The Plan
THE PLAN

In the simplest terms, a master plan has two goals: first, to accommodate a given need for new facilities; and second, to create a setting which allows these facilities to be built while it embodies the values of the community. What this Plan proposes, then, is a way of organizing development so these two goals—"quantity and quality"—can be met.

The Master Plan proposes a series of concepts for organizing future development of buildings, open spaces, and infrastructure. This chapter deals with the concepts and planning principles. Guidelines for development are given in a subsequent section of the Master Plan.

The Neighborhoods

The 1963 LRDP envisioned UCSD as a campus of neighborhoods. It has evolved in that fashion. Lower SIO, Revelle, Muir, and Third Colleges are the most complete examples. Each is a distinct area separated from other development by a clear boundary. Each has a specific character that grows out of the pattern of its development, the arrangement of its buildings and open spaces.

The concept of neighborhoods as the "building blocks" of development was put forward in the earliest plan for the campus. The 1963 Plan proposed to array clusters of undergraduate college neighborhoods along two major pedestrian axes. This inherently compact development pattern ensured the preservation of a substantial amount of open space outside of the built areas. By planning colleges of about 2,000 to 3,000 students, it emphasized the need to maintain neighborhoods of a human scale within the larger campus environment.

Compact and carefully defined neighborhoods provide a necessary sense of place. They make it easier for people to orient themselves in their immediate surroundings and ultimately to grasp the campus as a whole. By limiting development to the neighborhoods—that is, to areas with distinct boundaries—it will be easier to develop the campus while preserving its overall character.

The Concept

A neighborhood is a place with common academic or other campus functions. Consequently, it should be made up of related buildings and open spaces within a defined area with clear boundaries. These boundaries can be created by open space, by a significant road or pedestrian pathway, or by a well-defined parking zone. What is important is a sense of the neighborhood's separation from campus—wide open space and adjoining development. This, in turn, makes it easier to give each neighborhood its own character.

Restricting development to clearly defined neighborhoods implies that the growth of UCSD will be accommodated in existing neighborhoods as well as new ones. Development will not occur evenly across the campus. Each new building within a neighborhood should be seen as an opportunity to enhance the neighborhood by helping to "complete it" by defining its walkways and open spaces, its borders, or its entries, creating a focal point, and other means.

The following principles guide the Master Plan for development of the neighborhoods:

• Buildings are clustered compactly in relation to a clear center. Individual buildings should relate well to their neighbors.

• Each neighborhood has a "theme", architecturally, and its open space patterns and landscape.

• The neighborhood as a whole is related to its surroundings, open spaces, adjoining development, roads, pathways, and parking. Each has boundaries that define its territory and entries clearly.

• Neighborhood plans anticipate mixed uses which integrate housing, academic facilities, services, open spaces, and amenities.

• Each neighborhood has its own mix of services and activities, such as cafes, dining, recreation, copy and computer centers, lounges and exhibition spaces.

• Common open spaces, such as plazas, malls, and connecting walks (being the centers of communities or corridors without walls) should be treated with the same importance as buildings and planned accordingly.

27. THE CAMPUS NEIGHBORHOODS ARE CONNECTED BY PATHWAYS TO EACH OTHER AND TO THE UNIVERSITY CENTER.

THE NEIGHBORHOODS ARE AS FOLLOWS:

SIO:
1. SIO WEST
2. AQUARIUM
3. SIO HOUSING
4. SIO EAST
5. SIO EAST
6. SIO EAST

WEST CAMPUS:
7. THEATRE CLUSTER
8. REVELLE COLLEGE
9. MUIR COLLEGE
10. THIRD COLLEGE
11. SIXTH COLLEGE
12. GLIDERPORT
13. NORTH POINT
14. WARREN COLLEGE
15. CAMPUS SERVICES COMPLEX/BIOLOGY FIELD STATION
16. FIFTH COLLEGE
17. VA MEDICAL CENTER
18. SCHOOL OF MEDICINE
19. UNIVERSITY CENTER

EAST CAMPUS:
20. HEALTH SCIENCE
21. ACADEMIC RESERVE
22. SCIENCE RESEARCH PARK
23. MESA HOUSING
Academic Corridors

The original plan for UCSD was that each cluster of colleges would contain some component of each academic department on the Oxford model, as well as a percentage of undergraduate housing. While some departments are still scattered in many different locations, the consolidation of departments is increasingly the pattern sought by the faculty. This trend is recognized and reinforced in the Master Plan by organizing development within "academic corridors"—linear groupings of related academic departments and disciplines.

