

19. Square feet numbers are predicated on 100 percent of the California Postsecondary Education Commission guidelines. Actual built area may deviate from projected space.



INSTRUCTION AND RESEARCH

1,108,000 GSF

Additional space needs projected for Instruction and Research and Academic Administration total approximately 1,108,000 GSF. This accounts for divisional space for the Arts, Humanities, Physical and Biological Sciences, Social Sciences, and School of Engineering as well as general assignment classrooms and non-departmental computer laboratories. General assignment classrooms are projected to need approximately 31,000 additional GSF and will continue to be built in conjunction with projects throughout the campus as enrollment increases warrant. The need for non-departmental computer laboratories is projected at 6,500 GSF; these will be built with college and academic core projects as needed.

ORGANIZED RESEARCH UNITS, ORGANIZED RESEARCH ACTIVITIES

225,000 GSF

ORAs and ORUs for the Arts, Humanities, Physical and Biological Sciences, Social Sciences, and School of Engineering are projected to increase 225,000 GSF.

ACADEMIC SUPPORT

157,000 GSF

Most of the projected space needs for Academic Support associated with the Academic Divisions and University Library. The additional University Library space need is projected at approximately 77,000 GSF according to UC Library Standards. Additional library space is projected to be associated with the Science and Engineering Library. The remaining projected need of 80,000 GSF includes space for college administration and the Graduate Division, space for Media Services, and space for the Arboretum.





PUBLIC SERVICES

43,000 GSF

The projected space need for Public Services totals approximately 43,000 additional GSF, and includes facilities such as the Monterey Bay Nature/Orientation Center, a joint visitor facility for the UCSC Arboretum and the Center for Agroecology and Sustainable Food Systems and retail areas.

STUDENT SERVICES

151,000 GSF

Student Services will require approximately 151,000 additional GSF to meet existing shortages of space and to provide for growth. Of this, about 132,000 GSF will be in non-college facilities and 19,000 GSF will support new colleges. Included in the non-college facilities are an addition to the Cowell Health Center, a new student union building, and expansion of the Bay Tree Bookstore. Future college space will include student activity facilities, coffee shops, and college counseling offices. Other future space may be developed to further support UCSC's rich and diverse history of cultural engagement. These spaces may include resource and enrichment spaces for student voice and student productions, student leadership, and student engagement.

PHYSICAL EDUCATION AND RECREATION

151,000 GSF

Physical Education and Recreation will need additional space of approximately 151,000 GSF. This includes an Events/Recreation Center and additional indoor recreation facilities.





INSTITUTIONAL SUPPORT

144,000 GSF

Projected space needs for Institutional Support total approximately 144,000 additional GSF, including 37,000 GSF for campus administration and 107,000 GSF for general services. The campus administration projection assumes that leased off-campus space will continue to be available, or that some or all of the units leasing space would move to UCSC's property on 2300 Delaware Avenue.

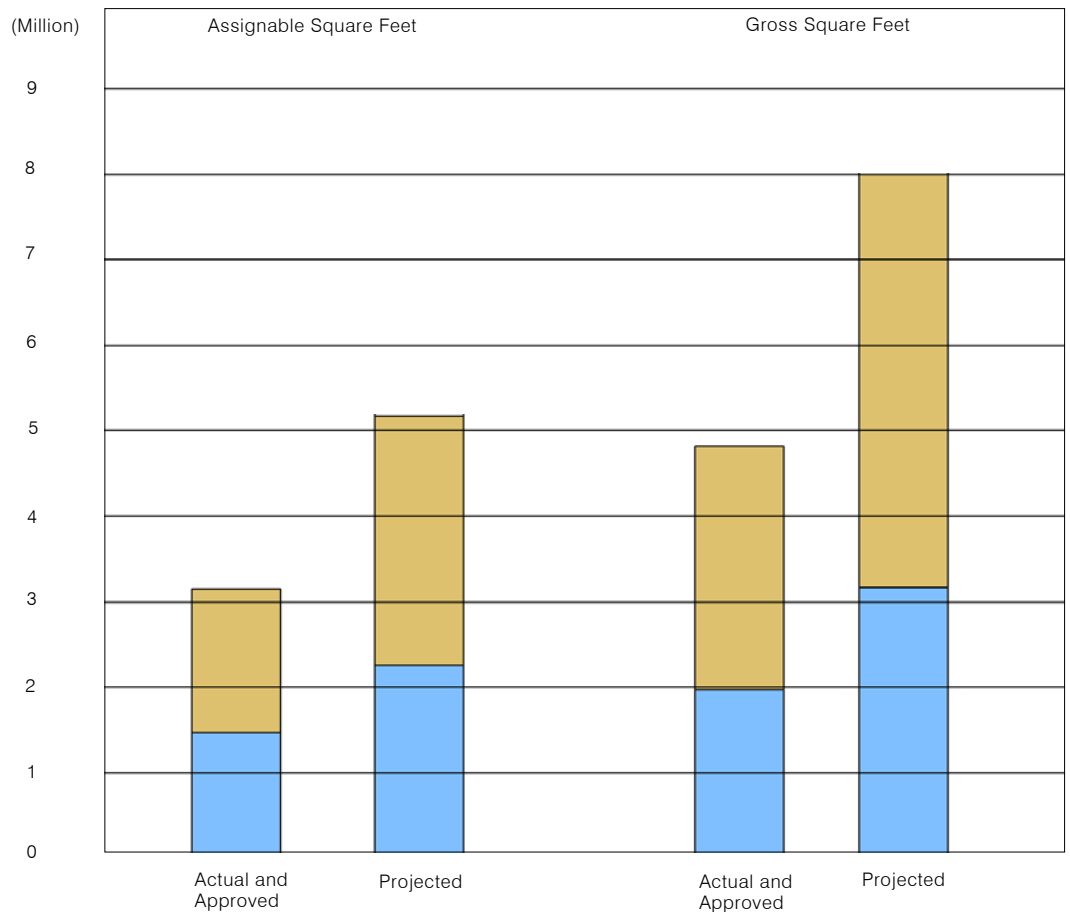
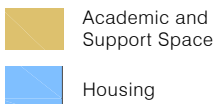
Included with the general services projects are future Environmental Health and Safety and Child Care Facilities. Space for other units located throughout the campus will need evaluation for the location of future buildings or reassignment of space.

STUDENT AND EMPLOYEE HOUSING

1,196,000 GSF

Given the unique characteristics of the colleges and the significance of housing as a whole for the campus, the building program for housing is described in a separate section. The residential college is one of UCSC's most distinctive features, and under this LRDP the residential college will remain a fundamental unit of campus growth.

**TABLE 4
PROJECTED CAMPUS SPACE
DEMAND**



d. Land-Use Plan

Similar to the 1963 founding plan for the campus and subsequent UCSC LRDPs, the 2005 LRDP Land-Use Plan identifies the need to extend development to the north to meet the academic, research, and housing needs of the campus as it matures. The plan balances development opportunity with conservation of natural resources and open space by clustering new potential development areas and recognizing that additional density can be added to existing developed areas. The Land-Use Concept plan, Figure 19, shows how the academic core would expand north within the loop road, with an arc of colleges and housing on the opposite side of a new loop road. Land between newly developed areas is left in a natural state to break down the overall scale and provide habitat continuity. The center of the expanded academic core, a generally sloping area known as the seep zone, is reserved for natural resource education.

The Land-Use Plan, described below in text and in the land-use map, is based on the Physical Planning Principles and Guidelines. It assigns elements of the building program to designated land-use areas and describes general objectives that will guide development within those areas. In some cases, building program elements may be assigned to more than one land-use category in order to offer the campus opportunities to combine and integrate program elements.

The boundaries of the land-use designations on the land-use plan are intended to provide a general framework for campus uses and may be adjusted based on field conditions at the time of implementation as long as the overall area for the given land-use remains the same.

LAND-USE DESIGNATIONS

ACADEMIC CORE (AC)

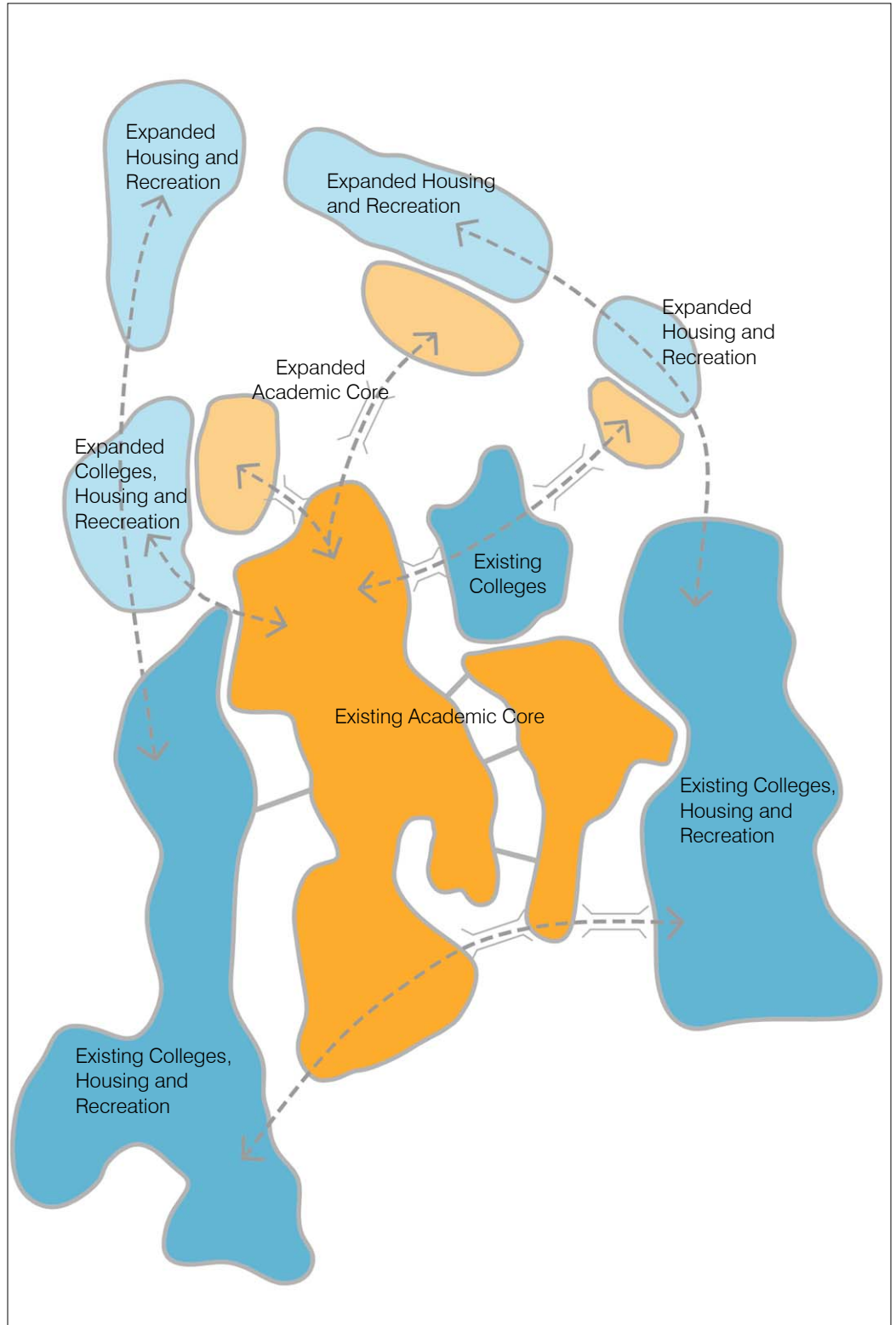
The 2005 LRDP Academic Core encompasses approximately 132 acres. This will provide space and flexibility for future expansion in the north campus for needs anticipated under this plan, including potential professional schools and research functions. The boundary of the Academic Core is defined by Heller Drive to the west, the Great Meadow to the south, Hagar Drive to the east, and a new loop road to the north. Facilities to accommodate the following building program elements will be the principal uses sited in the Academic Core: Instruction and Research, Organized Research, Academic Support, Libraries, Student Services, Public Services, and Institutional Support.

