Chapter 3
THE 2004 LRDP

UC San Diego
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The 2004 LRDP considers projected student enrollment, campus population growth, and the anticipated space program and land uses associated with expansion of UCSD’s academic, administrative, and support programs to academic year 2020-21. The primary intent of this LRDP remains unchanged from that of UCSD’s previous LRDPs: the 2004 LRDP is intended to provide a general land use plan to enable UCSD to achieve its academic, research, and public service goals, to realize the best possible balance between aesthetics and functionality, to guide stewardship over the development of this spectacular site, and to attain appropriate integration with the surrounding off-campus community.

As discussed previously, UCSD’s academic plans provide the basis for its enrollment projections and physical plans. Consequently, this section of the 2004 LRDP presents a) projections of enrollments and the campus population, b) estimates of the additional academic and ancillary space, including housing, needed to achieve the delineated program goals, c) the principles that will guide planning for future development, and d) the revised land use plan.

A. PROJECTED ENROLLMENT AND CAMPUS POPULATION

This section describes the projected student enrollment and campus population growth through academic year 2020-21. As previously described, the UCSD plan entails accommodating a total enrollment of 32,700 full-time equivalent (FTE) students through 2020-21, including summer enrollment. A description of the relationship between FTE and headcount enrollment follows.

1. Relationship Between Full-Time Equivalent and Headcount Enrollment Planning

The term “full-time-equivalent” students, or FTE students, is a budgetary term used by the University and the State to define funding associated with enrollment growth. The number of FTE students differs from the number of individual students (measured in terms of headcount) who are enrolled. Forty-five units of coursework taken in a quarter system by undergraduate students during an academic year is equivalent to one FTE student, based on the concept of an entering freshman making orderly progress over four years toward a 180-unit degree. At the graduate level, 36 units of coursework is equivalent to one FTE, and in the Health Sciences every student headcount is considered to be one FTE.

If each student (undergraduate or graduate) took a full-time course load, student FTE would equal the student headcount enrollment. However, student FTE numbers are somewhat lower than the total student headcount because, on average, students take slightly less than a full-time course load (approximately 95% of the defined full-time course load). This difference between student FTE and student headcount is greater during summer sessions. During summers, enrollment consists primarily of undergraduates who typically take about 8 units of coursework, far below the 15 units that students typically earn each quarter, and farther still below the approximate 45 units that students earn over the course of an academic year.
A headcount student currently attending summer session, then, equals slightly less than one-fifth of an annualized FTE student.

2. Student Enrollment
To meet the needs of California’s growing population, UCSD plans to enroll 32,700 FTE by academic year 2020-21, including 24,700 undergraduate FTE, 6,000 graduate FTE, and 2,000 Health Sciences FTE. Table 6 displays projections of FTE enrollment anticipated to occur in both the regular and summer sessions (assuming provision of State funding) through academic year 2020-21. Table 7 presents student headcount projections as a three-quarter-average of students enrolled in the Fall, Winter, and Spring quarters (regular academic year) with separate numbers for summer sessions. The vast majority of the students that attend summer session also enroll in the regular session. Therefore, it is not meaningful to combine the student headcount estimates for regular and summer sessions because the sum of the two would double-count those students enrolled in both sessions. Overall, UCSD projects that its regular academic year, three-quarter-average headcount enrollment in 2020-21 will be 29,900 students, including 21,900 undergraduates, 6,000 graduates, and 2,000 in the Health Sciences.

3. Campus Population
Projections of the total campus population are provided in Tables 8 and 9 for the regular and summer sessions, respectively. Table 8 shows that the population of students and academic and staff employees during the regular session is projected to grow by approximately 4% annually over the LRDP planning period. Table 9 shows that the population of students and academic and staff employees during the summer session is projected to grow by approximately 10% annually over the LRDP planning period. Even with a larger percentage of student growth projected for the summer session, the overall total campus population during summer will remain substantially below that of the regular session over the LRDP planning period.

In addition to the students, faculty, and staff who study and work at UCSD, on any given day there are a number of other people on campus, including patients, visitors, vendors, construction workers,
employees of other entities (e.g., the Howard Hughes Medical Institute, the Institute of the Americas, the future Science Research Park, etc.). Furthermore, the campus population includes night-time visitors, such as University Extension students, patrons of theater performances and large event audiences at the 5,000-seat RIMAC arena, etc. Although the projections reported in the LRDP does not capture these other populations, the associated LRDP EIR analyzes their environmental impacts.