The Concept

The identification of these corridors is intended to assist the campus in grouping the facilities of related departments in reasonable proximity to each other. Corridors would become a focus of the academic life of students and faculty in these related departments on a day to day basis.

The corridors concept is a guideline, a tool to assist in locational decisions.

These academic corridors overlap in some cases. They are not meant to be exclusive preserves for the related disciplines. They are intended only to provide a general guideline for the location of new facilities and the relocation of existing ones over time. Corridors are linked together by a clear system of pedestrian walkways. Along and within these are formal and informal gathering places where colleagues can meet and where academic exchange and processions can take place.

Five corridors have been identified:

**Humanities Corridor:** extending east from Muir College to Fifth College.

**Math, Engineering & Physics Corridor:** encompasses math and computer science in Muir College and physics and engineering spanning Warren and Fifth Colleges and, if necessary, University Center.

**Life Sciences Corridor:** extending south from Muir College, then east from Revelle College, to the School of Medicine and the Satellite Medical Facility on the east campus.

**Social Sciences Corridor:** extending north from Muir College to Sixth College.

**Marine Sciences Corridor:** extending from SIO west to Torrey Pines Road. A clear pedestrian linkage through the theatre cluster to the Life Sciences corridor should be provided.
University Center

The University Center is to be the hub of activity on campus. The Plan puts major classrooms, student services, senior administrators, academic space, and much of the urban life that supports a great university in the Matthews area near the Central Library. Some of these activities are new there. Others are to be developed.

Many universities border an active commercial district or street in a larger community. These areas, with their cafes, bookstores, theaters, and street life are often the real heart of the university. UCSD, however, lacks such an off-campus district, and there is little likelihood that future development in the region will provide one.

The Matthews area offers the possibility of creating such a quarter within the campus proper. Its “town-like” grid of streets and buildings lends itself to redevelopment as a more urban, mixed-use setting. It also lends itself to phased development, so that the Matthews area’s transformation can occur in tandem with that of the rest of the campus.

The Concept

The University Center Plan envisions a mixed-use area that functions as the:

Academic Center: there is sufficient land in the Matthews area for academic facilities. Buildings with exceedingly large footprints or with blank walls may not be appropriate.

Hub of the Instructional Core: classrooms at the University Center will be within 10 to 15 minutes walking distance of the colleges making up the instructional core (Muir, Third, Fifth, and Warren).

Town Center: a “downtown” for the entire campus, with stores, snack bars and restaurants, a theater or concert hall, gallery, and other social and cultural attractions.

Student Service Center: student services are concentrated in the University Center, in close proximity to student-oriented “town center” activities.

Administrative Center: in new structures, key campus administrative offices remain in the University Center, where they will be central and convenient to all campus units.

Special Housing: there is the opportunity for special housing which may not directly relate to a college, such as international student housing or short-term guest/faculty housing.

These different activities coexist successfully within a relatively compact area. The existing pattern of streets and open spaces in the Matthews area suggests “transparent” facades with many lively activities at street level. Offices, studios and classrooms can locate above street level. Academic facilities can be designated around interior courts and quadrangles. Public spaces that already exist are included in the Plan and are used to organize future buildings.

The University Center should have its own architectural theme which would extend from “library walk” to Pepper Canyon, and from University Drive to a new glade east of Price Center. Programmatically, the boundaries of University Center extend between “library walk” and Russell Drive.

29. NEW THREE AND FOUR STORY BUILDINGS FRAME EXISTING QUADRANGLES AND ADDRESS THE GRID OF STREETS WITHIN THE PROPOSED UNIVERSITY CENTER.
30. THE UNIVERSITY CENTER IS THE FOCUS OF THE CAMPUS, THE CENTER FOR STUDENT LIFE.
The Park

If there is any single physical feature of UCSD that identifies it in the minds of the public, it is its natural setting: the eucalyptus groves and canyons of the west campus, and the chaparral-covered mesa and coastline of SIO. UCSD has acknowledged their importance by designating natural reserve areas on the west campus and at SIO. The eucalyptus grove has also been identified as a source of the campus’ identity. These are strong and positive steps toward a goal that seems paramount: to preserve and enhance its open spaces as natural resources and visual, educational, research and recreational amenities.