CAMPUS SUPPORT (CS)

Eight separate areas totaling approximately 85 acres are designated Campus Support. The largest of these, at the south entrance to the campus, will accommodate both public functions and operations-oriented functions in the corporation yard. To the extent feasible,



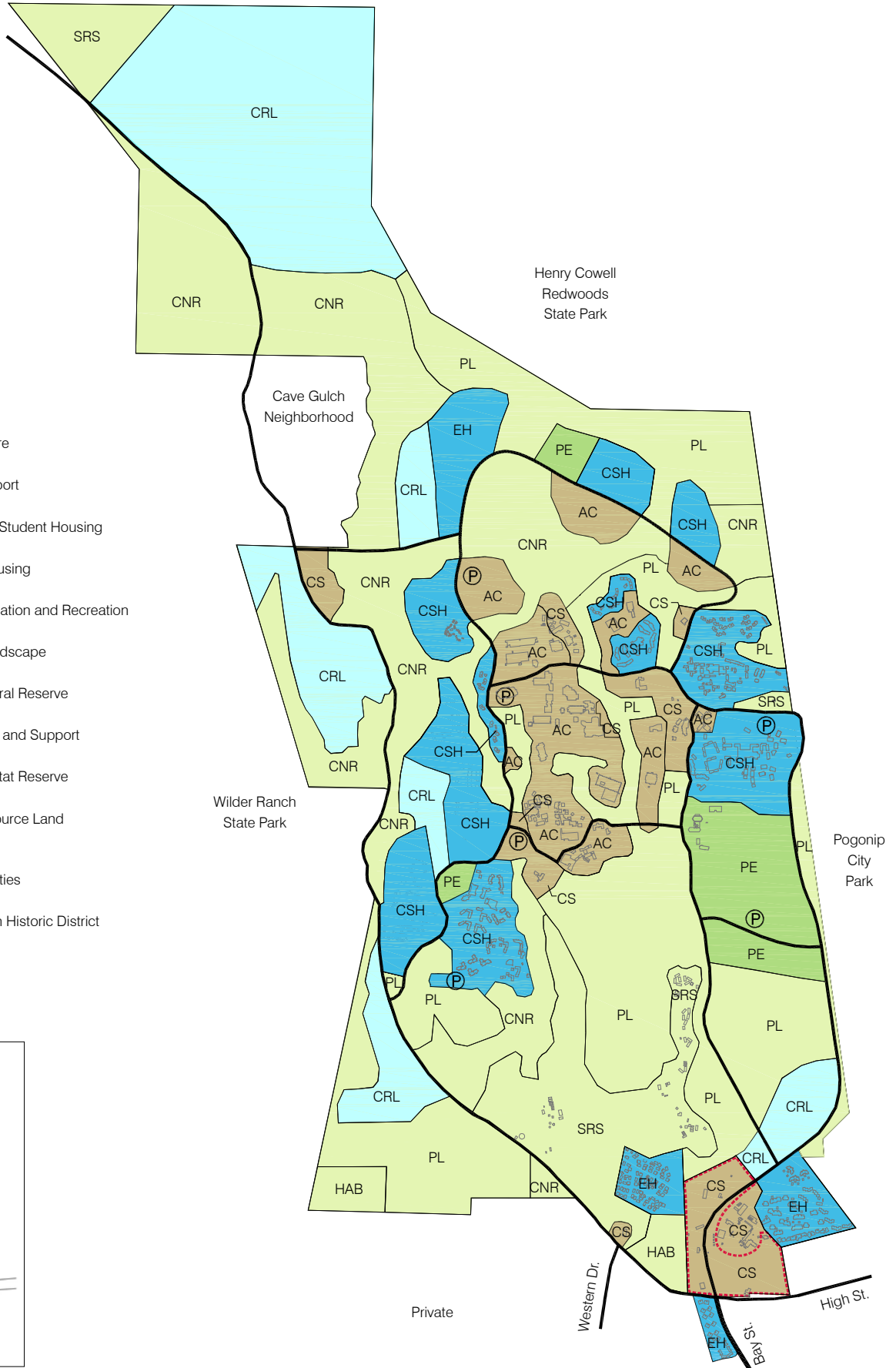
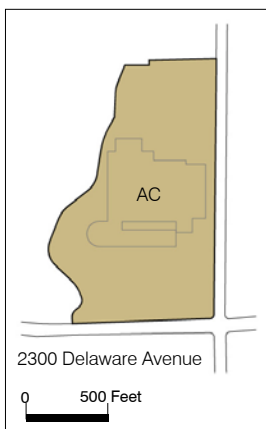
FIGURE 19
LAND-USE CONCEPT

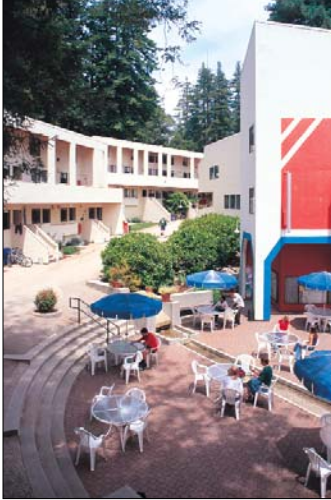


**FIGURE 20
LAND-USE MAP**

Legend

- AC Academic Core
- CS Campus Support
- CSH Colleges and Student Housing
- EH Employee Housing
- PE Physical Education and Recreation
- PL Protected Landscape
- CNR Campus Natural Reserve
- SRS Site Research and Support
- HAB Campus Habitat Reserve
- CRL Campus Resource Land
- P Parking Facilities
- Cowell Ranch Historic District





some facility and operational corporation yard functions will be relocated under this LRDP, primarily to an 8-acre site off Empire Grade. This would allow improvements to the main entrance area for public-oriented and visitor services and to improve efficiency in operations.

The Quarry Plaza area north to McLaughlin Drive will expand to accommodate growth for future Student Service functions, commercial and retail facilities and the Cowell Student Health facility. The area housing the Fire Station will expand to meet projected future needs. A new area is designated for Campus Support east of Earth and Marine Sciences for infrastructure to support expansion of facilities and to supplement the Central Heating and Cooling Plant (another Campus Support area). The area accommodating the University House (the Chancellor's residence) will remain unchanged.

COLLEGES AND STUDENT HOUSING (CSH)

The college arc surrounding the academic core is designated Colleges and Student Housing, and constitutes 228 acres in this LRDP. This area occupies land to the east, north, and west of the academic core, and will accommodate the construction of new colleges, expansion of existing colleges through infill, new undergraduate and graduate student housing, and family student housing projects. In addition, housing-related parking and recreational amenities will be provided in Colleges and Student Housing. Residential facilities may include both residence hall, apartment style, and various suite-type accommodations. (For additional information on college and housing program goals, see section 5e. Housing and Student Life.)

The principal program elements permitted in Colleges and Student Housing include Housing and Food Services, related recreational amenities, related parking, Student Services, Academic Support, Family Student Housing, Childcare, and Physical Education and Recreation. Some facilities for the academic divisions are located in the colleges; it is also anticipated that new colleges will house some Instruction and Research space.

EMPLOYEE HOUSING (EH)

Approximately 69 acres encompassing existing development and undeveloped land are designated as Employee Housing in this LRDP. Existing employee housing near the south entrance, including Ranch View Terrace, occupies approximately 42 acres. A second 27-acre area to the north has been designated for future development of employee housing. Housing for faculty and staff, childcare facilities, and related accessory buildings are consistent with this land use, together with associated parking and recreation space. Additional employee housing could be located on Campus Resource Land.



PHYSICAL EDUCATION AND RECREATION (PE)

Approximately 86 acres of relatively level land in three areas of the campus are designated Physical Education and Recreation (PE) in this LRDP. Two of these areas, located east and west of the Academic Core, already accommodate PE. The western area, approximately four acres, does not have sufficient remaining undeveloped space for expansion of PE and Recreation facilities. The east area, of approximately 71 acres, has adequate space for additional indoor recreation facilities, playing fields, and courts. A third area of approximately 14 acres to the north is currently undeveloped and could accommodate a significant increase in indoor facilities, playing fields, courts, and other recreation facilities, thereby providing a more balanced distribution of recreation opportunities across the campus. This land-use designation can also accommodate parking and transit facilities. A future recreation and events center could be located within this land use.

CAMPUS RESOURCE LAND (CRL)

The 1988 LRDP assigned approximately 471 acres of undeveloped land located in the northern part of the campus to this land-use category. The 2005 LRDP land-use plan designates 335 acres of undeveloped land, mainly located in the far north campus and areas in the coastal zone west of Empire Grade and west of Porter College, to this land-use category. This land-use designation is assigned to lands that are not planned for development under the 2005 LRDP. It is envisioned that these lands would be maintained in their natural state to serve as long-term reserve lands for future use. In the event that the campus determines during the term of the 2005 LRDP that it needs to develop some portion of this land, it will conduct additional environmental review and will seek an LRDP amendment.

CAMPUS NATURAL RESERVE (CNR)

The land use designation "Environmental Reserve" was established in 1988 LRDP in order to protect certain of the campus's natural features and processes for teaching and research. The 1988 LRDP designated approximately 393 acres for this use. The proposed 2005 LRDP renames this land use category Campus Natural Reserve (CNR) and designates 410 acres for this use. Land under this designation would remain in its natural state except as required for maintenance, as teaching and research reserve. Construction in this area is prohibited, except as required in conjunction with teaching and research in the area, or the limited construction of utilities, roads, and paths.

One section of the CNR, the Lower Moore Creek area adjacent to the Arboretum, will be jointly managed under the direction of the UCSC Campus Natural Reserve and the Arboretum and will include a California regional native plant garden, California red-legged frog habitat improvements, and other support and interpretive structures.



SITE RESEARCH AND SUPPORT (SRS)

Three areas totaling approximately 154 acres are designated for Site Research and Support in this LRDP. The first of these areas in the south campus includes land currently used by the Center for Agroecology and Sustainable Food Systems (CASFS) and the UCSC Arboretum. The second area in the far north includes 33 acres. The Chadwick Garden at the east end of McLaughlin Drive, encompasses four acres. The development of new buildings associated with these and future approved research programs is permitted within these designated areas. The principal program elements associated with this land use are Social Sciences, Physical and Biological Sciences, Student Services, and Public Services.