B. PROGRAM DEVELOPMENT

1. Academic Programs

UCSD’s academic programs continue to evolve as knowledge unfolds, new fields emerge, and societal needs are redefined. Although, changes in the basic academic structure and program goals are not anticipated during the planning horizon of this LRDP, UCSD recognizes that future instructional, research, and employment activities at the University may be influenced by advances in telecommunications and information technology. Not only may those potential advances result in superior academic experiences, they could conceivably result in beneficial environmental impacts (entailing less commuting and reduced traffic, parking, and air quality impacts).

Although the effects of telecommunications and information technology on University activities are still evolving, UCSD will carefully monitor those developments and seek resources to implement warranted innovations. Nevertheless, the addition of students will require new faculty, support staff, and other related employees, and added instructional space (classrooms and laboratories) and office space (for faculty, researchers, and administrative support). Ongoing academic planning guides decision-making about the nature of the programs needed to accommodate the student demand and meet the requirements of California’s citizens. Most of the student enrollment growth will be centered in the General Campus divisions, but expansion of professional programs, including the Health Sciences, is also anticipated. In addition, given workforce and economic considerations, continued growth in teacher education and engineering programs, at both the undergraduate and graduate levels, is also planned.
2. Ancillary Programs
Most of UCSD’s ancillary programs, particularly student housing, recreation, and parking, will experience increased demand for services resulting from enrollment growth. Certain administrative units, student services, and childcare will also face demand for added service, some of which may translate into future program space proposals. In addition, growth in the patient service programs of the UCSD Medical Center La Jolla is expected to result in new initiatives, funding opportunities, and facilities.

Transportation and Parking Services regularly evaluates on-campus parking availability and allocation in response to population changes, and it is anticipated that adequate on-campus parking will continue to be provided (see Section 6, page 44 for additional discussion of parking and transportation plans). In addition, UCSD remains committed to advancing its alternative transportation programs and specific consideration will be given to measures designed to reduce automobile usage.

3. Space Projections
Development of new space will be required to accommodate the projected population growth and expansion of UCSD’s academic, clinical, housing, administrative, and service programs. Table 10 depicts total space projections in gross square feet (GSF) by function and geographical area for 2002-03 and 2020-21. As a whole, UCSD may grow from 10.1 million GSF to 19.2 million GSF during the time that the 2004 LRDP is in effect.

4. Housing Projections
In 2003-04, UCSD housed a total of 8,300 students (including 6,825 undergraduates and about 1,475 graduate and professional students). The 2004 LRDP has identified land to house a total of 13,300 students, including housing for 9,785 undergraduates and 3,515 graduate/professional students. In addition, the campus will continue to explore opportunities to acquire more off-campus, privately developed housing, just as it did when it purchased the La Jolla del Sol complex located approximately one mile from campus, so 50% of eligible students may reside in campus-owned facilities.

UCSD will also consider opportunities to develop new childcare facilities and rental housing for faculty and staff in campus areas designated for housing facilities that are unrelated to the undergraduate colleges. Continuation of the University’s home loan mortgage origination and assistance programs for faculty members will help those individuals to secure housing and further reinforce UCSD’s competitiveness in recruiting and retaining academic talent.

<p>| Table 10 |
| UCSD Development Gross Square Feet (GSF) |
| 2002-03 | 2020-21 |</p>
<table>
<thead>
<tr>
<th>Actual</th>
<th>Projected</th>
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<tbody>
<tr>
<td><strong>By Function</strong></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
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<tr>
<td>Administration / General Services</td>
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<tr>
<td>Public Venue and Sports</td>
<td>823,000</td>
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<tr>
<td>Housing and Dining</td>
<td>3,059,000</td>
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<tr>
<td>Hospital and Clinics</td>
<td>326,000</td>
</tr>
<tr>
<td>Science Research Park</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>10,082,000</strong></td>
</tr>
<tr>
<td><strong>By Location</strong></td>
<td></td>
</tr>
<tr>
<td>SIO</td>
<td>851,000</td>
</tr>
<tr>
<td>West Campus</td>
<td>7,405,000</td>
</tr>
<tr>
<td>East Campus</td>
<td>1,151,000</td>
</tr>
<tr>
<td>Nearby</td>
<td>675,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>10,082,000</strong></td>
</tr>
</tbody>
</table>

Notes:
1. GSF data is rounded to the nearest 1,000.
2. Nearby includes University House, La Jolla del Sol, and various leased properties within close proximity to the Main Campus.
5. Pedestrian Circulation

The 2004 LRDP provides a framework for pedestrian routes (Figure 7) that has been designed to create a desirable physical environment, support healthy lifestyles, reduce automobile usage, and link with mass transit stations.