SIO is a model for the preservation of natural resource areas. Its long tradition of stewardship for its natural setting reflects its abiding interest in the physical environment. The natural setting is especially prominent at SIO, and over the years the buildings have evolved to fit within it. This is less the case on the west campus, where some of the natural resource areas occur in the midst of development. To date there has been little development on the east campus, but its canyons are in much worse condition, having been seriously damaged by past uses.

The Concept

As a strategy to preserve the sensitive lands for future generations to enjoy, the canyons, steep slopes, native vegetation and eucalyptus groves are designated as the Park. The UCSD Park is an area of the campus where development is restricted. The Park (whose environs are distinct from land areas which fall within the boundaries of the university-wide Natural Reserve System administered by the University of California Office of the President) consists of three components, each with different constraints:

Ecological Reserve: This includes the canyons north of Voigt Drive, and Skeleton Canyon with its associated buffer/transition area at SIO.

Grove Reserve: Includes the major west campus eucalyptus grove stretching from Genesee Avenue to the northern end of SIO.

Preserve Lands: Includes hillsides, bluffs, and disturbed canyons.

New developments in this portion of the Park are strongly discouraged and would require an amendment of the Master Plan. Further, any development in the grove area east of Hopkins Drive and north of Voigt Drive would require an Environmental Impact Statement (EIS) or Environmental Impact Report (EIR), as appropriate, of that development on the ecological integrity of the associated natural ecosystems.

Analysis of the inventory of projected need for facilities against land capacity clearly shows that the area set aside for the Park does not conflict with academic or administrative priorities.

Although it should be maintained as a separate district, the Park is part of the campus’ overall open space system, which also includes glades, playing fields, and other campus-wide open spaces. The landscaping of these areas should be appropriate to their use. Where no special use is present, the landscaping should be compatible with the rustic landscape of the Park in that area.

The Park is intended as a resource and an amenity. While parts of it will require greater care than others to ensure their preservation, the overall intention is to make it accessible for human use, and to provide the neighborhoods with “breathing space” and the presence of nature. An exception is the designated canyons and hillsides where human intervention or use will disrupt a fragile ecology.

The Park must have a maintenance and management program to protect and/or enhance the vegetation and pathway system.

A great object of all that is done in a park, of all the art of a park, is to influence the minds of men through their imagination.

—Frederic Law Olmsted
The Campus Open Space System

As UCSD grows, the planning of the University’s environment is critical. The “out of doors” is what gives the campus its image and the people who fill the streets, activate the plazas, stroll through the grove, and play in the fields, give UCSD its personality. The contact with this special setting is enough to start the day joyfully.

The campus offers unique and extremely diversified grounds in addition to that of grove and canyons. Major playfields, beautiful lawns, plazas, military quadrangles, intimate courtyards, and the outdoor Stuart Art Collection make up an open space of great use and variety.

The Master Plan attempts to organize this diverse landscape and define a hierarchy for open space which future generations can protect and enhance as development occurs.

The Concept

The landscape of UCSD can be grouped into three categories: rustic, discrete, and transitional.

Rustic:
The rustic landscape has dry, non-irrigated, “classically Californian” vegetation. On the west campus the rustic areas contain both the native chapparal vegetation of the canyons, as well as the non-native eucalyptus groves. It also includes many varieties of trees, ground cover bushes and brush that are important elements of the campus landscape. The Park (previously described) would be considered the protected district in this system.

The rustic pertains to the land outside the neighborhoods. The campus edges, the surface parking areas, the campus entries should all be rustic in character. Within the rustic category, great diversity of plant material can exist. For example, acceptable trees would include varieties of Melaleuca, Acacia, Sycamore, Oak, Pine, and others suitable to the San Diego coastal environment. Irrigated lawns, exotic plants, and manicured or formal plantings should be avoided. Most campus roads fall within the rustic category and should be landscaped accordingly. Major roads such as “University Drive”, “East Campus Drive”, and the North and South Entry Drives should be defined by the eucalyptus.

Discrete:
The discrete landscape is a more urban landscape — the landscape between walls. Major plazas, such as in Revelle or Warren, neighborhood parks such as in Matthews quadrangle, and the small courtyards such as those within Muir College, make up this discrete landscape. Planting will be watered and maintained. There will be fountains, sculptures, special lighting and seating aimed to give each space its own life and character.