PROTECTED LANDSCAPE (PL)

The natural landscape of UC Santa Cruz has been recognized from the campus's inception as a unique asset that distinguishes UCSC from other universities. In addition to the 420 acres in the CNR, approximately 505 acres of land have been designated in this LRDP as Protected Landscape in order to maintain special campus landscapes for their scenic value and to maintain special vegetation and wildlife continuity zones. To the extent feasible, Protected Landscape will be retained in an undeveloped state as the campus grows. Any development within Protected Landscape will not impinge on its overall character.

The meadows south of the developed center of the campus will be maintained as undisturbed grassland. In these meadows, no building will be allowed. Agricultural research that maintains the visual quality of the lower meadows may be allowed.

CAMPUS HABITAT RESERVE (HAB)

Two areas on campus, which total approximately 25.5 acres, are designated as Campus Habitat Reserve (HAB). The larger of these two areas, a 13-acre parcel on the southwestern corner of the campus adjacent to Wilder Creek, is designated as a reserve to retain high-quality grassland and forest habitat on the campus for the California red-legged frog and the Ohlone tiger beetle. This reserve was established pursuant to a 2005 Implementing Agreement between the U.S. Fish & Wildlife Service and The Regents. The second area, a 12.5 acre parcel, is located in the southern portion of the campus near the main entrance. A portion of the parcel is designated as a management site for Ohlone tiger beetle habitat with the remainder of the site managed for California red-legged frog. HAB lands are protected lands that will remain undeveloped except as permitted by the terms of the Implementing Agreement and associated Habitat Conservation Plan (HCP).

OVERLAY AREAS

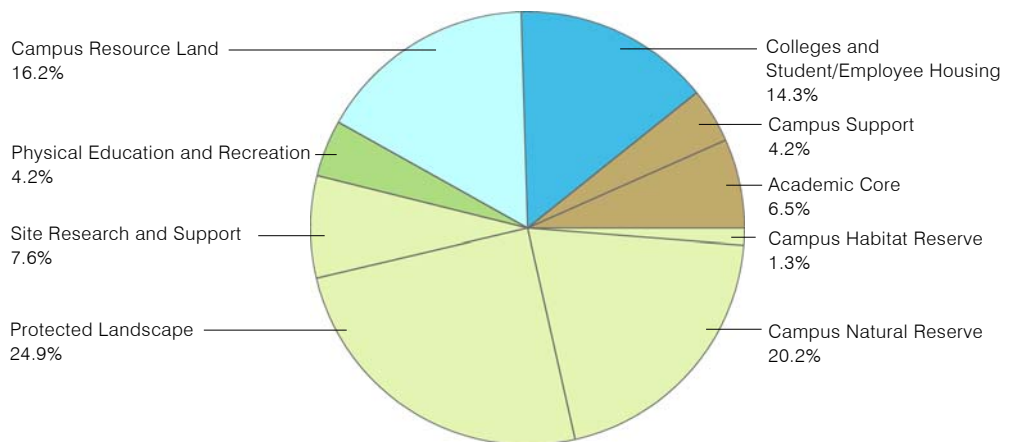
COWELL RANCH HISTORIC DISTRICT

The Cowell Ranch Historic District (CRHD) is an overlay district that encompasses cultural resources of particular significance from the original Cowell Ranch. The Cowell Ranch constitutes a landmark that helps define a strong and unique "sense of place" for UC Santa Cruz. The overlay district is in a Campus Support land-use area. The CRHD is eligible for listing on the National and State Registers of Historic Places. A CRHD Management Plan governs development and protection of structures and landscape in and around the CRHD.

PARKING FACILITIES

The parking overlay areas provide consolidated peripheral parking and reduce the number of parking spaces in the central campus. The 2005 LRDP also provides for limited surface parking in Academic Core, Campus Support, Colleges and Student Housing, Site Research and Support, Physical Education and Recreation, and the Cowell Ranch Historic District overlay area. Existing surface parking lots may be used as future building sites. The Parking Facilities designation is an overlay area in the land-use plan. It represents the general area within which possible future parking facilities could be located, but does not designate specific site and garage configurations.

**TABLE 5
2005 LRDP LAND USE**



e. Housing and Student Life

University-affiliated housing supports the academic mission of UC Santa Cruz by fostering recruitment, transition, retention, development and graduation of both undergraduate and graduate students. Residential life, academic life and student life are the three elements of the UC Santa Cruz college system, the cornerstones for creating dynamic living/learning communities.

Because campus housing is self-funded, adequate demand must be substantiated to produce on-campus housing. Student housing demand is dependent on several factors that include the student market, product cost, regional housing inventory, and amenities. The character of on-campus student housing should respond to the preferences of students and their diverse needs. In general, on-campus student housing should be available, accessible from the academic core, diverse in respect to housing type, and integrated with other services such as dining, childcare, recreation, parking, and transportation.

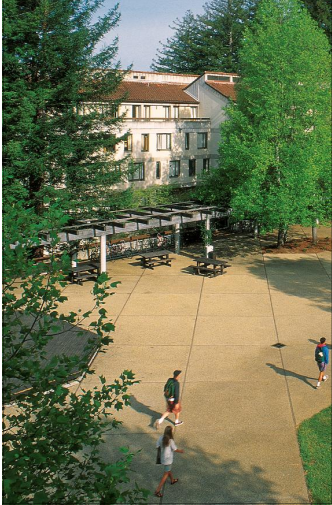
The campus will strive to accommodate reasonable density in new on-campus housing, recognizing the value of campus natural lands and the goal of reducing the potential for sprawl. Increased density is consistent with sustainable design principles and with the vision of the original 1963 LRDP, which predicted an increase in the average building height as the campus matures. The appropriate height and density of new housing development will reflect several factors, including economic viability, 2005 LRDP Physical Planning Principles, social context, and the particular considerations of each site. Considering the large proportion of the overall development program that housing represents, achieving appropriate density is important not only to promote sustainable development practices but also to preserve future opportunities beyond the time frame of this LRDP. The land area identified in the 2005 LRDP for housing uses assumes 50 percent of undergraduate students, 25 percent of graduate students, 25 percent of faculty, and 3 percent of staff could be accommodated in those areas.

In addition to new housing in the residential colleges, other types of undergraduate housing will be needed to serve the diverse student community. UCSC will continue to expand opportunities to diversify its portfolio of housing types and continue to work to meet the needs of the student body.

UCSC will continue to work with the City and county to coordinate overall housing efforts. Developers of regional housing might choose to build housing for campus employees and students. Off-campus student housing may be developed in the context of the regional housing market and could complement other housing opportunities in the local community.

The following section describes the program for various types of campus housing. Given that the ability to produce housing depends in large part on market factors beyond the control of UCSC, these are goals that the campus will strive to attain if economically feasible.





UNDERGRADUATE COLLEGES AND HOUSING

The colleges are an essential part of the undergraduate experience at UC Santa Cruz. All undergraduates are affiliated with a college, including those living off-campus. The plan anticipates the development of one new residential college. Under this LRDP, each of the eleven residential colleges will have an average of 1,500 affiliated students. These may have up to 750 beds each with a possible distribution of 50 percent traditional residence hall space and 50 percent apartment, studio, or suite space. The new college will include support facilities such as food services, recreation facilities, study space, and services (mail room, laundry).

The campus will develop additional infill housing in or near existing colleges where appropriate. New infill housing will be affiliated with the adjacent residential college if possible, and will likely be apartment-style. Economic factors will be considered in determining minimum viable project size.

Undergraduate apartments will likely be needed in addition to the new residential college and infill units. These may be located on undeveloped land north of the core and will also include support functions such as student services and academic support facilities.

GRADUATE STUDENT HOUSING

Increasing the graduate student population has been identified as an important element in meeting UCSC's academic and research goals. To accommodate this population, a new graduate student village and commons will be considered to provide graduate students with a sense of identity and a collegial and supportive residential environment. The majority of this housing would be apartment-style to reflect market preference. If possible, the graduate student village would be located in relative proximity to family student housing, as many graduate students have families and related programmatic needs.



FAMILY STUDENT HOUSING

Family student housing serves undergraduate and graduate student couples with and without children, as well as single parents. Family student housing units are included within the undergraduate and graduate housing goals above. Existing family student housing facilities (199 units) have reached the end of their lifespan as determined by extensive structural analysis and need replacement. Phased redevelopment of this area is projected during this LRDP to provide improved replacement facilities and better utilization of the site. Additional family student housing units may be developed in other locations, preferably on the west side in the vicinity of existing facilities. Close proximity to recreation space and childcare is important.



EMPLOYEE HOUSING

Providing housing opportunities for faculty and staff is an important element of the 2005 LRDP. Currently there are 325 units of existing housing including the approved Ranch View Terrace project (84 units). On-campus employee housing should be accessible to campus perimeter roads and also integrated with other services such recreation, childcare, parking, and transportation.

STUDENT LIFE FACILITIES

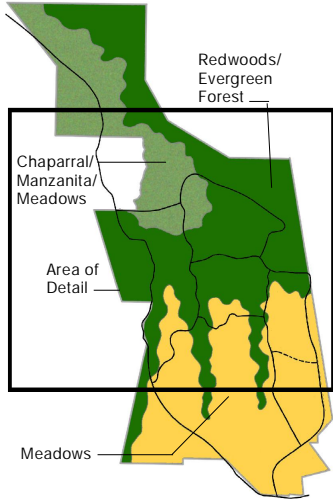
Student life facilities and student academic support services are generally integrated with the Colleges and enrich the university experience of undergraduate and graduate students. These facilities, programs, and services support the development of a vital intellectual community; promote full engagement in university life; and positively impact recruitment, retention, and graduation. To further enhance the overall quality of student life, appropriate social, cultural, retail, and recreational spaces and facilities will be developed centrally to complement the colleges, while also strengthening a developing central hub for a wide variety of student activities, sports and recreation, and academic support services.



f. Landscape and Open Space

LANDSCAPE AND OPEN SPACE FRAMEWORK

LANDSCAPE FRAMEWORK KEYPLAN



The 2005 LRDP builds on the current pattern of development clusters carefully placed through a balance of programmatic need and ecological sensitivity, as shown in Figure 21 below. The open expanse of the Great Meadow will be maintained, with new buildings confined to the forest edge and developed as infill. New development in the lower East Meadow between Hagar Drive and Coolidge Drive will be minimized to maintain the overall sense of an open meadow landscape. Within the current core (bounded approximately by Meyer, Hagar, McLaughlin and Heller Drives), the ravines, Kerr Meadow, and other areas will be retained as natural open space between development clusters. New development parcels to the north of the existing core will be sited sensitively and will maintain this pattern of development clusters surrounded by unbuilt landscape. The far north campus, in the vicinity of Marshall Field, will remain as undeveloped open space in its current natural state under this LRDP. This area requires careful planning and coordination to maintain a balance related to wildlife, hydrology and programs on the Campus Natural Reserve.

