INTRODUCTION

This Long Range Development Plan provides guidelines for the physical development of the University of California Santa Cruz campus that are consistent with the academic goals of this campus and sensitive to the natural beauty of its environment. Santa Cruz's role within the University system is strongly tied to a residential college concept, as the socially and intellectually integrating element in providing excellent undergraduate instruction as well as a number of selected graduate programs.

The Plan guides development up to an enrollment of 7,500 students, while reserving potential for growth beyond that point. However, as matters stand, foreseeable new development will be minor in comparison with that which already exists, and investments will be small. It is especially important, therefore, to see all decisions as directly related to the best functioning of the campus as it really exists.

The intent of the Plan is to assess the current state of the campus (not including the field and research stations such as, Lick Observatory, or the Coastal Marine Laboratory), to re-evaluate previous plans in view of present situations, and to formulate well-specified planning policies that can provide the basis for future development decisions that will complement existing facilities in the context of limited growth.
I BACKGROUND

In March 1961 the Cowell Ranch, 2,000 acres of undeveloped land northwest of the City of Santa Cruz, was chosen as the location for the new “South Central Coast” campus of the University of California. Conceptual development and planning of the campus began that same year following the appointments of the Chancellor (Dean E. McHenry), the Campus Architect (John E. Wagstaff), the master plan team (headed by John Carl Warnecke) and consulting landscape architect (Thomas D. Church). The first Long Range Development Plan (LRDP) was prepared during 1962 and 1963 by the master plan team under the guidance of the UCSC Campus Planning Committee. The 1963 LRDP established guidelines for the initial physical development of the campus.

The 1963 Long Range Development Plan

The 1963 LRDP projected a new campus at UC Santa Cruz (UCSC) based on a residential college concept, with emphasis placed on undergraduate education. The campus was planned to grow as large and diverse as UCLA. This initial LRDP:

- defined the colleges as self-contained units that would provide for much of the students' academic and social needs.
- planned housing that would accommodate at least 50% of the students and 50% of the faculty on, or close to, the campus.
- set aside areas for regional centers for athletics and other student-participation activities.
- based a circulation system on a major inner loop road and outer loop road connected by minor roads.

The major physical concept of the 1963 LRDP was the development of a moderately dense academic core, encircled by an inner loop road and surrounded by some specified natural reserve areas and by low-density dispersion of colleges and professional schools. The core covered about 350 acres of the 2,000-acre campus. The Plan provided for the campus to develop incrementally from this geographic center, spreading north and south in satellite fashion.

- projected an enrollment of 27,500 students at UCSC by 1990, a projection based on forecasting of the 1950's and early 1960's that was sensitive to the post-war “baby boom” and a predicted continued migration of people into California. An assumption was that growth would be continuous and rapid.
- described a campus which would eventually consist of fifteen to twenty residential colleges and ten professional schools.
- described a central campus core that included academic and science centers and was surrounded by the colleges and professional schools. The core was to be primarily pedestrian oriented.
Initial Development

The first students were admitted in September 1965, and a rapid building program began. Within the first six years, the campus as it presently exists was substantially built. Construction was concentrated in the core and the east side of the campus.

The 1971 Long Range Development Plan

The 1963 LRDP was revised by the 1971 LRDP. In this new document many of the early quantitative assumptions were revised. The enrollment estimates for the University and the projections of growth rates were studied carefully and changed.

The 1971 LRDP envisioned a simpler campus fabric than the 1963 plan, though it was still set in the framework of ultimate expansion to a 27,500 person student body. The difference was that it suggested a much more carefully phased development of facilities extending to the year 2000 and beyond.

Furthermore, the 1971 LRDP was less architecturally specific than the 1963 Plan had been. Instead, it emphasized area planning, for in 1971 the campus was experiencing the need for greater cohesion. And although very little of the plan was implemented, its goals were clear: generation of a denser campus core than that suggested in the 1963 LRDP and the establishment of more extensive natural preserve areas, both north and south of the core and the surrounding colleges.

The Great Meadow
II. THE 1978 LONG RANGE DEVELOPMENT PLAN: SUMMARY

The present LRDP is set in a framework of even more limited growth than either of the previous Plans. The Plan promotes the benefits of the existing campus physical structure and gives direction for a modest building program. Specifically, this LRDP identifies building sites for the few new facilities planned to meet a small increase in projected enrollment. These sites have been chosen to complement and make more dense the existing campus structure.

Sites are also proposed for professional schools and institutes which may be required independent of enrollment projections, but this LRDP does not provide a timetable for the construction of the facilities described. It does provide a framework for phasing their development and for making judgments about specific proposals as they arise. It is an informed and flexible framework that permits physical facilities planning to respond thoughtfully to changing academic needs.

This LRDP is organized to respond to the needs stated by current academic planning. It was prepared concomitantly with an Environmental Impact Report (EIR) which assesses possible impacts of the Plan and will serve as a basis for environmental analyses of specific projects as they are proposed.

Principles of the Plan

The following principles will guide the planning of future development on the Campus:

- New development will be framed in a context of limited growth without foreclosing the possibility of expansion in the future.
- New development will be studied within the context of its impact on the surrounding community. Thus, the campus should be developed in part to enhance the cultural, educational, recreational and social resources of the entire Santa Cruz community.
- New developments will maintain and enhance the human scale of the campus.
- New development will utilize and encourage efficient circulation patterns, encouraging pedestrian movement on the campus and discouraging the use of private automobiles.
- New development will be designed to conserve energy and to maximize utilization of existing roads and other facilities.
- New development will promote and intensify the existing campus community, making UCSC a safe and attractive place to live, learn and work.
- New development will consider carefully the sensitive natural environment, preserving it for study purposes as well as for the enjoyment of the community at large.

A Summary of Planning Policies

This Plan addresses detailed considerations of the natural environment, parking, transportation, housing, energy use and the community. The major policy guidelines are summarized as follows:

- New development will be located within or near the present developed campus area. Care must be taken to avoid placement of facilities in areas that may be isolated from the campus core indefinitely.
- Space will be reserved adjacent to certain existing campus facilities, to allow for possible future additions to them.
- Relationships between activities on campus will be basic to future siting decisions.
- New development will enhance and facilitate the interaction of students, faculty, staff, visitors and members of the community. They will act to link campus facilities together both spatially and psychologically.
- The LRDP will change as issues change. Its intent is to guide growth and development at Santa Cruz until it, like earlier plans, needs changing to reflect future needs.
III. SPACE NEEDS

The early era of rapid growth, with many new starts in a wide range of programs and new facilities to match, has ended, and the campus now recognizes the limitation on resources it will face in the future. Campus academic planners have projected very small enrollment growth over the next ten years. These projections make appropriate a slow-growth physical planning policy, to accommodate a campus population of 6,760 in 1985-86 and some growth in additional graduate programs and professional schools. This Plan answers to the present-day realities by proposing a more flexible approach than heretofore to campus space needs, one which can by simple and imaginative use of available space relieve much of the congestion that exists now.