The discrete landscape within the neighborhoods can take whatever character is appropriate. While issues such as water conservation remain important, the choice of vegetation can vary widely from neighborhood to neighborhood.

Some examples of discrete landscape are:

Plazas — As in major cities, the plaza is the focus of civic activity. Plazas can have great diversity of use such as major rallies, concerts, and outdoor eating. A plaza gives a sense of place and becomes the focus of a neighborhood. Revelle Plaza is currently the main plaza, the place where major gatherings occur. As the campus expands, other large plazas will be introduced, possibly, in the School of Medicine, Sixth College, and the upper lands of SIO.

Neighborhood Green — Within some neighborhoods, there are large enclosed lawn areas or glades such as Matthews quadrangle. As opposed to plazas, which are predominately paved, these greens are more landscaped. Used for picnicking, studying, strolling, these greens greatly enhance the livability of a neighborhood.

Courtyards — Throughout SIO and the west campus neighborhoods, small beautifully scaled courtyards can be discovered. These special places, some active, some passive, bring sunlight and air to the buildings and become active at night. The courtyards tend to link together informally, and should be encouraged in all new construction.

Transitional:
The next category is the transitional landscape, called transitional because it is what ties the natural with the man-made or discrete urban landscape.

The playfields, large lawn areas, major walks, all of the common lawn spaces which do not belong to a particular neighborhood, are within this category.

Muir Lawn, for example, will expand when the surface parking area west of the Faculty Club is relocated. This lawn will be the “transition” between the intimate courtyards of Muir College and the groves of the Park. Other examples of transitional landscape are the lawn at the School of Medicine, the “Revelle Henge” lawn, and the recreation fields.
32. The West campus eucalyptus grove is an example of the rustic landscape.

33. The courtyards within a neighborhood are an example of the discrete landscape.

34. The future Muir Green, west of the faculty club, is an example of the transitional landscape between the rustic of the grove and the discrete of the neighborhoods.
35. THE RUSTIC LANDSCAPE IS PROPOSED FOR MOST OF THE CAMPUS LANDS BETWEEN NEIGHBORHOODS. THIS LANDSCAPE, WHICH INCLUDES MANY VARIETIES OF EUCALYPTUS, AS WELL AS TORREY PINE, CHAPARRAL, NATIVE PLANTS, AND OTHER DROUGHT RESISTANT TREES AND SHRUBS, CREATES THE UNIFYING IMAGE OF UCSD.
The discrete landscape is within the neighborhoods. Irrigated planting, fountains, and plazas are all encouraged.
Recreational Open Space

With some of the finest beaches in California, the water's edge should be the focus of recreational activities. Surfing, swimming, jogging, and scuba diving are all part of UCSD recreational opportunities.

There are many recreational fields existing, under construction, and proposed. Within the west campus, Revelle, Muir, Third, Warren, and Fifth Colleges all have playfields. The north fields which consist of four softball fields, three soccer fields, and a running track are currently under construction. Large assemblies and outdoor performances can be accommodated on certain playfields.

On the east campus, a new recreation area is proposed which will include a baseball field with seating, three soccer fields, and a campus events facility which will house major indoor assemblies and performances.

Near the recreation fields there are two existing and one proposed recreational center on the west campus. Sited to provide easy access within a few minutes' walk, the three centers are the Main Gym, Canyonview, and the proposed Recreational Intramural Athletic Complex (RIMAC). A possible site for RIMAC is south of the north fields. Within these facilities are 25- and 50-meter swimming pools, racketball courts, handball courts, gymnasium and tennis courts. A second 50-meter swimming pool is proposed for the Canyonview facility. Scattered throughout the campus are multiple tennis courts. A tennis stadium may be added in the future. Wherever possible parking garages should have tennis courts on the top level.

Together, these recreational facilities support the intercollegiate athletic teams, club sports teams, and intramural sports programs of the campus.
A key goal of the Master Plan is to define the connections necessary to link UCSD's neighborhoods together and to link the campus more effectively to its region.

The planning of pedestrian circulation, roads, and a shuttle bus system present opportunities for tying the different parts of the campus together. At the regional level, new entries, preservation of key view corridors, the provision of parking, and the development of alternative modes of transit have the potential for strengthening linkages with the region.

As UCSD evolves, its three major parts — the west, east, and SIO campuses — will begin to merge together. This process can be facilitated by establishing clearer and better connections, not only between these larger areas, but among neighborhoods, colleges, and the Park.