FIGURE 21
LANDSCAPE FRAMEWORK:
CENTRAL AND NORTH CAMPUS

LEGEND

- Forest
- Chaparral
- Meadow
- Open Spaces, Playing Fields, Courtyards, and Bridges
- Buildings
- Developed Landscape
- Development Area 2005 LRDP



The LRDP encourages careful design consideration with the natural landscape context and character of each site. Significant existing vegetation, topography, and drainage patterns will be protected as much as possible, and will inform site, building and landscape design. New landscaping and plant material will be chosen to blend with the natural environment through the use of local native materials and species present on site prior to construction.

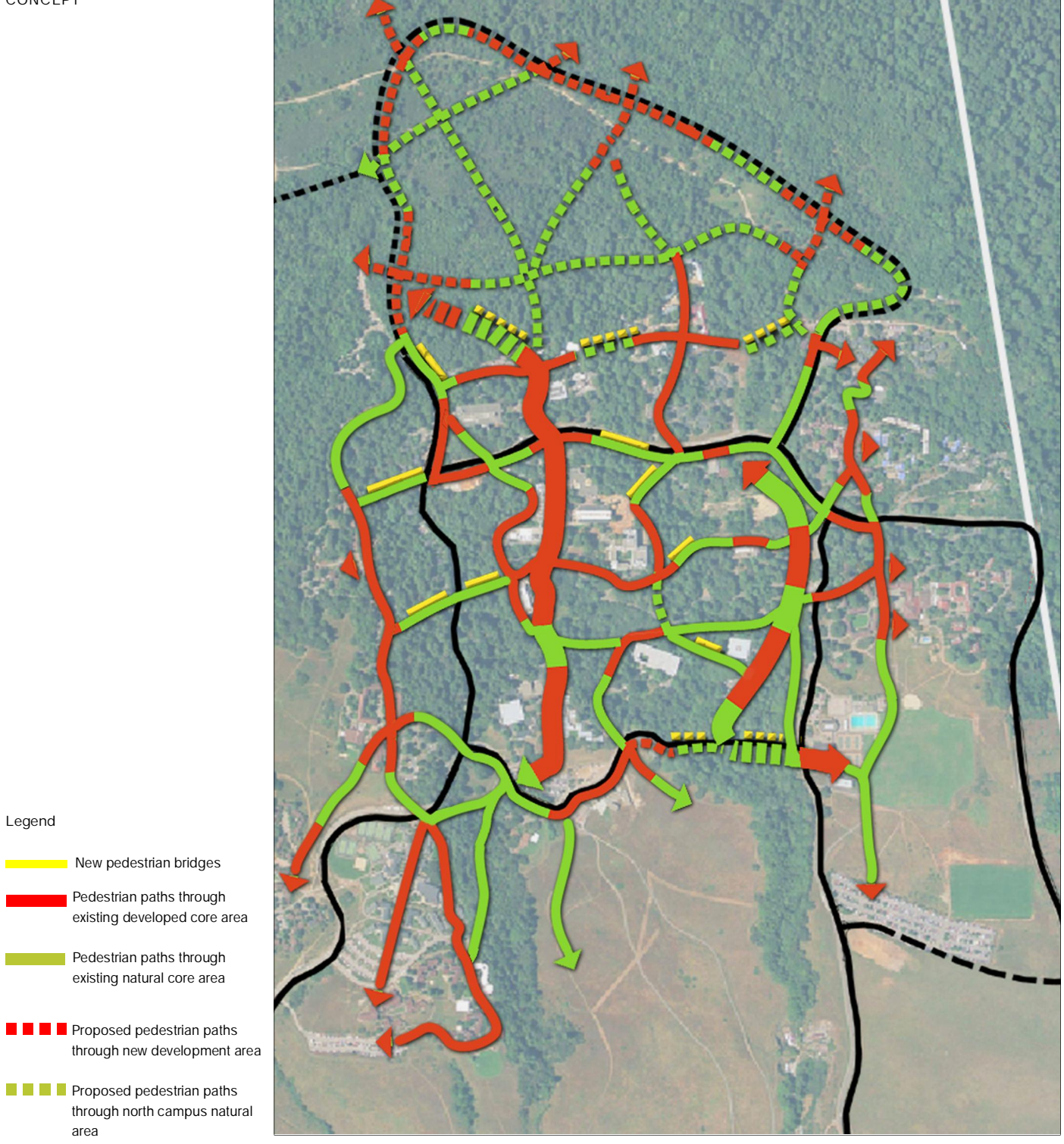
The plan reinforces the developed landscape framework of the central campus by enhancing the two major pedestrian circulation corridors which run north/south through its developed areas, as shown in Figure 22, Pedestrian Circulation Concept. The first of these is the corridor on the west side, which begins at Oakes College and runs north of the Engineering buildings. This LRDP will reinforce this significant landscape and circulation element and extend it northwest across a new bridge to the expanded academic core expansion area near Engineering, as well as north to future academic and housing areas.

The second circulation corridor east of the academic core focuses on student life. It currently connects Cowell Health Center to Quarry Plaza to Hahn Student Services Building and the Physical Education and Recreation facilities. As these pedestrian corridors traverse significant elevation change, they will be strengthened with infill development along their edges, with well-defined and generously designed pathways, and with a series of developed open spaces along their length, particularly at junctions with east/west pathways or other gathering places.






East/west pedestrian circulation patterns occur mostly at constant elevations. Bridges provide critical connections across ravines to fully integrate all program functions within the academic core and beyond to other areas of the campus. The landscape of the central campus, and its full pedestrian circulation system is an organic web of pathways, roads, and trails that can be understood as a "warped-grid" system as shown in Figure 22. The experience of walking through a mix of natural and developed areas gives the UC Santa Cruz its distinctive character. Improvements to the campus pedestrian circulation system to support enrollment growth are described in more detail in the following section.

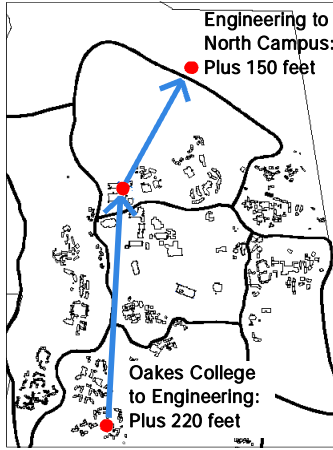


FIGURE 22
PEDESTRIAN CIRCULATION
CONCEPT



Legend

-  New pedestrian bridges
-  Pedestrian paths through existing developed core area
-  Pedestrian paths through existing natural core area
-  Proposed pedestrian paths through new development area
-  Proposed pedestrian paths through north campus natural area



Relative Elevation

LANDSCAPE STRUCTURE: TOPOGRAPHY

The LRDP, in its patterns of open space and development, uses the topography of the land—its series of stepping terraces punctuated by ravines—to define the unique form of the UCSC campus. The relatively level areas of the current developed campus will be used for carefully sited infill development. New academic and research facilities needing proximity to related existing facilities will be sited primarily on the "peninsulas" of the academic core and in an area north of Engineering identified for core expansion. New infill student housing projects will be located in the vicinity of existing colleges and housing.

North of the developed areas, the campus rises to an upper terrace as shown in Figure 23 below. Use of this level area is integral to this LRDP to support 19,500 FTE students. New housing and recreation space is located outside a new loop road. The expanded academic core is located inside the loop road. The area west of Heller Drive and north of Kresge College, which is within easy walking distance of the academic core, is identified as a location for undergraduate colleges.

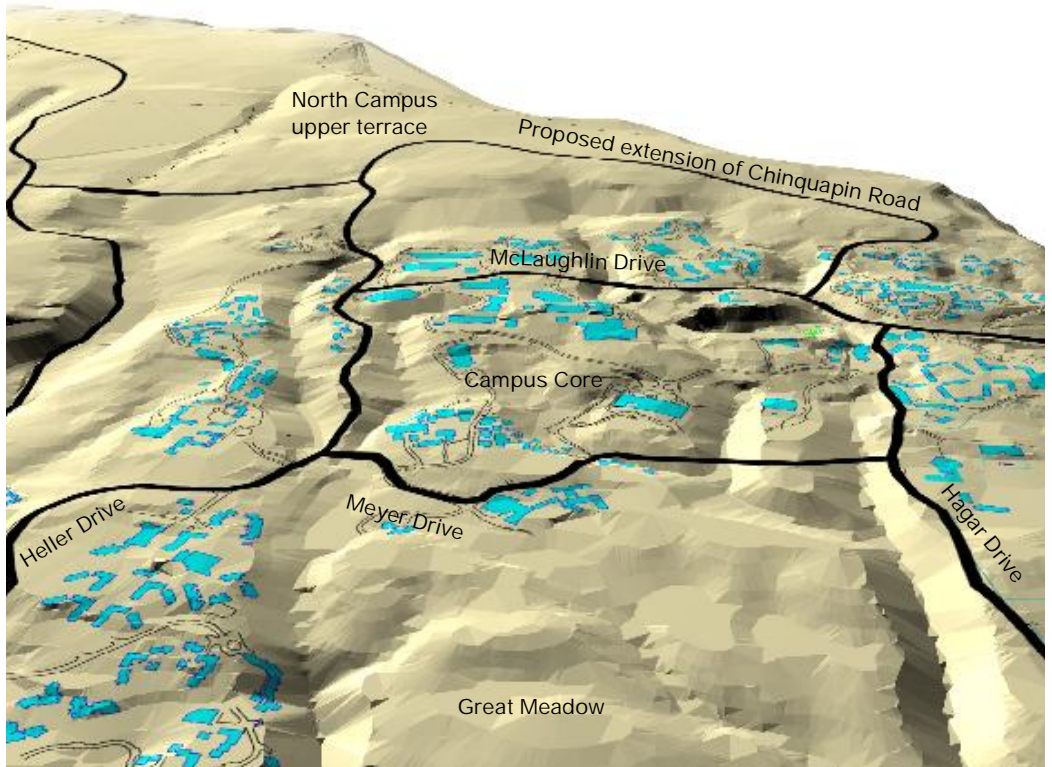


FIGURE 23
LANDSCAPE STRUCTURE:
TOPOGRAPHY



OUTDOOR RECREATION AREAS

Approximately 15 acres of new playing fields are needed to address a current deficit and to serve the projected population. A portion of the north campus has been allocated to Physical Education and Recreation for this purpose, including additional facilities such as courts, a swimming pool, and indoor recreation facilities. Additional playing fields and other outdoor recreation facilities could be developed in the vicinity of the East Remote lot. New colleges and housing development will also include recreation amenities such as playing courts. Natural areas of the campus offer places and pathways for additional recreational activities.