The latest ten-year projection, indicated below, anticipates an approximately 10% increase in enrollments over 1976-77 levels.

<table>
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<th>Year</th>
<th>Undergraduate Enrollments</th>
<th>Graduate Enrollments</th>
<th>Total</th>
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<tr>
<td>1985-86</td>
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</tbody>
</table>

The following table indicates additional academic needs in assignable square feet (a.s.f.) based on projections to 1983-84 generated by enrollment growth:

- Natural Sciences: 21,600 a.s.f.
- Social Sciences: 15,800
- Humanities/Fine Arts: 7,500
- Humanities/Letters: 6,100

51,000 a.s.f.

The Natural Sciences Division can grow within the existing three science buildings (Thimann Laboratories, Natural Sciences II and Applied Sciences buildings), by completing presently unfinished space within the Applied Sciences building and by occupying space presently occupied by administration when a campus administration building is completed. Present planning envisions the completion of the first floor of Applied Sciences for Natural Sciences laboratories and the completion of the basement for Natural Sciences shops. Space within Thimann laboratories and Natural Sciences II, now occupied by the various shops, would then be freed and converted to research laboratories. New space will be required for such ancillary services as animal quarters and the science library. It may be possible to relocate the art laboratories from Applied Sciences building and thus provide additional space for Natural Sciences.

The Social Sciences Division is contemplating the possibility of additional graduate programs as well as professional schools. Clark Kerr Hall (Social Sciences building) is now occupied jointly by College Eight and Division of Social Sciences. Consideration will be given to accommodating space needs by either adding colleges...
or making available additional academic space, which will provide for Social Science Division needs. Depending upon the scope of proposed graduate and professional programs, it is possible to plan for a vertical addition to Clark Kerr Hall to provide additional space for the Division.

As the Humanities Division program grows, it will be necessary to provide additional space. As indicated above for Social Sciences, additional colleges would include a small amount of additional Humanities space. At the 7,500 enrollment mark, the campus could justify building additional core academic space (in addition to that included in the new colleges), and depending upon the growth of Humanities programs, these spaces could be assigned to Fine Arts or Letters.

Organized research units, professional schools, and institutes would need some spaces in their formative years, as well as timely implementation of new spaces as their programs mature. These will be accommodated in existing space adapted to their needs, or in new facilities when necessary. (See Appendix: A & B)

In sum, the Plan foresees that judicious use of existing space and careful planning for future additions will provide adequate space for contemplated academic programs as follows: the construction of an administration building and completion of space within Applied Sciences will provide for Natural Sciences Division expansion; and additional space for Humanities and Social Sciences will be provided by adding colleges or making additional academic space available. Permanent housing for College Eight will need to be provided as Social Science Division space needs increase. Furthermore, as part of this Plan, campus space will be continually analyzed, with every effort being made to reallocate space efficiently consistent with programmatic needs in all areas, and to project needed new space on an annual basis (through the annual Major and Minor Capital Improvement Program requests).
IV. SITE PLANNING: A CONSIDERATION OF THE DESIGN ELEMENTS IN A PHYSICAL CONTEXT

Sites

The first plan for physical development of the campus, the LRDP of 1963, identified a central core area, enclosed by an inner loop road, as an academic/administrative facility precinct. Colleges were arranged around this precinct, or core area, beyond the loop road.

The core area and surrounding colleges were located north of the Great Meadow at an elevation of about 400 feet above the campus entrance on High Street. This area was chosen, in part, for its forested nature, which allowed the development of relatively large-scale buildings, while preserving the quiet, undeveloped visual character of the site.

Early construction included four colleges on the east side of the college ring, and some academic and administrative facilities in the central core. A later phase of building activity expanded core facilities and developed the Student Apartments.
and College V on the west side. The most recent developments have been mainly on the west side of the campus, including two more colleges and some additional academic facilities.

Early development was almost completely within the forested core area of the campus. Second phase construction is more visible to viewers across the Great Meadow, and most third phase development has been entirely outside the forested area, visible to the community. As the campus has developed, there has been a growing expression of a need for a sense of “place”, and this Plan has recognized that this need results from the present lack of close relationships between buildings and from too-separated activities. Development to date has generally followed the lines projected by the 1963 Plan. Buildings were built within general zones prescribed for their use, on particular sites chosen at the time the projects were conceived. Balance between the east and west sides of the campus was stressed, rather than close proximity. It was felt that within a relatively short time, development activity to meet an enrollment of 27,500 students would fill-in the interstitial areas between zones, but it is now clear that such “filling-in” is unrealistic in the foreseeable future. One result of this situation has been that circulation between buildings under present usage is time-consuming, and in some cases, arduous.

The present developed area of the campus is 350 acres for 6,000 enrollment. This compares to 177 acres at UC Berkeley and 376 acres at UCLA for 30,000 students.
Policy

This Plan establishes the following guidelines for siting the relatively minimal amount of construction which can be foreseen in the next ten years:

1. Sites for future development will be within or adjacent to the +350 acre primary area already developed to maximize the filling-in of that area. Limitation of development to this area will result in:

   - a better relationship between existing facilities, with an increased sense of "place" through intensity of activity;
   - a decrease in overall circulation time between buildings;
   - a gradual reduction in the now-extreme grade separations between activities (sites are between 610 feet and 840 feet mean elevation);
   - no need for new major roads or underground utilities;
   - limitation of development on undisturbed land, which might impact natural resource areas;
   - more intensive and efficient use of existing facilities and services.

2. Within the developed campus area, land which is difficult or undesirable to build on will be eliminated from siting consideration. Areas eliminated include:

   - natural resource areas, thus reducing adverse environmental impacts;
   - areas steeper than 20% in grade, which tend to increase construction costs;
   - areas of geologic or hydrologic significance which would suffer negative impacts and add to the cost of construction.
3. Within the area so reduced, twelve potential sites have been chosen, primarily because of their size and relationship to existing facilities. These are identified as "buildable sites." These sites have been evaluated in the accompanying EIR, and all are designated as “developable” with little or no adverse environmental impacts. Campus development through an enrollment level of 7,500 students will focus upon these twelve designated sites (see Figure 9 and description of sites).