Pedestrian Circulation

There are many opportunities to create a more coherent pattern of pedestrian circulation. The basic concept is to reinforce the connections among neighborhoods and between them and the University Center.

The Concept

The Plan envisions specific designs for each type of pedestrian walk. Where possible, these will be separated from areas of heavy vehicular traffic. The "ridge walk" (the major north-south pedestrian spine connecting Revelle College with the north campus) and the "library walk" are to be grand academic promenades. Cross campus walks should invite easy and efficient movement. These should be reasonably direct, and compatible in planning and design with their surroundings. With the possible exception of a major pedestrian link between Peterson Hall and the Price Center, where these walks pass through the Park they should follow the terrain with sensitive paving, soft edges, and places to sit. When they reach the canyons they should pass along their edges or bridge over them. The "campus meander" is to be a system of minor pathways which provides a means to experience the campus' natural features informally without harming them. While cross campus walks are direct, this group of paths is meant to invite relaxation and contemplation.

The development pattern of the east campus is dictated by the nature of the large-scale building projects planned for it. These building complexes are widely separated from one another. As a result, pedestrian circulation within the east campus will be somewhat difficult. Tree planting, paths and landscaping should ease and encourage walking between facilities.

Major pedestrian ways should be defined to link the various neighborhoods and recreational facilities. A clear continuous walk should originate at the Pacific Ocean and, as a common thread, tie SIO, west campus, and east campus together.

With the proposed LRT station, pedestrians may in the future arrive at a "Life Sciences bridge" area. From there, walkways will link to the various neighborhoods.

The "campus meander" should track the edges of the canyons. This path will connect to the regional system of open space to the north of the campus.

The Ten-Minute Walk

The prevailing practice is to locate undergraduate classrooms within a 10-minute walk of each other. Classrooms meeting this requirement on the west campus form its instructional core. Peterson Hall at Third College is currently the focus of this core. As UCSD grows, the pedestrian based definition of the core may require rethinking. The development in the central west campus will shift to "library walk" at the west edge of University Center. All developable land within a 5-minute walk radius of this point is appropriate for classrooms. At that point, the instructional core will include parts of Fifth, Third, and Muir Colleges, the majority of Warren College, and all of University Center.

Redefining the instructional core based on a 15-minute rather than a 10-minute walk would add the majority of Third and Muir Colleges, and part of the School of Medicine and Revelle College.
Roads, Campus Entries

The goal is to provide better separation between different types of traffic, improve vehicular access between the different neighborhoods, and design the roads to fit with their immediate surroundings.

The Concept

Several new roads will be added to improve the clarity of the road system. The major public roads will become clearly defined; for example, Gilman and Villa La Jolla merge to form "University Drive" on the west campus. Similarly, Campus Point Drive and Eastgate Mall form the "East Campus Drive". The campus "loop road", linking east and west campuses, is a more private, University-serving road. It will be redesigned to be a continuous road which addresses all campus neighborhoods.

Campus entrances should be strengthened. They can become a series of clearly visible and ceremonial public entries that provide direct access to each campus area. Entries should be clearly marked and have signage or a kiosk to orient visitors. "University Drive" and the "East Campus Drive" will be four-lane roads with landscaped medians.

New bridges can help strengthen connections between different parts of the campus. These bridges are more than physical connections. They become landmarks and modes of activity for the campus from the surrounding community. For example, the Miramar bridge and the Life Sciences bridge can symbolically mark the campus from I-5.

The campus "loop road" will cross I-5 and connect the west and east campuses together. The campus "loop road" will be a two-lane road without a median.

Service roads are envisioned as discontinuous cul de sacs that extend from the campus "loop road" into the neighborhoods.

A clearly expressed movement system is a powerful influence, capable of seizing men's minds and developing loyalties around it.

—Edmund N. Bacon
Traffic

The roads and freeways which serve UCSD have been analyzed in relation to the projected growth in the region and within the campus. The campus’ goal of parking for approximately 26,000 cars was assumed. Road volume to capacity ratios were determined both with and without the proposed campus entry/exit ramps on I-5. It is the Master Plan consultant team’s conclusion that:

- The west campus will experience major through-traffic if the Gilman ramps are introduced. Campus roads will need to increase in size to accommodate it. For example, the two-lane campus “loop road” would need to be increased to four lanes between the School of Medicine and Warren College.