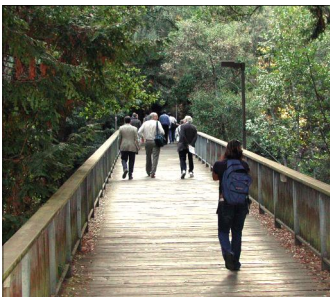


g. Circulation and Parking

UCSC has been highly successful in reducing single occupant vehicle (SOV) use. As of 2004, only about 40 percent of the person trips to and from the campus were made in a vehicle with one occupant. This traffic reduction has been achieved through a combination of parking management policies and Travel Demand Management (TDM) programs that encourage travel via high occupancy vehicles (HOV) while discouraging SOV use. Together, UCSC's parking management and TDM programs have reduced campus traffic generation rates well below comparable rates for other universities or the Santa Cruz region. As the UC Santa Cruz campus matures, filling gaps in the existing circulation network and expansion of circulation and parking infrastructure is essential. The 2005 LRDP proposes a comprehensive transportation system that combines improved campus connectivity, parking collection points, transit hubs, pedestrian, and bicycle-focused routes. This system provides the needed flexibility to support careful expansion into the north campus, as proposed in earlier LRDPs, and promotes an academic environment designed for convenience, contemplation, and interaction, disturbed as little as possible by auto traffic. The circulation and parking system must be flexible enough to accommodate a variety of strategies for improved campus access from the surrounding community. The design of new roads, bridges and pathways will include an exploration of ways to reduce and control runoff.

ACCESS

As most of the campus is bounded by parkland, all campus traffic is channeled through residential neighborhoods of the city's upper westside. The campus currently has only two entrances—the main entrance at the south campus and the west entrance, as shown on Figure 24, Vehicle Access. The 2005 LRDP proposes adding a third access to provide additional egress for fire safety, to support future campus expansion, and to support relocation of some service functions to a corporation yard off Empire Grade. The extension of Meyer Drive serves to improve internal access on campus by linking the east and west sides of the campus and completing a perimeter road to serve the central campus.



NEW ROADS

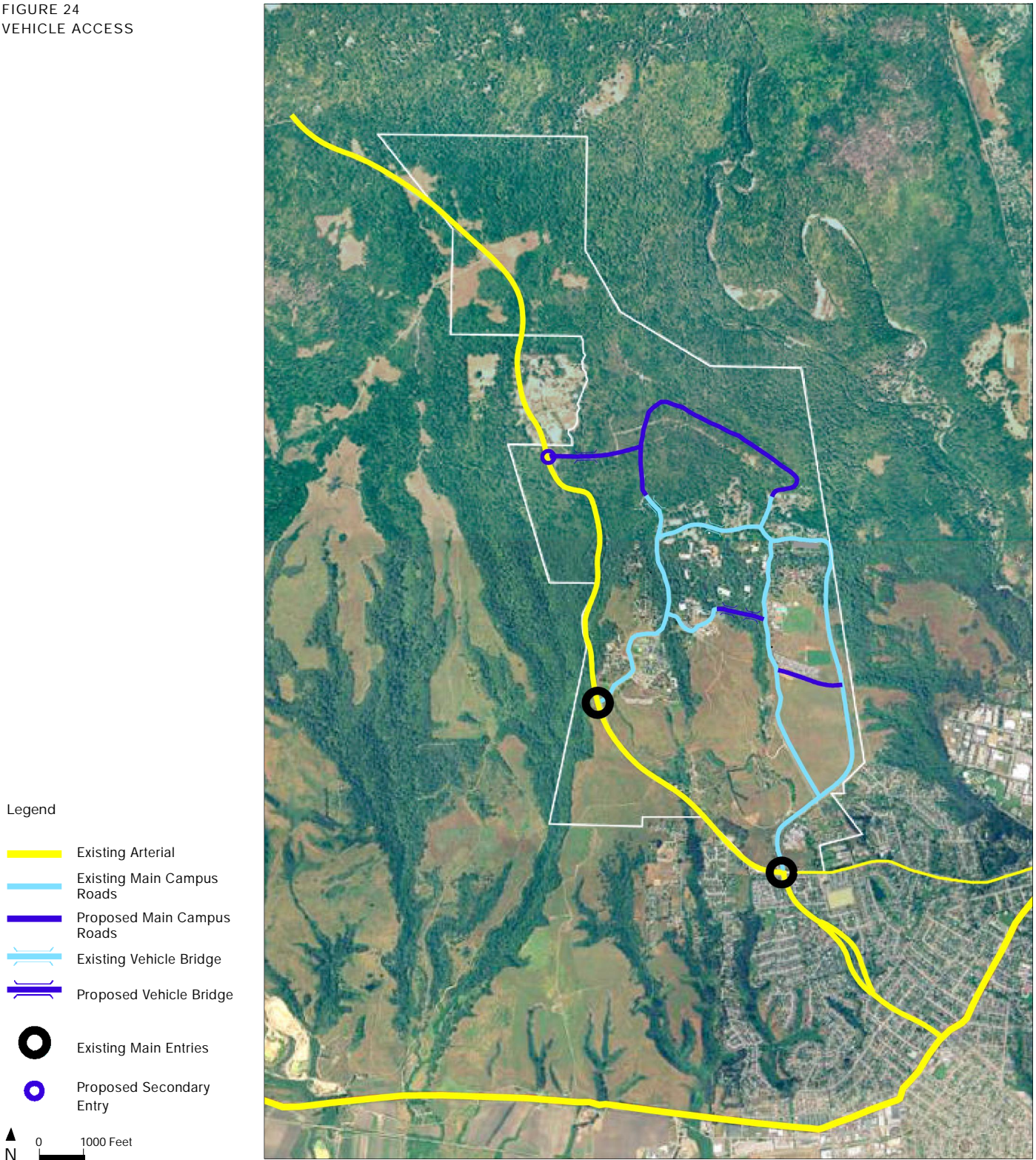
The vehicular circulation system in the 2005 LRDP is generally consistent with the 1988 LRDP. Several proposed roads identified in the 1988 plan are included in this plan to provide access to new areas of the campus, improve cross-campus connections, and improve the efficiency of shuttle access to parking facilities (see Figure 25). These roads will also provide traffic relief on existing roads, creating safer pedestrian and transit-friendly areas. The 2005 LRDP accommodates new road improvements including:

- *Chinquapin Road*

This proposal extends Chinquapin Road to serve areas north of the campus core, including the potential to connect to Empire Grade. The alignment will respect the terrain and sensitive environmental areas of the north campus.



FIGURE 24
VEHICLE ACCESS



- *Heller Drive*

Heller Drive is extended past the existing parking lot to connect with Chinguapin Road. This provides easy access from the new corporation yard to the core.

- *Empire Grade Access*

This road provides an emergency campus egress to the west, allows service access, and access for potential employee housing. The road would require a bridge over the ravine at Cave Gulch.

- *Meyer Drive Extension*

This proposed new road with two bridges will provide a critical cross-campus connection from Meyer Drive's existing terminus at the Music Center to Hagar Drive. The road will be aligned to minimize visual impacts, relieve traffic on McLaughlin Drive, and introduce a new route for transit vehicles. By bridging to the Hahn peninsula, the extension will serve the Hahn Student Services building, the library, and parking areas. Access to Meyer Drive Extension will be designed to serve either general traffic circulation or restricted access for pedestrian, bicycle, transit, and service vehicles. This flexibility is achieved as long as the connection to the Hahn peninsula provides a vehicular turnaround.

- *Hagar Drive to Coolidge Drive Connection*

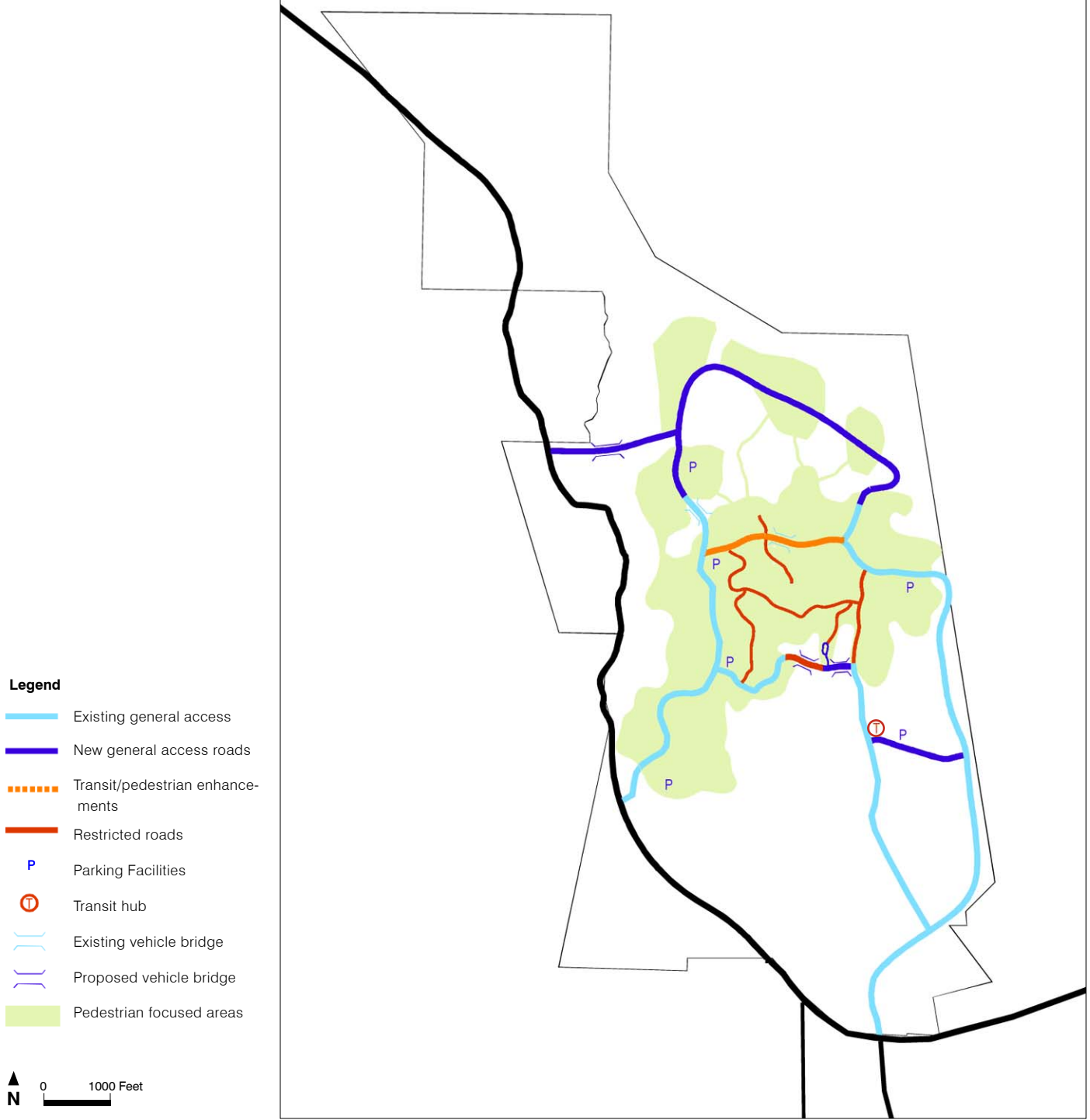
This proposed new road will be located along the south edge of the East Remote parking facility. It will improve the efficiency of ingress and egress at the parking facility and supports the proposed new transit hub in this vicinity. This connection would allow for restricted access on the Hagar Drive (between the East Field House and McLaughlin Drive) as Coolidge Drive/McLaughlin Drive becomes the primary vehicular route accessing the central campus.