Among the developable sites, sites for specific facilities are not identified because there are no specific program requirements yet prepared. When a new facility is to be built, an appropriate site will be selected from these sites. The EIR provides the necessary environmental data to guide the specific choice of site.

All of the identified sites are appropriate for most of the types of development now anticipated. However, the sites located adjacent to central academic/administrative activities should be reserved for those types of use, while the sites further from the center should be used for new colleges, faculty/staff housing or ancillary facility development. Exceptions to this policy which may occur as each new facility is programmed will be added as amendments to this Plan.

Description of Sites: (See Fig. 3 & 9)

Site 1
South of College V is a medium-sized site which could accommodate a facility or facilities as large as one college. It is about 2,000 feet southwest of the main library at mean elevation 700 feet. Its major physical characteristics are that it is gently rolling and relatively free from forest cover, visible from the south and east, with good views to the west.

Site 2
North of Kresge, at a mean elevation of 840 feet, is a large site suitable for one or more colleges. The site, approximately 4,000 feet northwest of McHenry Library, is wooded with a gentle to moderate slope.

Site 3
North of the Applied Sciences, at a mean elevation of 815 feet, is a medium-sized site suitable for academic facilities or a college. The site, 2,800 feet north of McHenry Library, is secluded and heavily wooded with moderate slopes.

Site 4
North of Cowell Student Health Center is a large site at a mean elevation of 830 feet. The area is open meadow and oak woodland that would be suitable for colleges or institutes. The site has a moderate slope and is 3,400 feet north of McHenry Library.

Site 5
South of Fieldhouse East, at a mean elevation of 610 feet, is a large site suitable for colleges or physical activities facilities. The area is an open, gently sloped meadow approximately 3,400 feet east of McHenry Library by existing pedestrian paths. The distance can be reduced to 2,800 feet with new pedestrian bridges.

Site 6
East of Performing Arts, at a mean elevation of 680 feet, is a large site suitable for academic or support facilities. The site is 700 feet southwest of McHenry Library, partially wooded and rather rugged with moderate to steep slopes. It includes the existing Performing Arts parking lot which is open and free from landscaping.

Site 7
South and east of Performing Arts is a large site suitable for academic, administrative or support facilities. The site is 1,400 feet south of McHenry Library, and is gently sloped and open at a mean elevation of 660 feet.

Site 8
South of Central Services, at a mean elevation of 665 feet, is a medium-sized site rising approximately twenty-five feet from McHenry Library, 1,000 feet to the east. The site is open, presently used as parking lots, and could be used for administrative or support facilities.

Site 9
South of Natural Sciences II is a medium-sized lot that would be suitable for academic facilities, particularly in the sciences because of the proximity to existing facilities. The site is approximately seventy feet above and 800 feet north of McHenry
Library and is open with a steady moderate slope and a mean elevation of 760 feet.

**Site 10**
South of Applied Sciences is a medium-sized site suitable for Academic facilities, institutes or professional schools. At a mean elevation of 780 feet, this area is flat and open with existing landscaping and parking lots. The site is ninety feet above and 2,200 feet north of McHenry Library.

**Site 11**
South and east of Classroom I, at a mean elevation of 750 feet, is a medium-sized site suitable for academic and support facilities. The site is 1,200 feet northeast of McHenry Library and includes the bookstore area. Except for the parking lot, the area has limited space and is steep and wooded.

**Site 12**
East of Clark Kerr Hall at a mean elevation of 710 feet, is a small, wooded site that would be suitable for academic facilities. The site is 1,000 feet from the McHenry Library and is rather rugged.

**Inclusion Areas (See Fig. 3)**

Three areas totaling over 200 acres within the campus boundaries were designated in the 1971 LRDP as Inclusion Areas in accordance with the policy concerning Inclusion Areas adopted by the Regents in 1967, amended in 1968, and supplemented by a Guidelines and Procedures letter in 1971. The extent and location of these areas were based on growth prospects for the campus and the perceived need for housing and various commercial support facilities adjacent to the campus. These areas were meant to accommodate activities that, while related to the campus only indirectly, could provide facilities or services advantageous to the functioning of the campus community. The areas are:

- **Inclusion Area A:** 78 acres in the southwest corner of the campus, in the Coastal Zone, separated from the campus by Empire Grade.
- **Inclusion Area B:** 75 acres, near the southeast corner of the central campus, between main access roads Coolidge Drive and Hagar Drive.
- **Inclusion Area C:** 50 acres, in the wooded undeveloped northwest corner of the campus. Area C is separated from "Cave Gulch", an enclave of small private land holdings located on Empire Grade Road by a major north-south ravine.

Current Regents' policy on Inclusion Area development includes the following criteria:

- that any development meet certain economic and physical guidelines established by The Regents, and
- that any development benefit directly the campus and the surrounding community.

A specific planning study for industrialized modular student housing in Inclusion Area C was completed in 1973 but not implemented. Studies of A and B made in 1972 resulted in no specific proposals.

As the campus has matured, there has been a growing realization that not all campus community needs can or will be met with campus or University originated funds. Privately funded development on Inclusion Areas has, therefore, become more attractive. The need for faculty/staff housing and ancillary facilities is being considered.

This Plan establishes the following specific planning guidelines for Inclusion Areas at UCSC.

1. **Existing Inclusion Areas (A,B,C) and new Inclusion Areas (D,E) are categorized as:**
   - Primary Inclusion Areas, areas which are suited under current planning criteria for development;
   - Secondary Inclusion Areas, existing areas which do not lend themselves to development at the present time;
   - Additional Spot Inclusion Areas which may be or may become suitable for Inclusion Area status as specific needs or development patterns evolve.

2. **Inclusion Areas are designated as follows:**

   - **Primary Inclusion Areas (A, D and E)**
     - Inclusion Area A, with large acreage, proximity to town, and good road accessibility, lends itself to a wide number of institution-related land usages which include recreation,
housing, and particularly non-manufacturing research and development facilities. They should be situated toward the east and west boundaries of the area to leave the central meadow portion free of structures which would tend to block the magnificent views from the central campus. This area is under the jurisdiction of the Coastal Commission.