- Congestion on surrounding roads and freeways will be only marginally reduced if the Gilman ramps are implemented.

Although the Gilman ramps have been endorsed in previous traffic and access studies, they will clearly have a negative impact on UCSD, without contributing in any substantial way to improving traffic congestion on surrounding roads. This proposed interchange should be reconsidered.

Based on traffic and growth projections, by 2005 there will be roughly an equal number of people travelling to and from the campus in a north or south direction on the I-5 freeway. Together, this traffic may represent 70 percent of the total reaching UCSD. Fifteen percent of campus traffic will come from the east using La Jolla Village Drive or Eastgate Mall and 10 percent will come from the south using La Jolla Shores Drive or Torrey Pines Road. Five percent will come from the north using North Torrey Pines Road.

This suggests that access to UCSD will be difficult in both directions using the I-5 corridor. By 2005, I-5 will have reached a high level of congestion, with substantial delays during peak periods. Genesee Avenue and La Jolla Village Drive will also be experiencing high levels of congestion. On this basis, there will be a clear need for light rail transit in the I-5 corridor with its own unimpeded right-of-way.

Genesee Avenue

By steady state, the Genesee/North Torrey Pines intersection will be seriously congested. Genesee Avenue is a critical artery that provides the only north access to the west campus.

A similar access problem also will exist in the future on Genesee Avenue near the east campus. Campus Point Drive will provide the only access to the east campus from the north.

La Jolla Village Drive

Two major entries to the west campus from the south are on La Jolla Village Drive where it intersects with Gilman Drive and Villa La Jolla Drive.

Gilman Drive, which is grade separated and has its own on- and off-ramps from La Jolla Village Drive, will be relatively uncongested when steady state is reached. Traffic lights at this intersection may be necessary, however, to reduce congestion at peak periods.

The Villa La Jolla intersection will be seriously congested at steady state, and there appears to be no possibility of increasing its capacity.

40. WITH THE PROPOSED CAMPUS ON- AND OFF-RAMPS, INNER CAMPUS ROADS WILL EXPERIENCE MAJOR CONGESTION AS INDICATED BY THE RED LINES.

41. WITHOUT THE CAMPUS RAMPS, SURROUNDING ROAD CONGESTION PATTERNS REMAIN SIMILAR AND CAMPUS ROADS ARE NOT IMPACTED.

42. PROJECTED TRAFFIC PATTERNS BY 2005 INDICATE MOST PEOPLE WILL APPROACH UCSD FROM I-5.

43. CONGESTED INTERSECTIONS ARE PROJECTED AT CERTAIN ENTRANCES TO UCSD AS INDICATED BY THE SOLID RED DOTS.
Bicycles

The use of bicycles for commuting and on campus transportation is encouraged, particularly as the campus expands to the east and north. UCSD's bicycle system connects with, and is an extension of, the system in the community. UCSD should continue to advocate public measures to enhance bicycle commuting convenience and safety, including the use of bike racks on public buses and the provision of bike lanes on the roads leading to the campus.

The Concept

Bicycle lanes will be included on all campus roads. A safe bicycle system, which provides access to all parts of the campus is proposed. Pedestrian conflicts may be minimized by bicycle lanes separated from walkways by a curb.

Using all roads, including service roads, together with some essential linking paths, a grid of bicycle lanes can be achieved on the west campus. This pattern of lanes parallels the major campus walks and provides access to all neighborhoods.

New bicycle lanes are needed to link major areas such as Revelle College and the Central Library. A bicycle lane needs to be provided from University Drive through the Park to the Central Library. This lane will parallel the "library walk". Bicycle parking should be located away from building entries and service entries. Bicycle parking areas, if appropriately designed, can be associated with specific groupings of buildings.

Centralized bicycle parking which can be more easily supervised should be considered. For example, the three athletic centers on campus, Muir Gym, Canyonview, and the proposed Recreational Intramural Athletic Complex at the north playfield can accommodate some larger bicycle storage centers.

Service roads may play a key role in providing bicycle access to all buildings. Where bicycle lanes cross major campus walks, bollards, special paving, or even signage can be used to alert pedestrians and slow cyclists.

Like automobiles, bicycles require not only special pathways to travel but parking areas for their storage, and here is their great virtue! While an automobile requires approximately 350 square feet for its existence, bicycles take up approximately 20 square feet; they demand less space and are simpler, less costly facilities.