With Coolidge Drive serving as primary access to the central campus, automobile traffic would be restricted on some roads within the core such as portions of Hagar Drive to improve pedestrian and bicycle safety and reduce auto traffic at Quarry Plaza. Service and transit vehicles would be permitted, but these roads would emphasize pedestrian and bicycle travel.

NEW BRIDGES

New pedestrian and vehicular bridges are an important part of the 2005 LRDP circulation system (see Figure 25). East/west travel on campus in many areas identified for development is impeded by ravines. Three new bridges for vehicles and pedestrians are shown in the 2005 LRDP: one connecting the extension of Chinguapin Road to Empire Grade and a pair of bridges connecting the Meyer Drive extension to the Hahn peninsula and on to Hagar Drive. Three additional new bridges are identified for pedestrians north of McLaughlin to link existing and proposed campus expansion.

FIGURE 25
VEHICLE CIRCULATION





PARKING

The campus today has nearly 5,000 car parking spaces. While various areas on the campus experience higher demands than others, on average, 70 to 80 percent of the campus parking supply is occupied on weekdays.

The growth projected in the 2005 LRDP will increase demand for auto travel and parking. Continued implementation and improvement of Transportation Demand Management measures and additional on-campus housing can maintain existing SOV levels or reduce this demand.

In order to serve the needs of faculty, staff, and students and fulfill the programmatic needs of the campus, the development of as many as 2,100 new parking spaces is proposed (net increase, not including spaces lost to development). These are projected from actual parking ratios derived from parking utilization surveys and applied to projected increases in campus population, of which more than a third are related to on-campus housing.

The parking strategy in the 2005 LRDP relies on a system of consolidated “collector” parking facilities located at the periphery of the central campus and served by high-frequency transit and campus shuttle service (see Figure 25, Vehicle Circulation). Parking will continue to be provided for on-site employee housing. In addition, the plan recommends pursuit of programmatic and policy measures to reduce parking demand on campus. Expansion of peripheral parking facilities and strategically located parking structures will accommodate the majority of the increasing parking demands, with implementation linked to actual and projected parking utilization rates. Individual colleges and buildings will continue to have limited parking close in for critical access needs, such as disabled access, deliveries, and service. With infill development on campus, the number of close-in parking spaces will likely be reduced.

The plan accommodates new parking structures to be located at the periphery of the central campus, to encourage walking and transit use in the academic core. The shift towards additional structured parking reflects a number of factors, including the scarcity of sites for new parking facilities, the likely decrease in surface lot spaces from continuing infill development, and the need to reserve buildable land for the academic program. Since Transportation and Parking Services is self-funded, economic viability of parking structures will need to be considered.

The 2005 LRDP proposes expanding the capacity of the East Collector Lot (formerly East Remote Lot) by constructing one or possibly two decks over the existing surface lot. This would result in an increase of approximately 2,000 additional spaces. This facility would be the campus's primary parking collection point served by regional transit and the campus

shuttle system at an adjacent transit hub. A new road connecting Hagar Drive and Coolidge Drive will improve access to this facility. On the west side of the campus the West Collector Lot (formerly West Remote) could function in a similar fashion. A collector parking facility will be located near the arts center, accessible via Heller or Meyer Drives, that may serve daily and arts events parking needs. A parking collector facility north of Cowell and Stevenson, accessed from McLaughlin Drive, could serve commuter needs. An additional parking facility may be located to serve the west side of the expanded academic core. Each of these structures could have approximately 500-700 spaces.

Limited surface parking will also be provided for new facilities within the central campus to meet accessibility requirements and to accommodate critical access needs. The location, amount and type of surface parking will be carefully considered to address storm water and environmental concerns.

TRANSIT/SHUTTLES

The campus transit system is a crucial component of the comprehensive transportation system. The transit system will continue to emphasize regional transit service provided by the external Santa Cruz Metropolitan Transit District (SCMTD) and an internal campus shuttle system serving the entire campus with transit hubs located at the east and west peripheral lots at parking collection points linking parking to campus shuttle systems. The 2005 LRDP relies on a frequent and reliable full-capacity shuttle and transit system that utilizes existing and proposed roads to serve the campus's growth areas. The 2005 LRDP envisions that the existing transit system and transit facilities will be expanded and configured to take advantage of the campus's loop road system through overlapping loop routes linked at parking collection points. Where appropriate, certain 'Bus Rapid Transit' solutions, such as queue jump lanes or transit-priority traffic signals, may be installed to



allow buses to bypass vehicle backups at intersections. The SCMTD would continue to provide a local and regional transportation alternative to single occupancy vehicle trips.

PEDESTRIAN CIRCULATION

Walking is the primary mode of travel for students within the academic core and within and between colleges. The pedestrian system is made up of a network of paths connecting individual buildings within colleges and inter-connecting the colleges. Most of the roads in the central campus have sidewalks on at least one side of the road, and to the extent possible new roads will have sidewalks on both sides. Crosswalks will be provided at intersections, with preference given to pedestrians inside loop roads.

As described in the Landscape and Open Space section and shown in Figure 23, north/south pedestrian travel is concentrated along two pedestrian spines. The 2005 LRDP reinforces and expands on these primary pedestrian spines and enhances east/west circulation by providing additional pathways and bridges along direct routes between destinations. In this way, proposed improvements would fill gaps in the circulation system. The most obvious of these gaps is the lack of connection of Meyer Drive to Hagar Drive. Extending Meyer Drive to Hagar can connect the East Remote parking and recreation facilities to the peninsula of land with the Hahn Student Services Building, the student services corridor, and the central core of campus. Further traffic reduction possibilities, noted above in the description of new roads, make this dual bridge project a priority.

Another gap is the lack of direct east/west connection between existing parts of the north academic core. Bridged pedestrian connections are needed between Crown College and Social Sciences/Colleges Nine and Ten, and between this area and Communications/Engineering. As the campus expands to the north, the existing pedestrian circulation system will need to be linked to new development areas. In the north, additions and upgrades to the existing unpaved roads could form other east/west routes between the core expansion parcels.

As the campus grows, conflicts between pedestrians and vehicles along roads at key crossing points will increase, particularly along McLaughlin Drive at Science Hill and south of Colleges Nine and Ten. Because of the volume of pedestrians flowing between the upper and lower portions of the campus at class change times, McLaughlin Drive will require innovative solutions to balance vehicular and pedestrian travel.

One of the challenges will be balancing pedestrian flow with transit schedules. High volumes of pedestrian crossings can impede transit vehicle travel speed.

BICYCLE CIRCULATION

Bicycle travel remains an important mode of transportation on campus despite the terrain, and bicycle travel is expected to grow as on-campus housing increases. The plan strives to improve the effectiveness and safety of bicycle travel by completing the campus's bicycle facility system and improving the safety of existing facilities. The bicycle circulation plan calls for Class II²⁰ bike lanes on major roads throughout the campus, both new and existing. Where constraints such as topography limit the ability to widen roads, bike lanes may be installed in the uphill direction, and bikes and vehicles will share the downhill travel lane, specifically northbound on Heller Drive between Meyer Drive and McLaughlin Drive.

Class III²⁰ bike routes, where bicycles and vehicles share travel lanes, are proposed along Steinhart and other campus service roads. With the completion of the Meyer Drive Extension, Hagar Drive between the East Field House and McLaughlin Drive will restrict automobile traffic, allowing only transit vehicles, pedestrians, and bicycles. With this improvement, pedestrian and bicycle conflicts with vehicles will be significantly reduced at Quarry Plaza.

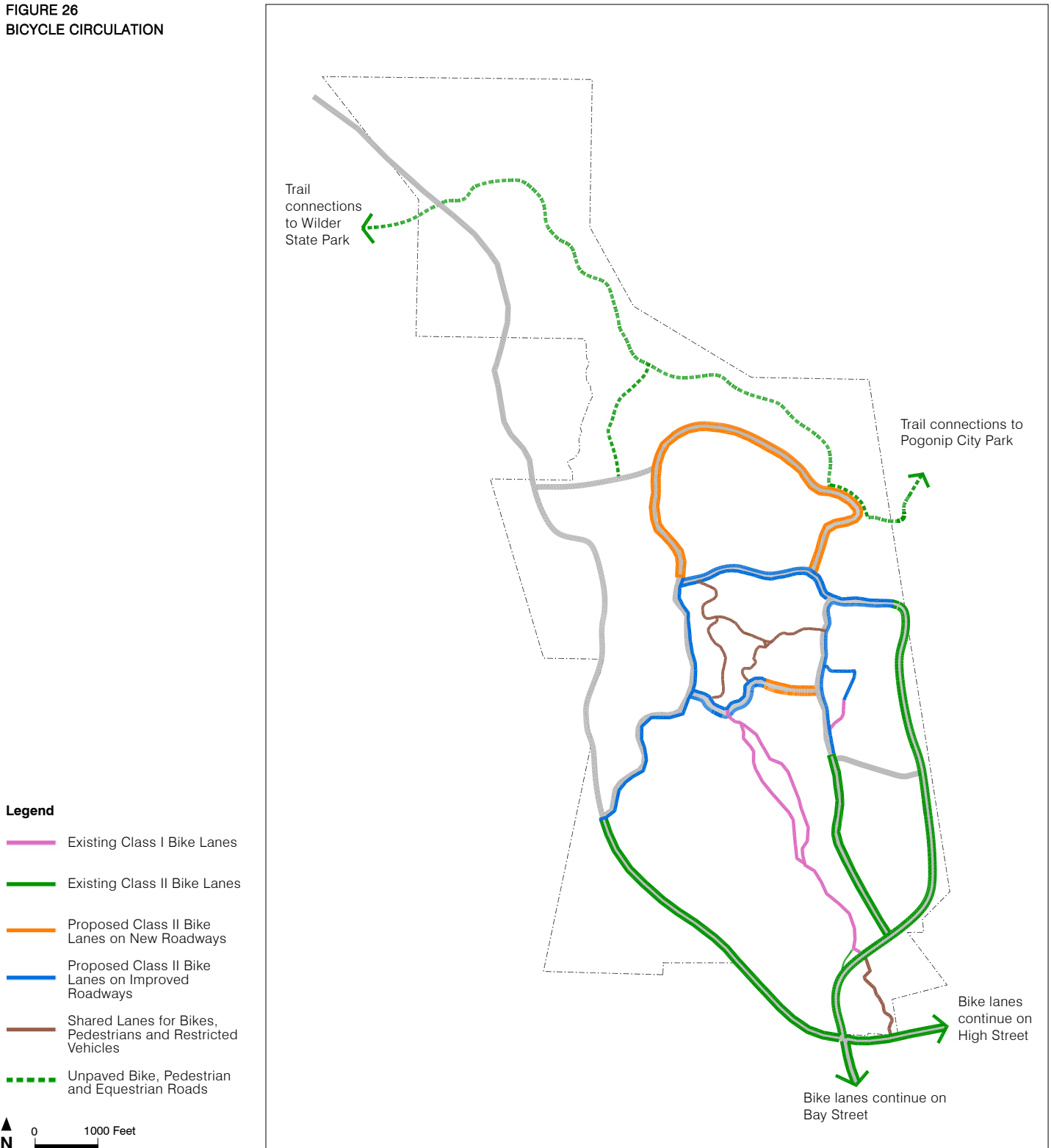
Recreational bike use will continue to be accommodated on designated fire roads and designated unpaved roads through undeveloped campus lands. As development expands to the north, the cross-campus regional recreation connection between the Pogonip City Park and Wilder Ranch State Park will be maintained for pedestrians, bikes, and equestrians.