- Inclusion Areas D and E, of seven and two acres respectively, are situated at the southeast boundary of the campus, near existing small-scale ranch structures and restored residential and farm buildings. Development should maintain this small scale and character. Educational society headquarters, small research service facilities, as well as recreation facilities would be especially suitable.

**Secondary Inclusion Areas (B and C)**

- Inclusion Area B is an integral component of the Great Meadow, and as such should remain undeveloped. Area C is too far north of the existing developed campus to consider extending utilities necessary for development at this time.

**Spot Inclusion Areas**

- These areas will accommodate specific facilities necessary for activities near and related to existing campus development. An example would be an entertainment/recreation/pub facility near the existing bookstore restaurant. Flexibility to assign this land use designation may encourage proposals for development in order to accommodate changing needs when University or Campus funds are not available.

3. Development of Inclusion Areas will be coordinated with ongoing campus and community planning efforts.
V. EXISTING PLANNING ELEMENTS: DESCRIPTIONS AND RECOMMENDATIONS

There are two basic concerns that must be considered in any future development on the UC Santa Cruz campus. One important consideration is the magnificent natural environment on the campus, an environment that necessitates sensitivity and care of approach. The concomitant consideration is the social environment on the campus, the environment that nurtures the academic work of the campus. In the following sections both of these elements are considered, as the programs of the University are described in terms of the natural resource areas, campus housing, transportation, energy and the surrounding communities.

A. Natural Resource Areas

Campus planners, in cooperation with the UCSC Environmental Studies Board, have developed a plan*

* "A Proposed UCSC Natural Resources Management Plan," August 1977

for the preservation and use of the natural resources of the campus which recognizes that these provide an overall context for the physical development of the campus. The plan for the natural resource areas addresses the establishment of four different kinds of such areas.

Description

The plan outlines a breakdown of the natural resource areas on the campus (shown in Figure 10), in order to aid in planning for the preservation and protection of representative plant and animal species as well as certain historical and archeological sites. The intention is to preserve representative samples of all plant associations found on campus, including chaparral, oak
woodland, madrone, tanbark oak, California bay, broadleaf maple, Douglas fir, coastal redwood, ponderosa pine, and associated shrubs and herbs. Similarly, the diverse habitats of the abundant fauna on campus will be protected in the plan. These include a wide variety of small carnivores (weasels, badgers, skunks, bobcats and an occasional mountain lion), an extensive invertebrate and insect fauna, and a diverse bird fauna. A great portion of the flora on campus is identified for preservation, including the endangered native Dichondra donnelliana, six species of native orchids (three of which reach their southern limits on the campus), and Isoetes and several other plant species that are known to occur only in one or two other localities in central California. The plan also provides for the protection of several permanent springs, the limestone caverns found in the Cave Gulch Area just west of the campus boundary, a major archeological mound, and a number of historical sites associated with the old Cowell Ranch.

A number of study areas have been selected for preservation. These include the Arboretum, the Farm Project, the Garden Project, the Chaparral Woodland Project, the Great Meadow, and the Cave Creek Bowl. These are used directly in the Natural History Program, a program that serves students who are interested in careers in the natural history field, including park programs, outdoor education, environmental assessment, and the interpretation of the environment in the media and the arts. In addition, the study areas serve as an amenity to the general campus community.

The establishment of a multiple-loop trail system is incorporated into this plan, that will allow visitors to walk through representative natural areas of the campus while remaining within established zones. Aside from human use values, an organized trail system is essential for the protection of the local flora and fauna.

The plan also identifies environmentally sensitive areas on campus, areas that are environmentally unique or extremely incompatible with building activity. For example, the three large gulches or ravines which slice through the campus are unsuitable for any development, as they have unstable soils and present extreme hydrology and erosion constraints. The limestone cavern areas present similar excessive physical constraints.

Policy

The plan makes a precise identification of the above types of natural resource areas. In this LRDP, these areas are to be specifically eliminated from the preferred developable areas of the campus. When it is necessary to bridge or construct in or near these areas, extreme caution and care will be exercised to prevent adverse environmental impacts. Costs may be greater for development in these areas in order to minimize impacts.
B. Housing

The idea of residential colleges has been one of the most important in the development of the Santa Cruz campus. For example, the first Academic Plan considered the colleges as "the basic units of planning and of faculty and student identification." It suggested that these "living and learning" environments would be the principal mechanisms for creating an intellectual community at UCSC and that they would facilitate an in-depth undergraduate education not typically available at other campuses.

Colleges still provide an important basis for campus planning, but specific concepts for physical development of the colleges have changed. The 1963 LRDP prescribed housing at least 50% of the enrollment in the fifteen to twenty colleges on the campus, and suggested that each college include from 250-1,000 students. Further, it suggested that each college provide for at least half of its students' instruction within itself, and that a large number of faculty live on or near the campus in special campus housing. It also prescribed that the campus develop (or encourage private development of) the commercial and recreational amenities necessary to serve a successful residential community.

The 1971 LRDP was based on the experiences of the first six years. College size was adjusted up, to 600-1,000 students: enrollment projections were lowered; recommendations for creating a campus community were made less specific; and the development of residential and commercial support facilities was suggested for the Inclusion Areas and the Environs.

Presently the colleges are comprised of 600-720 students, with an upper limit of 800. But both upper and lower division students typically take most of their classes outside of their college, and a high percentage of all students are upper-division transfer students or returning students rather than four-year students,
creating an older group with wants and needs different from those that had been foreseen. These changes necessitate modifications of the development of the campus and the colleges, particularly in regard to housing issues.

Presently many students prefer to live in the Santa Cruz community. The campus offers three types of housing: typical single and double room dormitory housing, some with communal kitchens; apartments with kitchens, with four to six persons per unit, but priced high in comparison with similar in-town housing; and, most preferred but usually reserved for students living in family units with children, two-bedroom apartments. Of these, the student apartments offer amenities closest to those of the housing of the town.

In 1976-77, about 2,500 students and a small group of faculty lived on campus. And though the prices of housing off-campus have increased and off-campus housing availability has decreased, the vacancy rates on the campus have remained relatively high. In order for the campus to insure maximum utilization of on-campus housing and to minimize its impact on the community, housing policy will have to be modified to meet the perceived needs of the students.