The following guidelines will be reflected in the planning of improvements to UCSD’s pedestrian circulation system:

- New buildings will be designed and located to accommodate existing pedestrian circulation and appropriate connections;
- Paths will be designed to encourage users (pedestrians, bicyclists, and skateboarders) to remain on paved routes through landscaped areas; and
- Paths in canyon areas will be restricted to canyon rims or bridges over canyons. Fencing and other barriers may be considered to limit access into natural areas.
6. Parking and Transportation Projections

Table 11 illustrates data corresponding to the supply of parking in 2002-03 and the projected capacity for 2020-21. Assuming continuation of existing campus policies with regard to parking access, the Scripps Institution of Oceanography (SIO) portion of the campus would need about 1,250 spaces; parking demand in the West Campus would increase to 15,600 spaces; and parking demand in the East Campus would increase to about 10,350 spaces, primarily due to the expansion of the UCSD Medical Center La Jolla and the Science Research Park. For the campus as a whole, the need for parking would increase by approximately 54%, from 17,650 spaces in 2002-03 to 27,200 spaces in 2020-21. The vast majority of future parking will need to be constructed in structures due to the limited amount of vacant land. Future parking will be funded primarily by the UCSD parking system; all new proposed parking facilities will be required to satisfy standard financial feasibility tests.

To accomplish its long-standing goals of easing access to the campus and minimizing the impacts of growth on the surrounding community, UCSD will continue to emphasize the importance of using alternative transportation, including campus-operated shuttles, public mass transit, carpools, and vanpools.

Given its commitment to encouraging the use of mass transit, UCSD has been working with the San Diego Association of Governments (SANDAG) to evaluate alternative public transit routes for effectively serving the campus via Light Rail and Bus Rapid Transit systems. Also, to increase the convenience and attractiveness of using this important mode of alternative transportation, UCSD will coordinate deployment of its campus shuttles with the improved public mass transit operations.

Consistent with the goal of optimizing the use of campus land and resources that was expressed in all of UCSD’s previous LRDPs, the 2004 LRDP promotes the following strategy to guide the development of alternative transportation and parking at UCSD:

- Expand and improve campus operated alternative transportation programs (e.g., shuttle systems, carpooling, vanpooling, bicycle network) to minimize demand for parking;

- Collaborate with the public agencies responsible for mass transit operations to secure external funding to expand the scope of services provided for UCSD commuters and to minimize demand for parking;

- Consider policy changes to contain both the amount of additional parking needed and permit cost increases, and to encourage expanded use of mass transit;

| Table 11 |
| UCSD Parking Space Capacity |
|  |
| | 2002-03 Actual | 2020-21 Projected |
| SIO | 950 | 1,250 |
| West Campus | 10,575 | 15,600 |
| East Campus | 6,150 | 10,350 |
| **TOTAL** | **17,650** | **27,200** |

Notes:
1. Parking space data is rounded to the nearest 50.
2. Parking capacity includes Coast Apartment and Mesa Housing, spaces at SIO, East Campus, SRP, and La Jolla del Sol. The above amounts exclude contractor parking that occurs on undeveloped lands.
• Develop parking structures as needed to accommodate the long-range population of the campus. Carefully consider opportunities to co-locate parking structures with other facilities (e.g., office space, recreational facilities, etc.); and

• In siting and designing parking structures, carefully consider topography, landscaping, noise impacts, nearby buildings, and lighting that ensures safety.

7. Vehicular Circulation
The overall goals of the vehicular circulation system in the 2004 LRDP (Figure 6, page 33) are as follows:

• Complete the campus loop road through construction of a second bridge over Interstate 5 at the eastern terminus of Gilman Drive (near the southeast corner of Sixth College);

• Improve service and emergency vehicular access;

• Design roads to fit well with their immediate surroundings; and

• Strengthen public entries with landscaping and information kiosks to provide attractive, visible gateways and make it easier for visitors to access information.

8. Bicycles
UCSD will continue to encourage the use of bicycles for commuting and on-campus transportation. With the growth in the number of students living on campus, including those in residential housing at the Mesa and Coast Housing complexes, demand on UCSD’s bicycle transportation network will intensify. Consequently, UCSD will continue to add designated bike lanes throughout the campus on major roads and provide other appropriate bicycle routes and bicycle parking facilities. The use of bicycles will however be precluded in select areas to avoid conflicts with pedestrians using major walkways (e.g., Library Walk).