Campus bike shuttles and transit services are equipped with bike racks that foster bicycle use by those unlikely to ride the entire uphill distance to the central campus. Bike parking facilities will continue to be provided at all major buildings and gathering places.

20. Class II bike lanes provide a striped lane for bicycle use on a road or highway; Class III bike routes provide shared use for bikes and vehicles on a roadway .



FIGURE 26
BICYCLE CIRCULATION



h. Utilities and Infrastructure

WATER

Adequate water supply is a primary issue for UCSC and the City of Santa Cruz given future anticipated shortfalls under drought conditions. Water is supplied to the campus by the City of Santa Cruz Water Department. The campus proposes a water management strategy that builds on existing programs for conservation and explores options for new source development. In addition, UCSC may explore the viability of possible on-campus water supply sources subject to test pump and aquifer capacity.

The water supply system is a complex network with four connections to the City of Santa Cruz system and eight separate pressure zones. Facilities in the campus core will likely require localized pipe upgrades and campus development north of the existing developed campus will require new piping and infrastructure elements, including booster pumps to augment pressure and new storage capacity.

The campus has implemented a range of conservation programs to reduce water consumption as the campus has grown. The 2005 LRDP calls for continuing these measures with additional improvements such as continued education efforts, continued retrofit of existing buildings with more efficient plumbing fixtures, use of ultra-low-flow fixtures in new buildings, and use of rainwater and/or recycled water if feasible for irrigation, cooling towers, and other non-potable uses.

ENERGY

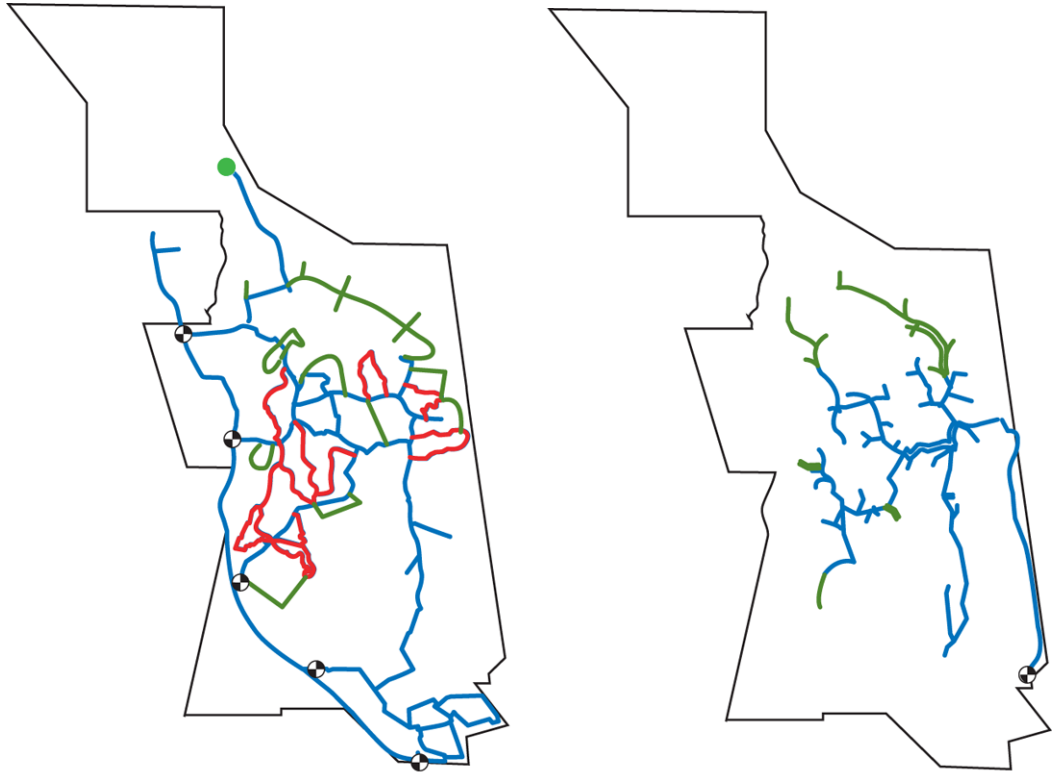
Over the past decades, UCSC has actively pursued energy conservation through energy-efficient new construction practices and energy retrofit programs. The campus will continue to promote energy efficiency and consistent service quality with demand-reduction strategies, compliance with the University of California Policy on Green Building Design and Clean Energy Standards, and self-generation when financially viable.

Campus natural gas and electrical service is supplied by Pacific Gas & Electric (PG&E). The campus-owned electrical network comprises 21kV primary service lines and 12kV distribution lines. This network is mostly buried and has a PG&E service connection northeast of the Hagar Court employee housing complex. Recent campus upgrades have increased feeder capacity. Future campus growth will increase demands on the campus electrical infrastructure and require localized upgrades and line extensions in addition to demand reduction strategies. Reliability of the power supply is particularly important to UCSC's mission as a research institution and will be a key element of future upgrades.

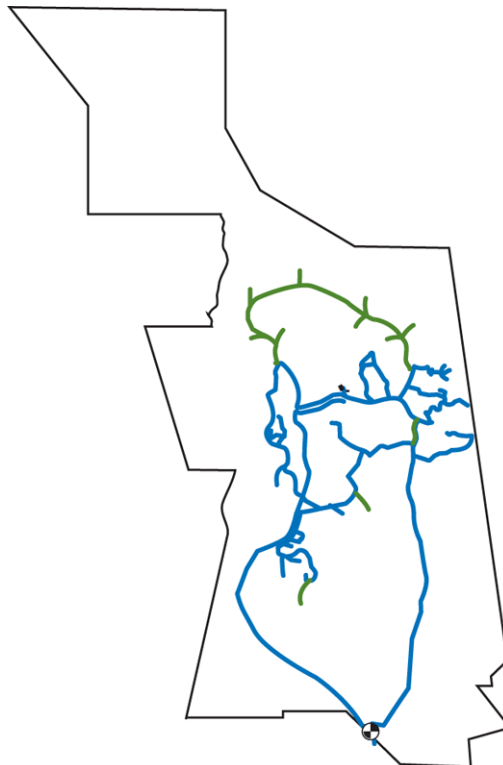
The natural gas distribution system is owned by UCSC and fashioned as a "ladder" system with primary piping extending up Heller Drive and Hagar Drive with cross connecting "ladder rungs" along Meyer Drive and McLaughlin Drive. Recent analysis has indicated a

**FIGURE 27 (LEFT)
WATER INFRASTRUCTURE**







**FIGURE 28 (RIGHT)
ELECTRICAL INFRASTRUCTURE**

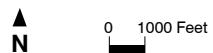


**FIGURE 29
NATURAL GAS
INFRASTRUCTURE**



Legend

-  Existing Utility Line
-  Proposed Utility Line
-  Upgraded Utility Line
-  Point of Connection
-  New reservoir/tower (Fig.27)
-  Campus Boundary



need for the repair of deteriorated or constrained areas of the network and the replacement or upgrade of system components to improve network stability and service. The 2005 LRDP will require extension of service to new development areas and a third pressure regulating station. In conjunction with demand reduction strategies, these infrastructure improvements will seek to ensure adequate infrastructure capacity for the plan.

SANITARY SEWER

The existing on-campus sanitary sewer system was sized for 27,500 students and will have adequate capacity for the proposed new development. There are two major trunk sewers on the UCSC campus, one on Empire Grade and the other along Hagar Drive, that combine into a single sewer at the Cook House, which discharges into the city's sewer system at Bay and High streets. New construction will be limited to repair, maintenance, limited upgrades, and extensions to areas of new development.

STORM DRAINAGE

The UCSC campus is unique in relying on a series of natural drainage courses and sinkholes for storm drainage. Storm water drains via a network of pipes into four drainage arroyos—Jordan Gulch, Moore Creek, Cave Gulch, and San Lorenzo River—which lead to a series of sinkholes (except for drainage into the San Lorenzo and the lower reach of Moore watershed). Detention basins and settling tanks serve localized building clusters. While this system meets current overall capacity requirements, there are localized areas of concern. Recent analysis has documented surface flooding, concentrated flows, and associated erosion in some locations. The long-term effect of sediment load on sinkhole capacity is not known and is difficult to determine. Future development will seek to minimize changes to existing hydrological conditions and utilize financially viable sustainable design strategies to manage storm water. These strategies may include minimizing point-source discharges from buildings and paved surfaces by using infiltration drainage techniques when feasible; recycling rainwater collected from impervious surfaces for irrigation or other non-potable uses; or collecting rainwater for controlled aquifer recharge.

DATA NETWORK AND TELECOMMUNICATIONS

Providing data and telecommunications infrastructure with adequate capacity and flexibility to support the educational and research mission of UCSC is a central element of the 2005 LRDP. This technology will serve the campus itself, link it to off-site facilities, and provide new opportunities for students, faculty, and staff through initiatives such as distance learning. Data and telecommunication infrastructure will need to be upgraded to meet short- and long-term needs for bandwidth/density and reliability. New data and telecommunications infrastructure should be flexible enough to accommodate new and emerging technologies.

CENTRAL PLANT

As the campus grows there will be a need to increase the capacity of the central plant system to provide hot and chilled water. The likely infrastructure requirements for the expansion of the hot water system include upgrade/construction of hot water piping and construction of a secondary heating hot water plant in the central campus. This secondary plant would be connected to the existing plant to provide flexibility in meeting peak demands. Additional chilled water capacity will also be required for cooling. This could entail installation of a new cooling tower and thermal energy storage near the existing central plant, or in another location with appropriate pipe connections to the campus system.