Future Housing Development

The challenge of improving campus housing is complicated by the high vacancies, as the resulting revenue losses (from the 1976-77 year, for example) make it difficult to raise the funds needed to modify existing housing or to justify building new housing. While recognizing this constraint, the Plan nonetheless assumes that change in the housing policy is both possible and desirable, in the following terms.

1. The campus will continue to affirm its goal of housing approximately one-half of the students enrolled, a concentration of residents that is essential to build a sense of community on the extended area of the developed campus, and a concentration that is important to lessen the competition for housing with non-campus people in the city of Santa Cruz.

2. Existing housing may be modified to meet student needs as is appropriate so as to restore financial stability to the campus housing operation, stability that may provide a solid base to build new housing as needed. For example, the campus may renovate some existing dormitory housing to provide for more single rooms and apartments. Also, the additional twenty-one units of married student housing presently planned may be built (as mentioned, this type of housing has ready market) when financially feasible.

3. Planning for new housing will involve cooperative efforts of both students and administrators.

4. Housing policies will be periodically re-examined and modified as necessary to make campus housing more attractive to students, faculty and staff.

5. Community amenities should be developed on the campus, including a grocery store, a drug store and a pub. These should be located near the center of the developed campus so as to serve the on-campus residential community.

6. The campus may consider development of on-campus housing for faculty and staff in the central campus and the Inclusion Areas. Such development would provide demographic diversity on the campus, diversity that is critical both in stimulating a community atmosphere and for the maintenance of the principle of an integrated intellectual community for living and learning.
C. Transportation, Circulation, Parking

Careful management of the use of private automobiles on campus was a major planning principle of the early formation of the campus. A pedestrian-oriented campus core, served by inner and outer loop roads, was part of the physical concept diagram of the 1963 LRDP as well as being carried out in the actual plan of the campus. The 1971 LRDP continued this planning principle by minimizing intracampus auto movement while maximizing pedestrian movement within the central campus. In both plans parking facilities were proposed that would serve the campus efficiently, and a transit system was described to link the colleges with the central campus.

Further analyses in 1974, (UCSC Transportation Study, 1974, DeLeuw Cather & Co.) expanded campus transportation planning to the regional level. Concern for the impact on the surrounding community from campus-oriented traffic, as well as a growing demand for increased control of intra-campus auto use, led to several recommendations. They included much greater use of public transit for access to campus; use of mini-buses on campus; development of more bicycle and pedestrian paths; and better and more efficient distribution of parking to encourage increased utilization of the parking then available.

The same goals which shaped the campus originally are still present in on-going circulation planning, at a time, however, when campus growth has placed greater demands on the systems which have been built to date. Congestion along key routes to the campus, a rapidly increasing demand for additional close-in parking coupled with increased parking congestion in neighborhoods near the campus, and increased auto/bicycle use of campus roadways are problems which need solutions.

Transportation, circulation and parking issues are so complex and interrelated that they must be dealt with as a system, rather than as isolated problems to be solved one at a time. For example, from an economic view, new roads mean additional capital expenditures for non-academic purposes. Physical planning, administrative direction and economic policy must work together to insure comprehensive and workable solutions. In the following analysis, these issues are examined separately, followed by an integrated policy statement.
Transportation To Campus

The rugged topography and remote location of the Santa Cruz campus present a particular challenge to transportation planning. Presently, there are four major methods of reaching the campus:

- private auto
- public transit
- bicycle
- pedestrian

The predominant use of private automobiles is not surprising, considering the remoteness of the central campus and the fact that there is little housing available within three miles of campus. The remarkably high patronage of transit by students, however, is the product of concerted efforts by the campus and the community to promote a "pro-transit" policy.

The Santa Cruz Metropolitan Transit District (SCMTD) provides excellent service in and near the City of Santa Cruz. UCSC students pay a transit fee at registration that allows them unlimited service on all SCMTD lines during the school year. This fee-card system has encouraged the high use (45%) of public buses by commuting students. A loop route to the campus from downtown Santa Cruz serves the campus at 7.5-minute headways during peak hours, 30-minute headways at night. This service is to be increased as use increases.

Bicycle, pedestrian and other forms of commuting to the campus while increasing rapidly over recent years, still represent less than 16% of the trips to and from campus. Topography, relative remoteness of the campus from the major areas of student and staff residences and physical/economic limitations of other forms of commuting continue to limit these alternatives.

Parking On Campus

There are currently 3,375 parking spaces on the campus in three types of lots:

- close-in parking, located adjacent to buildings in the campus core. This is available for faculty, staff, and some graduate students, who buy annual stickers; some metered space is also available.
- college lots, available to faculty, staff and commuter students. Metered spaces are also available.
- remote parking, in two large lots south of developed campus. This is the only parking available to resident students, and it is also patronized by some commuters because of its lower price.

All parking is asphalt surface on grade; there are no parking structures nor parking integrated with building structures. Parking has been provided more or less on demand since the campus was founded. In recent years, the demand for close-in parking has increased, and the current number of spaces (0.56 ratio; spaces to enrollment) is higher than earlier plans recommended.

Counts taken in 1976 by campus staff, however, noted that most parking lots were underutilized and inefficient.
in their layout. Restriping some lots has added many spaces without new construction, but efforts to direct parkers to those lots which have space and to the remote lots have been less successful.

**Policy**

This Plan provides guidelines to implement a renewed commitment to the goals upon which the campus was founded: to create a primarily pedestrian central campus with care and sensitivity to the unique environment in all aspects of circulation planning.

1. The campus pro-transit policy* will be promoted in order to:
   - reduce the demand on automobile routes through the Santa Cruz community to the campus;
   - reduce congestion on intracampus routes;
   - reduce the demand for on-campus parking.

2. Effective implementation will be comprehensively planned to include the following:
   - encouragement to use public transit by making it responsive to the users;
   - encouragement to use alternatives to the auto, such as bicycle, Dial-A-Ride and car and van pooling;
   - encouragement for the pedestrian, by creation of a path system which is easy to use and easy to understand;
   - attractive incentives to encourage transit use;
   - dis-incentives to discourage auto use.

Based on the above policy, this Plan outlines the following:

1. Construction of new auto routes around or within the central campus will be postponed (except minor service roads if required by a new facility). The proposed extension of Meyer Drive and the Eastern access should be planned now but construction postponed until the enrollment reaches 7,500. (See Sec V. E.I.)

2. SCMTD Service may be increased to fill the demand to new and currently underserviced areas of student residence and any other area which represents significant demand for service.

3. While students are using transit in very high numbers (45% in 1976), incentives to increase this to 60% will be implemented.