C. PLANNING PRINCIPLES

Physical expansion of the campus will require UCSD to manage its evolving urbanization so that aesthetic and functional considerations are properly balanced. To this end, UCSD completed a comprehensive urban planning analysis called the UCSD Master Plan Study (1989). This study presented five conceptual planning principles to guide physical development: Neighborhoods, University Center, Academic Corridors, the Park, and Connections. Since its completion, the campus has extended the Master Plan Study through a series of more focused neighborhood-level studies that have incorporated design guidelines and updated projections of program goals and space needs. A general description of each principle follows, along with a discussion of some specific planning and design considerations that guide the implementation of each concept.
1. Neighborhoods
The term “neighborhood” describes UCSD’s distinct geographical and architectural districts (Figure 8). Compact, clearly demarcated neighborhoods will ensure the efficient use of land and provide an opportunity to imbue each neighborhood with a distinctive character. In general, academic and ancillary program objectives will provide the basis for shaping the character of the various neighborhoods. The following considerations will guide neighborhood development:

- Neighborhoods should comprise compact clusters of buildings, courts, plazas, quadrangles, and open spaces, and have distinct boundaries and entries;
- Each neighborhood should follow specific architectural and landscape design guidelines; and
- Landscaping and the siting and massing of buildings within a neighborhood will preserve view corridors for the campus and community whenever possible.
2. University Center

UCSD is not located in or adjacent to a traditional “college town.” Thus, to achieve the services and atmosphere of a college town, the campus will develop one of its neighborhoods as a “town center.” This area, designated as the University Center, comprises 28 acres within the geographic center of the campus. University Center affords a location within easy walking distance of many neighborhoods in the western area of campus.

The following planning considerations will guide development of UCSD’s University Center:

- In contrast to the more park-like areas of the campus, the University Center will have an urban character;
- As UCSD’s “downtown,” the University Center may have a variety of facilities, perhaps including academic facilities, classrooms, administrative and student services, campus-oriented stores, eating establishments, performance venues, galleries, museums, gathering areas, and some housing; and
- In general, buildings will be oriented to pedestrians, with open and inviting ground level facades with arcades where appropriate.

3. Academic Corridors

To make certain that faculty and students in related academic departments have easy access to one another and to provide a corresponding basis for locating academic facilities, the campus has settled upon the concept of “academic corridors.” Thus, the idea of academic corridors (Figure 9) is used as a theoretical concept to guide the process of selecting sites for new buildings and the corridors will not manifest physical cues. Each of the corridors is related to academic discipline clusters, and each includes adequate land to accommodate projected space needs for those disciplines. Five corridors, cutting across neighborhood boundaries, have been identified:

- The Humanities corridor extends east from Muir College to the Sixth College;
- The Mathematics and Engineering corridor encompasses Mathematics in Muir College and Engineering spanning Warren and Sixth Colleges and, the University Center;
- The Life and Natural Sciences corridor extends south from Muir College to Revelle College, through the School of Medicine (SOM) and Veterans Administration Medical Center, and ends at the UCSD Medical Center La Jolla on the eastern area of the campus;
- The Social Sciences corridor extends north from Muir College to Eleanor Roosevelt College; and
- The Marine Sciences corridor extends from the Scripps Institution of Oceanography’s oceanfront facilities northeast through the entire span of the Scripps Institution of Oceanography portion of the campus to North Torrey Pines Road.
4. The UCSD Park

UCSD’s natural resources (the eucalyptus groves, canyons, hillsides, and bluff areas) have been conceptualized collectively as the UCSD Park. This integrated system of open spaces (Figure 10) contributes significantly to the campus’ identity and character and is planned as a permanent campus feature to preserve these natural resources. The UCSD Park is separate and distinct from land areas within the University of California Natural Reserve System.

Designation of the Park land use is intended to ensure management of these natural resources as a cohesive and integral open space system. Thus, limitations on development activities are associated with this land use. The construction of buildings, facilities, roads, driveways, utility infrastructure, and other improvements that would disturb the natural setting are restricted and, in some cases, prohibited within Park areas. The UCSD Open Space Management Program is intended to maintain or enhance the existing biological values within the Park Ecological Reserve. The
Program is focused in this area of the Park due to the higher level of sensitivity of those habitats. Key components of the Program include management, maintenance and monitoring activities. The UCSD Park consists of three types of open spaces with distinct qualities of vegetation, topography, and geography. These areas are the Ecological Reserve, the Grove Reserve, and the Restoration Lands.

**Ecological Reserve**

The ecological reserve areas of the Park contribute to UCSD’s unique setting and include the canyons north of Voigt Drive on the West Campus, and Skeleton Canyon and the sloped area adjacent to La Jolla Shores Drive at the Scripps Institution of Oceanography. The ecological reserve resources within the Park land use category are biologically sensitive and, therefore, boundary adjustments may only be considered on a case-by-case basis if compelling circumstances warrant such consideration. No buildings, roads or driveways will be permitted in this area of the park. Essential utility infrastructure improvements may be considered, but may
be implemented only with appropriate mitigation of potential biological impacts. Implementation of a pedestrian trail (or campus meander) along perimeters of the Ecological Reserve will be allowed. Further, because the Ecological Reserve lands include most of UCSD’s stands of native vegetation, this area when appropriate and sensitive to the Ecological Reserve function can serve as an important resource for teaching and research.