Acknowledgements

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Credits

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Sinkhole photo on page 37: By Don Fukuda, From Warrick, Sheridan F., ed., *The Natural History of the UC Santa Cruz Campus*, Environmental Field Program, University of California, Santa Cruz, 1982, p. 75

Sinkhole diagram on page 37: From Warrick, Sheridan F., ed., *The Natural History of the UC Santa Cruz Campus*, Environmental Field Program, University of California, Santa Cruz, 1982, p. 75

California red-legged frog photo on page 40 courtesy of Dr. Mark Jennings

Aerial photo of Santa Cruz on page 51 courtesy of Rich Pillinger

Appendix A
Summary of Existing and Approved UCSC Space

Facility	# of Bldgs	Instruction and Research						ORUs & ORAs	Academic Support			Phys Ed & Recr	Stdnt Serv	Inst Operatns		Stdnt/Fac Hsg & Food	U Ctr & Non-UCSC	Total ASF	ASF/ GSF	Total GSF
		Arts Div	Hum Div	PB Sci Div	Engin School	Engin Soc Sci Div	Gen Asgn		Library	Div, Col	Misc			Public Serv	Gen Srv					
Academic Resource Ctr	2												11,522					11,522	0.65	17,677
Agroecology trailers	4							3,185										3,185	0.74	4,322
Ap Sci Trailer 9	1							614										614	0.85	720
Arboretum	4								8,738									8,738	0.82	10,635
Architect & Eng Trailer	1													426				426	0.74	578
Auto Teller Machines	2																	0	NA	207
Barn G Shop	1													13,964				13,964	0.75	18,678
Barn H Receiving	1													11,866				11,866	0.84	14,071
Bay Tree Bookstore	1												26,605		2,027			29,670	0.68	43,894
Bay Tree Bookstore Shed	1												99					99	0.83	120
Blacksmith Shop	1													1,102				1,102	0.57	1,939
Bug Shop	1													116				116	0.93	125
Cam Fac trailers	2													844				844	0.70	1,205
Cardiff House	1													1,778				1,778	0.74	2,417
Cardiff House Annex	1													369				369	0.91	407
Carriage House	1													1,588	4,448			6,034	0.75	8,029
Ctr Agro & Sustain Food Sy	5					1,251		2,067										3,318	0.88	3,754
Center for Adaptive Optics	1							4,197										4,197	0.58	7,182
Central Heat Plant	4													12,922				12,922	0.75	17,120
Classroom Bldg	1					7,053								912				10,003	0.66	15,168
Communications Bldg	1	11,027												11,112				23,683	0.64	37,251
Communications 2 trailers	2													851				851	0.90	944
College 8	19					11,959		3,808						4,729				161,896	0.71	227,368
Colleges 9 & 10	14													4,884				241,232	0.89	351,273
Cook House	1													2,419				2,419	0.67	3,606
Cowell College	16		10,720											3,685				106,063	0.62	171,214
Cowell Infill Apt	3					106		3,991										42,560	0.74	57,724
Cowell/Stevnsn Comp Lab	1													831				831	0.74	1,127
Cowell Stdt Health Ctr	1													13,664				13,664	0.55	25,055
Crown College	16		-247	124.0				5,442	4,076					3,089				84,003	0.80	139,672
Crown/Merrill Housing	15																	95,446	0.88	108,496
Development Trailer	1													421				421	0.84	500
Digital Arts Facility	2	24,195								1,418								25,613	0.58	44,193
Elena Baskin Arts	15	30,604												298				30,902	0.79	39,325
Env Assess Group Trailer	1													524				524	0.91	578
Earth & Marine Sci	1			68,095					4,706	10,107								82,908	0.55	150,594
East Pool Facility	1																	450	0.80	624
EH&S Storage	1													2,858				2,858	0.95	3,024
EH&S Trailer	1													1,247				1,247	0.76	1,644
Emergency Response Ctr	1													3,280				7,920	0.65	12,198
Emerg Res Ctr Storage	1																	3,280	0.65	5,052
Engineering Bldg	1																	90,894	0.58	156,938
Engineering Bldg	9						55,904	15,302	5,057	14,631								5,466	0.87	6,293
Field House East	1																	21,888	0.76	28,938
Field House West	1																	10,009	0.57	17,531

Appendix A (continued)
Summary of Existing and Approved UCSC Space

Facility	# of Bids	Instruction and Research				ORUs & ORAs		Academic Support		Public Serv	Phys Ed & Recr	Stdnt Serv	Inst Operatns		Std/Fac Hsg & Food	U Ctr & Non-UCSC	Total ASF	ASF/ GSF	Total GSF
		Arts Div	Hum Div	PB Sci Div	Engin School	Soc Sci Div	Gen Asgn	Library	Div/Col Misc				Gen Srv	Adm					
Firehouse	1											1,000	3,860			167,092	0.79	4,882	
Family Std Hsg	50												2,298	163,794			0.85	196,593	
Garage fleet services	1											4,644	4,256			4,256	0.76	5,608	
Grad Student Commons	1															4,644	0.66	7,056	
Grad Student Housing	5													23,480		23,480	0.86	27,269	
Granary	1												2,097			2,097	0.85	2,465	
Hagar Court Office Bld	1								493		12,137			3,322		884	0.79	1,124	
Hahn Student Services	1															23,015	0.69	33,282	
Hahn Art Facility	1	2,820														4,722	0.71	6,684	
Housing Admin	1	2,527											398	1,045		4,722	0.71	6,684	
Housing Storage 1-2	2													158		158	0.99	160	
Humanities Bldg	3		29,140				6,860		6,340							51,140	0.60	85,000	
Humanities Trailer 1	1								241							241	0.84	288	
Infant Toddler Mod Unit	1												1,335			1,335	0.70	1,920	
Interdisciplinary Sci	1			17,246			12,066		130							34,557	0.56	61,346	
J Baskin Engineering	1			16,422	60,644				7,965				9,739			104,214	0.60	172,838	
Kerr Hall	1			-92					2,503	800	217	5,163	36,466			45,057	0.57	79,363	
Kiosk East	1												21			21	0.66	32	
Kiosk West	1												21			21	0.66	32	
Kresge College	29	6,273		5,205			479	4,827	10,147		7,298	159		90,009		124,397	0.79	156,957	
KZSC Storage	1										50					50	0.83	60	
KZSC Transmit	1										486					486	0.94	518	
Life Lab	1														1,398	1,398	0.76	1,848	
Maintenance Storage Trlr	1								86			199				285	0.89	320	
McHenry Library	1	11,069	4,864	18,749	864	864	4,390	148,723	6,815							196,338	0.71	277,474	
Merrill College	19		-154			11,575	4,201	4,837			4,503			69,653		94,981	0.67	141,256	
Music Center	2	28,138					217			109						28,464	0.55	52,179	
Nat Sci 2	1			14,826		16,718			2,828		71	148				49,955	0.55	90,294	
Nat Sci 2 Annex	1						2,265						1,052			6,727	0.71	9,465	
Nat Sci Greenhouse	1			1,593												1,593	0.95	1,680	
Nat Sci Paleo Lab	1			943					1,769							943	0.92	1,020	
Nat Sci Storage	1															1,769	0.95	1,860	
Nat Sci Woodshop	1			2,359												2,359	0.92	2,560	
Oakes College	19		-575			9,673	4,850		3,717		7,000			103,094		127,759	0.67	190,429	
OMP Trailer	1												443			443	0.88	504	
OPERS Fitness	1									9,679						9,679	0.72	13,440	
OPERS Office	1									2,005						2,005	0.65	3,091	
OPERS Tennis	1									10,322						10,322	0.65	15,865	
Paint Shop	1												266			266	0.95	280	
Parking Structure	1															0	NA	184,395	
PE Activity	1									2,390						3,076	0.97	3,172	
Physical Sci Bldg	1			61,278	5,088				7,400							79,829	0.59	136,444	
Porter College	5	6,513							11,743		4,380			92,758		120,319	0.64	188,249	
Porter Infill Apt	7													81,400		81,400	0.74	110,403	
Powder House	1															120	0.84	143	

**Appendix A (continued)
Summary of Existing and Approved UCSC Space**

Facility	# of Bids	Arts				Instruction and Research				ORUs & ORAs		Academic Support		Public Serv	Phys Ed & Recr	Stdnt Serv	Inst Operatns		Stdnt/Hsg & Food	U Ctr & Non-UCSC	Total ASF	ASF/GSF	Total GSF				
		Div	Hum Div	PB Sci Div	Engin School	Soc Sci Div	Gen Asgn	Library	Div, Col Misc	Library	Div, Col Misc	Gen Srv	Adm				Gen Srv	Adm									
PF&C Trailers 1-2	2																	1,233		533		1,233	0.89	1,392			
RV Recreation	1																							533	0.56	956	
School Age Mod Unit	1																		1,475					1,475	0.77	1,920	
Sci & Engineering Library	1											55,160												55,160	0.72	76,800	
Sign Shop	1																		896					896	0.90	992	
Sinsheimer Lab	1													639					1,027					62,098	0.63	99,132	
Social Sci 1 & 2	2													7,167					1,110		135			78,990	0.60	131,623	
Social Sci Trailer 1	1																							0	NA	0	
Solar Greenhouse	1												606											389	0.90	431	
Stevenson Academic	15																							71,646	0.64	156,233	
Stevenson Infill Apt	3																							39,730	0.74	53,886	
Stone House	1																							879	0.66	1,324	
Student Music East	1																							2,136	0.81	2,645	
Student Union	2																							9,549	0.80	11,985	
Theater Arts Complex	14																										
Theater Barn	1																										
Thimann Lab	1																										
Thimann Lab Trailer 3	1																										
Thimann Lecture Hall	1																										
Thimann Receiving	1																										
Transport & Park Serv Stor	1																										
Transport & Park Srv Trailer	1																										
UCO Lick Lab A & B	2																										
University House	1																										
University Relations Trlr	1																										
Upper Quarry Amphitheater	2																										
Village Housing	21																										
On-campus total	419	172,991	51,827	316,759	123,710	150,832	97,698	86,706	203,883	118,621	1,434	56,743	134,700	110,442	54,202	1,423,788	8,480	3,112,816	0.65	4,825,289							

Appendix B

Public Workshops

- | | | |
|--|--------------------|------------------------------|
| <p>Wednesday, 11/5/03</p> <ul style="list-style-type: none"> • LRDP Background • Cooper, Robertson & Partners Background • Key Topics for the LRDP • Discussion Tables | <p>6:00-9:00pm</p> | <p>UCSC Inn, Sierra Room</p> |
| <p>Wednesday, 2/25/04</p> <ul style="list-style-type: none"> • Overview of LRDP Process • University and Community Work Group • UCSC Site • Strategic Futures Committee Update • Preliminary program/Scenario testing • Sustainability • Question and Answer | <p>6:00-9:00pm</p> | <p>UCSC Inn, Sierra Room</p> |
| <p>Wednesday, 4/21/04</p> <ul style="list-style-type: none"> • Update from Strategic Futures Committee • Update from Campus and Community Work Group • Enrollment Scenarios - Site Design Studies • Preliminary Transportation Assessment • Campus Housing Program • Background on City's Housing Element • Question and Answer | <p>6:00-9:00pm</p> | <p>UCSC Inn, Sierra Room</p> |
| <p>Wednesday, 6/9/04</p> <ul style="list-style-type: none"> • Campus Development Options: Draft Enrollment Scenario • Sustainability and Infrastructure • Report from Campus and Community Work Group • Question and Answer | <p>6:00-9:00pm</p> | <p>UCSC Inn, Sierra Room</p> |
| <p>Wednesday, 10/20/04</p> <ul style="list-style-type: none"> • Overview and Discussion, First Draft LRDP | <p>6:00-9:00pm</p> | <p>UCSC Inn, Sierra Room</p> |