4. Staff and faculty have generally shunned use of transit alternatives (8% in 1976). Incentives to encourage their use of transit might include:
   - staggered work hours;
   - more particularized transit alternatives to fit their needs;
   - economic advantages to use of transit;
   - dis-incentives to use of auto (high parking fees and elimination of preferential treatment in allocation of parking spaces);
   - bicycle racks, car pools and van pools;
   - good remote parking with quick and easy access by mini-bus to their destination.

5. Parking spaces will not rise above the current ratio (0.56). Since some lots are currently underutilized and inefficient in their layout, retrofitting of existing lots should be implemented before new lots are considered. In 1977, 90 new spaces were created by making retrofitting adjustments.

   - At enrollment level 7,500, a ratio of 0.56 will mean 4,200 spaces on campus. This implies construction of 825 additional spaces by the time of the enrollment.
   - New parking will be constructed in concert with new facilities and integrated with them if possible (in structures and underneath buildings, for example).
   - A phased allotment of new parking can be generally planned as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing 1/78</td>
<td>3,375</td>
</tr>
<tr>
<td>Restriping and Additions on existing lots</td>
<td>75</td>
</tr>
<tr>
<td>Colleges 8-10 (100 spaces each), or at professional schools or institutes</td>
<td>300</td>
</tr>
<tr>
<td>Academic, administrative and support</td>
<td>450</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>4,200</td>
</tr>
</tbody>
</table>

- Parking, in order to serve the unavoidable need for an auto which some campus users will continue to experience, will be allocated in a fair and equitable manner, with handicapped, elderly and emergencies having first priority. A zone-parking system is one method for apportioning spaces.
- If parking congestion in neighborhoods adjacent to the campus continues to be a problem,
parking regulations and enforcement procedures will be proposed.

6. On-campus transit systems will be improved and increased to provide the level of service which will satisfy ex-auto users as closely as possible.
   □ New mini-buses, new routes, wider area service, decreased headways will all be necessary for transit to be an incentive.
   □ Door-to-door service will be available for emergencies, elderly and handicapped on a will-call basis.

7. A good on-campus restaurant for lunch combined with other services like a drugstore, a grocery, possibly even a laundry, a more centrally located post office and a pub would be incentives to stay on campus at mid-day.

8. All remote parking lots will be served according to need by campus transit.

9. Separated bicycle ways will be constructed on campus as needed. Already planned in conjunction with the City and County are:
   □ A second bikeway along the alignment of an existing ranch road up to the Field House East.
   □ A bike lane on Coolidge Drive to the end of Spring Street planned to connect with a City-planned bike route.
   □ A second bike shuttle van during peak hours to operate between the Barn Theater and the Whole Earth Restaurant.
   □ A possible bikeway up Cardiff Way, to bypass the Bay/High intersection.
   □ Additional bike-locking stands at campus buildings as demanded.
   □ The City is considering a bikeway up Spring Street to Coolidge Drive, and eventually shoulders and a bike lane on Empire Grade.
   □ A future recreational bike trail from Coolidge Drive to Henry Cowell Redwoods State Park at Highway 9, along the route of the old Rincon Road.
   □ Possible shoulder surfaces along Coolidge.

10. Pedestrian pathways will continue to be established wherever the demand is demonstrated.
   □ A new major East-West pedestrian route at the southern edge of the developed campus including two new pedestrian bridges will be established to provide better access from the West (married-student housing/College V/Oakes College/Performing Arts/Fieldhouse West/West Remote Lot) to the East (Fieldhouse East/Central Services/East Remote Lot).
   □ Bridges spanning ravines will be provided as necessary to eliminate stressful climbing for the handicapped and elderly as well as the non-hiker or pedestrian.
   □ A comprehensive system of graphic signs will be improved on campus to quickly and simply inform pedestrians of the most efficient routes to reach their destinations.
   □ Buildings can serve as both vertical and horizontal pedestrian ways, and new structures will be so planned if possible. Innovative means of facilitating the pedestrian will be given a high priority.
   □ Security on isolated pathways must be adequate to encourage their use. Lighting, call boxes, patrols and landscape thinning will all be provided.
D. Energy Resources

Much of the campus was developed in the 1960’s, an era of cheap and abundant energy. Clearly, this assumption is no longer a valid one, as energy costs are increasing quickly and supplies of some kinds of energy are approaching depletion.

The University of California has set a goal for all campuses of reducing energy consumption rates by 1980 to 70% of their consumption in fiscal 1972-73. Conservation efforts at the Santa Cruz campus have already surpassed this standard for academic core spaces.

Policy

Campus energy conservation programs will be implemented that will reduce consumption of electricity and fossil fuels while preparing to shift from reliance on these resources to alternative sources, such as solar. The goal is to reduce consumption rates by 20% below current rates for all space on campus.

Heating Systems

Currently, all space and water heating systems depend on boilers fired with fossil fuels. Heating needs of the academic core buildings are provided for at the Central Heating Plant. Heat is distributed through an insulated, underground, high-pressure, hot-water system. The colleges and buildings outside the core have individual boilers. Natural gas is the primary fuel for heating and cooling, supplying over 95% of the demand; however, the Central Heating Plant can be operated on oil as well (about 50% of demand). The campus purchases natural gas from Pacific Gas & Electric on an interruptible
basis. During times of short supply the campus is cut-off and must rely on stocks of its standby fuels: liquid petroleum (LP) gas and light fuel oil.

- Conservation efforts will continue with modifications to existing energy use systems to decrease consumption.

- Insulation of buildings will be improved, and both active and passive solar heating and cooling devices and methods will be introduced, where possible.

- Present storage capacity for LP gas and light fuels is sufficient. However, if increasingly frequent cut-offs of natural gas require more reliance on the standby fuels, storage capacity may have to be increased sufficient for 30 days.

Energy Conservation Programs

An energy conservation program was started at UCSC in April 1973 with the installation of a Central Control System. This system, which controls the central campus buildings, repaid its cost in energy savings within a year of installation. The Campus Energy Conservation Analysis project has reviewed energy consumption patterns and designed projects that have resulted in many other substantial energy savings. A set of guidelines, called "Energy Conservation Guidelines for New Facilities at UCSC", is currently being developed to assure that these considerations are introduced at the outset of building design projects and monitored through construction and maintenance.