—Lawrence Halprin
Parking

The 1963 Plan called for 25,000 parking spaces to be provided. This represented a .66 car per person ratio based on a projected campus population of 37,500.

The 1981 Plan, with a more constrained view of growth, abandoned this concept: “Because of the availability of land, relatively inexpensive surface lots have been installed instead of parking structures.” Surface parking was a logical choice when growth projections put little pressure on the use of land and the necessity for the parking system to be self-sufficient discouraged any strategy which raised costs and fees. The 1981 Plan saw parking structures as possibly necessary in the future, but made no prediction as to when this might occur.

The 1988 steady state program sets a parking requirement that is quite similar to the 1963 Plan: 26,000 parking spaces, based on a west campus .41 car per person ratio, a projected campus population of 48,000, and an assumption for visitors and patients at clinical facilities. Meeting this demand can be accomplished in several ways, making use of surface and structured parking on the west and east campuses and surface parking at SIO.

Parking on the west campus will be in structured and surface parking, to a total of ±14,000 cars. Approximately 5,000-6,000 spaces serving the west campus will be parked in remote surface lots and structures on the east campus. Some structured parking close to the I-5 corridor will also serve the west campus. The Satellite Medical Facility may house ±2,000-3,000 cars. The Science Research Park is also projected to house up to 2,400 cars. SIO will park 1,600 cars in surface parking.

The Concept

The provision of parking will evolve incrementally from surface to garages. By providing parking in remote locations served by shuttle buses, the need for parking garages on the west campus can be reduced.

Many smaller structures are preferred to a few large parking facilities. Small structures can be phased easily, dispersed to avoid congestion, and can integrate with other buildings on the campus.

There needs to be adequate flexibility to allow for changes in the projected campus population, in the car to person ratio, and in the number of parking spaces to be provided.
Phasing

The phased provision of new parking will make it possible to “tune” parking locations in relation to the traffic conditions of surrounding roads and intersections as the campus evolves.

- Phase 1: “permanent” locations for parking, including many existing areas, are identified in the Master Plan. They will be used first for surface lots, then for structured parking. Shuttle buses, already in use for north campus locations, will be added as needed. Parking locations will be generally peripheral and associated with major campus entries. Parking lots should be landscaped compatibly with their surroundings.

- Phase 2: remote surface parking lots will be provided. Their locations will be on the east campus with access by shuttle buses to the west campus.

- Phase 3: parking garages will be added at select west campus locations. Phased with new development, the garages will be located in “permanent” parking sites. Larger structures should be held to the periphery of the west campus.

- Phase 4: remote surface parking lots will be decked or replaced by larger parking structures, if necessary.

In general, parking structures should be small when they are located within the center of the campus.

Parking structures should integrate with existing neighborhoods to minimize their visual impact. Whenever possible, parking structures should incorporate active uses at ground level and recreational uses on the roof.

46. The strategy for increasing the amount of parking on the west campus consists of slowly replacing the large surface parking areas with parking structures. The diagrams to the left represent, as an example, the evolution of the parking area between Muir and Third Colleges from surface to structure.

47. The existing pattern of surface parking on the west campus.

48. By 1995, East campus remote parking and three west campus structures will be introduced.

49. By 2000-2005, as many as 11-12 structures serving the west campus will be required.

50. By steady state, 23-24 structures may locate on the west campus. Five structures may locate on the east campus which support west campus parking demands.
Shuttle Buses and Mass Transit

The interdependence of UCSD and the University community will increase steadily. Currently, 45% of UCSD’s population uses some alternative to the single occupancy vehicle to reach the campus. The Master Plan strongly encourages improving this percentage through the use of mass transit systems and car pooling. The Master Plan addresses the issue from UCSD’s vantage point, which is to remain accessible to its own population, and to enhance the physical interface with the surrounding community.

**Shuttle Buses**

UCSD currently operates a shuttle system. This service connects the west campus with the Medical Center, the Matthews area with Torrey Pines Center and off-campus administrative facilities, and Muir College with campus parking lots.

The development of the east and SIO campuses, and construction of a light rail station and remote parking suggest the need for several new shuttle bus routes. The Master Plan proposes University Center as their “hub” or transfer point. Based on preliminary analysis, the radial deployment of the shuttle buses from University Center provides faster and more frequent service than if only a loop route is developed. It also allows the system to be implemented in stages. The proposed routes include:

- East line: from University Center to the east campus, serving the Satellite Medical Facility, the athletic fields, a future campus events facility, the future Science Research Park, and a stop at the light rail station.