**Grove Reserve**

The Grove Reserve areas of the Park include the major eucalyptus stands, stretching south from Genesee Avenue to the northern end of the Scripps Institution of Oceanography campus. The mature eucalyptus groves are a valuable aesthetic resource on campus. However, the Grove Reserve has been affected by prior development, including several buildings within its boundaries. Future expansion of existing facilities will be restricted and, wherever possible, efforts should be made to eliminate buildings and restore the eucalyptus groves to enhance the integrity of this open space. Development of suitable bicycle and pedestrian paths in the Grove Reserve is allowed.

**Restoration Lands**

The Restoration Lands include slopes on both the east and west frontages of Interstate 5, Pepper Canyon on the main campus, the canyon north of Geisel Library, the canyons and slopes east of Interstate 5, the ocean bluffs at the Scripps Institution of Oceanography campus, and the slopes adjacent to the Birch Aquarium and Museum. These areas have been disturbed by erosion, invasive vegetation, and past military use. Efforts to restore these lands are defined in the Environmental Impact Report for the 2004 LRDP.

Development proposed in this Park category may be implemented provided the improvements have acceptable impacts on the park. In particular, a potential Light Rail Transit alignment and development expansion in one of the Restoration Land areas, Pepper Canyon, is anticipated to provide a future public transit station and appropriate land uses.

5. **Connections**

An integrated system of roads, paths, public entries, landmarks, view corridors, and landscape features ties the campus together in a manner compatible with the smaller scale and distinct atmospheres of the neighborhoods. This system of connections encourages the involvement of the local community in campus programs, yet preserves UCSD’s academic ambiance.
D. LAND USE PLAN

Consistent with the approach taken in preceding plans, the 2004 LRDP focuses on UCSD’s three main geographical areas (Scripps Institution of Oceanography and the properties west and east of Interstate 5). The 2004 LRDP describes land use categories that reflect those activities that will be predominant in any given area (Figure 11). Predominant uses are the primary programs, facilities, and activities in a general geographic area. In addition, other associated or compatible uses are allowable within any given area defined by a predominant use. For example, parking and student housing may be included in academic use areas.

- **Academic** use areas primarily include classrooms, class and research laboratories, and ancillary support facilities (such as administrative facilities, housing and dining facilities, open space, parking, recreation, and shops supporting academic operations), undergraduate colleges, graduate programs, and professional schools.

- **Academic/Community-Oriented** use areas primarily contain facilities that are associated with or support academic programs that also are regularly used by the general public community; e.g., the Birch Aquarium at Scripps and the Theatre District south of Revelle College.

- **Academic/Science Research Park** signifies a land use primarily intended to accommodate private research entities whose activities are compatible with University based research programs and entail collaboration with UCSD faculty and students. This land use designation also allows UCSD use of these facilities, and UCSD facilities in the Science Research Park.

- **Administrative** land uses primarily involve general administrative and institutional support functions that typically occur in office facilities.

- **General Services** land uses primarily include facilities for personnel and equipment related to the operations, security and safety, and maintenance of University facilities; e.g., central garage, shops supporting general maintenance activities, materials handling, Police, utility plants, service yards, recycling areas, storage, etc.

- **Housing** land uses primarily denote residential facilities intended to accommodate unmarried students, students with families, faculty, and staff.

- **Medical** land uses primarily include clinical and medical research, and teaching facilities associated with the UCSD Medical Center.

- **Mixed Use** land areas primarily include facilities for academic and administrative activities that generally serve the campus as a whole, rather than a single college or professional school; e.g., campuswide classrooms, admissions, registration, the chancellor’s office, etc.
• **Park** denotes open spaces areas that have ecological or aesthetic value and are subject to special constraints on development; e.g., canyons determined to have biological or habitat value, the eucalyptus grove that winds throughout campus, and restoration lands that consist of slopes, canyons, and bluffs.

• **Sports and Recreation** denotes major playing fields and other athletic facilities.

• **Surface Parking** includes two areas designated for surface parking but which may be reassigned to higher and better uses. Note that parking structures and surface lots are located throughout the campus. These parking areas are included in the land use areas characterized by the predominant use; e.g., Academic, Housing, Medical, etc.