- A coordinated program of conservation will be developed that will eliminate wasteful procedures and implement alternative systems incrementally where possible. New buildings will be designed to maximize energy conservation. This is the most positive and effective approach to conservation as an effective design can save 25-50% of the energy needed to heat, cool, and illuminate buildings.

Water

The University of California required all campuses to cut their rates of water consumption to 70% of their monthly consumption during 1975. UCSC achieved this goal during 1977 by re-fitting water consuming devices with water-conservative fixtures, with the excellent cooperation of all users.

- Water conservation fixtures will be incorporated in the design of all future facilities, and water conservation will be stressed.

Sewage

The campus sewage system discharges into the City's sewers at the southern boundary of the campus. No new trunk mains will be required for expansion through the 7,500 enrollment level.

Solid Waste Disposal

Solid garbage waste is containerized and removed by the campus to the Santa Cruz Municipal Dump. Campus-generated waste represents a minor portion of the community's output, and no new arrangements will be necessary through the 7,500 enrollment level.

At present, campus recycling efforts are confined to student programs in the residence halls. An expanded campus-wide recycling program is being considered in order to cut the solid waste load.
E. The Santa Cruz Community

One thousand acres of the campus, including all the developed portions, lie within the City of Santa Cruz. The remaining one thousand acres are in unincorporated areas of Santa Cruz County. About 300 acres of the campus, to the west of Empire Grade, are within the jurisdiction of the California Coastal Commission, Central Coast Region. The planning and development policies of each of these three agencies affect the future development of the campus and its environs.

In 1964 the City Council of Santa Cruz adopted a General Plan which included a University Community Development General Plan (the University Environ Plan). The Environ Plan was developed and adopted by the campus, the City, and the County of Santa Cruz. Regents' adoption followed.

This environs plan was based on a campus whose future enrollment would approach 27,500 students with concentration of facilities at the southern end of the site and with concern for possible rapid development within the adjacent areas. The environs area was defined in a very broad manner, extending to the north to Cowell Redwood State Park; the Pogonip area to the east; the Cave Gulch and Wilder Ranch areas to the west; and to the shore of Monterey Bay, to the south.

In 1971 the City began a General Plan review and revision, resulting in the publication of the Policy Basis for the General Plan. In discussing the form and size of the community, Policy Basis stated that the City should "encourage the Regents to adopt a policy restricting enrollment of UCSC to a maximum student population of 10,000." The Policy Basis also stated that the University's LRDP would be coordinated with the City's University Planning area. The City is proceeding with the revision of its General Plan.

Planning policies of the concerned public agencies are currently being reviewed at several levels. Campus/community communications are maintained.
by the staff of the Office of Public Affairs and the office of Campus Facilities. Some campus personnel have served as members of the City Planning Commission and on various City and County technical advisory committees. Cooperation in planning has been achieved more informally through regular contact between the planning staffs of the campus and of the various City, County and special district agencies.

The 1978 LRDP is based on the existing campus of approximately 6,000 students located on 2,000 acres of land with little prospect for substantial growth through the 1980's and into the 1990's. The campus center, as developed, is located a considerable distance from the entrance at Bay and High Street with a large natural buffer zone between the campus and community. The campus has ample acreage, through the use of inclusion areas or other type of planning, to develop necessary facilities to complement academic programs. Also, during the past fifteen years much of the land in the Bay/High environs area has developed into single family residential uses, and a large portion of the formerly considered environs area is within the coastal zone, and through its regulations and City and County regulations, orderly development is assured.

For these reasons, the campus is not concerned with a large geographical environs area as such, but is concerned with certain vital interests which it will pursue in working with the City and County to provide solutions compatible with community and campus growth.

The following are considered the most important interests which the campus plans to pursue in concert with the City, County and, as required, the Coastal Commission:

1. Regional transportation planning and its impact on the campus:
   - The campus and the City of Santa Cruz are

Aerial view of the campus from Younger Lagoon.
concerned with access to the campus along Bay/High and western corridors. The campus would encourage avoiding high density uses and road configurations which will increase traffic conflicts along the Bay/High corridors. There are presently plans for upgrading and maintaining the natural environment of Western Drive, and the campus urges such consideration also be given to the upgrading of the existing Empire Grade alignment.

In 1961 the County entered into an agreement with the University to construct a six lane highway (now reduced to a two way road) from the intersection of State Highways 1, 9, and 17 to an entrance point on the eastern perimeter of the campus. The eastern access is a long term need for the campus and the proposed routing of the roadway should be established. This need is based on the desire of both the City and the University to reduce traffic to the campus on neighborhood residential streets through the City of Santa Cruz and also to provide a second major entrance to the campus. Present traffic counts indicate heavy usage of the existing limited access (Bay Street — Coolidge Drive) and even though enrollment may not increase considerably, other campus activities will increase these traffic pressures. Also, there is need for improved access from the San Lorenzo and mid-county areas.

2. Community development adjacent to campus:

There is a need for a commercial service center for the campus and such facilities may be established on campus or in areas adjacent to the campus. The campus will be concerned with any development of this type within the Bay/High Street areas. Also, the campus is evaluating uses for inclusion areas, especially Inclusion Area A, and this is discussed elsewhere in this document.

The City of Santa Cruz is now proceeding with a General Plan which will establish guidelines for the development of the Pogonip area. Pogonip consists of approximately 620 acres of undeveloped land owned by the Cowell Foundation. This land is located between Highway 9 and the eastern boundary of the campus, and as indicated above, the eastern access to the campus would be constructed through this land. While the campus has a clear institutional and contractual interest in the development of the eastern access, no such interest exists in the development of the Pogonip area. The campus will cooperate in all ways possible with the City and County and if such development is planned, the campus will urge that detailed planning and a specific timetable for construction of the road be established.

3. Community use of Campus facilities:

The campus will continue to make its physical amenities and cultural and recreational facilities accessible to the community. In order to make these facilities more accessible, the following will be instigated:

□ New development will enhance and facilitate, to the degree appropriate, the interaction of the campus and the larger community.

□ Better and more visible signs will be designed to enable visitors to circulate through the campus in an efficient and easy manner.