- North line: from University Center to a future Sixth College, Torrey Pines Center, and the gliderport.

- South line: from University Center to the commercial areas on Villa La Jolla Drive. This line will be considered if the proposed North Community Transit Loop does not provide such service.

- SIO Line: from Biological Grade to the aquarium access road. This line will connect SIO to the west campus.

Shuttle bus routes should be continually evaluated as the campus develops. Night time routes may differ from day time routes. Supplemental loop routes may prove desirable as well.

**Mass Transit**

Light Rail: a light rail line planned for the mid-coast corridor extending north from Old Town has a major advantage over other vehicular traffic: a dedicated right-of-way. Regardless of the hour, it can maintain its schedule and provide regular and rapid service. It can reduce car traffic to the campus. The Master Plan advocates use of the light rail system by proposing a convenient campus station. UCSD will foster transit patronage by encouraging the use of “park-and-ride” and by encouraging students, faculty and staff in the vicinity of other light rail stations along the lines that serve the campus. The campus shuttle system will serve the LRT station.

The preferred north-south alignment for the light rail system is the I-5 corridor. The preferred station location is adjacent to the “Life Sciences bridge”, where it can provide pedestrian and shuttle bus access to all campus locations.

In the coming years, as traffic becomes more congested, the UCSD community will rely increasingly on the LRT. The north-south line will create a campus entry of significant importance. Students, faculty, staff, and visitors, as well as employees of the various medical and research facilities will be arriving at this location. The LRT stop and the adjacent bridge will be a hub of campus pedestrian movement and should be designed and landscaped with this in mind.

As the Golden Triangle develops and more people begin to live east of UCSD, an east-west light rail line may become feasible.

**Buses**

City and regional bus lines provide a vital “city to campus” connection. Six major bus routes now serve UCSD. It will be increasingly important to locate bus stops at major campus entries, including University Drive, Eastgate Mall, the north entrance off Genesee Avenue, the aquarium access road, and La Jolla Shores Drive. Bus traffic within the campus should not conflict with daily campus activities.

The design of bus stops and bus waiting areas is an opportunity to both encourage ridership and incorporate them effectively as elements of the campus design. This is especially the case when they are located next to a major entry.

**Vanpooling and Carpooling**

UCSD already operates an effective pooling system. The continued use of these alternatives to single-rider car commuting should be encouraged, particularly as congestion on surrounding streets and the cost of on-campus parking increase.
View Corridors

UCSD's many view corridors, which establish visual connections with the ocean, the foothills, and nearby canyons and open space, are an important means to tie the campus to the surrounding region. Ocean views are particularly significant and occur in many places within SIO and the west campus. The campus should maximize its visual access to the sea and clarify access for pedestrians. Enhancing views of the Pacific Ocean, even if this includes selective thinning or pruning of existing trees, is essential. These views should not only be protected as new development occurs, but emphasized, framed and enhanced by creating special plazas, building setbacks, and sensitive landscaping. The Plan for development recognizes these views and seeks to maintain and enhance them. Some of the more important view corridors include:

**West campus:** the north and south-running ridge in the future Sixth College area has views to the east across the eucalyptus grove toward the foothills and west toward the ocean. South of Revelle College there are views of the grove and some longer views south and east toward the foothills. There are also important view corridors within the west campus. Views of the Central Library are important symbolically and as a landmark. Views of special places such as the “Sun God” and the stand of eucalyptus which greets those entering along University Drive are also significant of the special campus image.

**East campus:** views of the west campus are significant to unifying these major elements. Internal views of the three east campus canyons are important for orienting new development.

**SIO campus:** there are significant views of the ocean, at lower SIO, along the hillside and the western edge of the mesa.

The Concept

The distant views from the campus as well as view corridors to the Central Library are clearly identified and should be maintained as the campus develops.

The siting and the design of new buildings should frame views, never obstruct them.

Trees should be sited and spaced to enhance views. Tall trees should be trimmed to allow views below and between foliage.

Open views to the ocean from major pedestrian walks by selective pruning of trees.

Tall buildings should be sited on the top of ridges to emphasize and not obstruct views.

Broad buildings should be sited on lower sites to allow views to extend over the roofs.

Pedestrian streets and roads should orient toward views when possible.

Bare, flat roofs should be avoided within a view corridor.