□ Parking for visitors on campus will be made available in convenient locations near facilities and activities of high visitor usage. Also, information will be disseminated on the use of the Santa Cruz transit to reach events on campus.
## LRDP Appendix A

### EXISTING BUILDINGS

<table>
<thead>
<tr>
<th>NAME</th>
<th>Year</th>
<th>Const.</th>
<th>Base OGSF</th>
<th>ASF</th>
<th>Architects/Engineers</th>
</tr>
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<tbody>
<tr>
<td><strong>Central Campus:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Science</td>
<td>1971</td>
<td>157,806</td>
<td>103,815</td>
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<td>Reid &amp; Tarics Associates</td>
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<tr>
<td>Astronomy Shops</td>
<td>1966</td>
<td>12,322</td>
<td>11,329</td>
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<tr>
<td>Bookstore</td>
<td>1971</td>
<td>7,401</td>
<td>6,434</td>
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<td>Bull, Field, Volkman &amp; Stockwell</td>
</tr>
<tr>
<td>Central Services</td>
<td>1965</td>
<td>30,453</td>
<td>22,636</td>
<td></td>
<td>Ernest J. Kump Associates</td>
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<tr>
<td>Classroom Building</td>
<td>1972</td>
<td>14,369</td>
<td>9,865</td>
<td></td>
<td>Marquis &amp; Stoller</td>
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<tr>
<td>Communication Building</td>
<td>1968</td>
<td>38,205</td>
<td>22,576</td>
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<td>Spencer, Lee &amp; Busse</td>
</tr>
<tr>
<td>Cooling Tower</td>
<td>1971</td>
<td>442</td>
<td>0</td>
<td></td>
<td>Robert Heaton</td>
</tr>
<tr>
<td>Cowell Student Health Center</td>
<td>1970</td>
<td>23,564</td>
<td>13,664</td>
<td></td>
<td>John Funk</td>
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<tr>
<td>Central Heating Plant</td>
<td>1966</td>
<td>5,125</td>
<td>4,793</td>
<td></td>
<td>Spencer, Lee &amp; Busse</td>
</tr>
<tr>
<td>East Pool Facility</td>
<td>1966</td>
<td>624</td>
<td>450</td>
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<td>UCSC Physical Planning &amp; Construction</td>
</tr>
<tr>
<td>Field House East</td>
<td>1965/71/77</td>
<td>27,165</td>
<td>22,528</td>
<td></td>
<td>Callister, Payne &amp; Rosse / J. Martin Rosse</td>
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<tr>
<td>Field House West</td>
<td>1977</td>
<td>17,454</td>
<td>10,009</td>
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<td>Bull, Field, Volkman &amp; Stockwell</td>
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<tr>
<td>Fire House</td>
<td>1975</td>
<td>4,263</td>
<td>3,457</td>
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<td>William M. Gillis &amp; Associates</td>
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<tr>
<td>LPG Standby Facility</td>
<td>1968</td>
<td>178</td>
<td>178</td>
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<td>Kennedy Engineers</td>
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<tr>
<td>McHenry Library</td>
<td>1966/76</td>
<td>156,039</td>
<td>114,689</td>
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<td>John Carl Warner &amp; Associates</td>
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<tr>
<td>Natural Sciences 2</td>
<td>1969</td>
<td>86,372</td>
<td>50,702</td>
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<td>Anshen &amp; Allen</td>
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<tr>
<td>Performing Arts</td>
<td>1971</td>
<td>59,131</td>
<td>37,839</td>
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<td>Ralph Rapson &amp; Associates, Inc.</td>
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<tr>
<td>P.A. Foundry</td>
<td>1975</td>
<td>1,984</td>
<td>1,863</td>
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<tr>
<td>P.E. Activity</td>
<td>1974</td>
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<td>2,091</td>
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<td>Restaurant &amp; Student Activities</td>
<td>1966/71</td>
<td>2,669</td>
<td>2,241</td>
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<td>Bull, Field, Volkman, Stockwell/UCSC P.P.C.</td>
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<tr>
<td>Science Library</td>
<td>1969</td>
<td>12,189</td>
<td>10,504</td>
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<td>Anshen &amp; Allen</td>
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<tr>
<td>Clark Kerr Hall (Social Science)</td>
<td>1973</td>
<td>77,970</td>
<td>45,333</td>
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<td>Germano Milono &amp; Associates</td>
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<tr>
<td>Thimann Labs</td>
<td>1966</td>
<td>88,882</td>
<td>56,641</td>
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<td>Anshen &amp; Allen</td>
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<tr>
<td>Upper Quarry</td>
<td>1973</td>
<td>756</td>
<td>511</td>
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<td>Royston, Hanamoto, Beck &amp; Abey</td>
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<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td>827,546</td>
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### Colleges and Residences

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<tr>
<th>NAME</th>
<th>Year</th>
<th>Const.</th>
<th>Base OGSF</th>
<th>ASF</th>
<th>Architects/Engineers</th>
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</thead>
<tbody>
<tr>
<td>College V</td>
<td>1971</td>
<td>171,785</td>
<td>114,652</td>
<td></td>
<td>Hugh Stubbins &amp; Associates</td>
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<tr>
<td>College V/Kresge Art</td>
<td>1973</td>
<td>2,184</td>
<td>1,981</td>
<td></td>
<td>MLTW/Moore Turnbull</td>
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<tr>
<td>Cowell College</td>
<td>1966</td>
<td>157,685</td>
<td>104,664</td>
<td></td>
<td>Public Structures, Inc. Wurster, Bernardi &amp; Emmons</td>
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<tr>
<td>Crown College</td>
<td>1967/68</td>
<td>133,275</td>
<td>79,837</td>
<td></td>
<td>Ernest J. Kump Associates</td>
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<tr>
<td>Crown-Merrill Recreation</td>
<td>1971</td>
<td>1,733</td>
<td>1,540</td>
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<td>Stevens &amp; Calender</td>
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<tr>
<td>Hahn Art Facility</td>
<td>1968</td>
<td>1,917</td>
<td>1,635</td>
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<tr>
<td>Kresge College</td>
<td>1973</td>
<td>107,642</td>
<td>86,506</td>
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<tr>
<td>Merrill College</td>
<td>1967/71</td>
<td>126,621</td>
<td>89,708</td>
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<td>Campbell &amp; Wong &amp; Associates/</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Wong &amp; Brocchini &amp; Associates</td>
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<tr>
<td>Oakes College</td>
<td>1976</td>
<td>97,443</td>
<td>71,979</td>
<td></td>
<td>McCue Boone Tomick</td>
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<tr>
<td>Stevenson College</td>
<td>1966/75</td>
<td>146,325</td>
<td>96,223</td>
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<td>Joseph Esherick &amp; Associates</td>
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<tr>
<td>Student Housing</td>
<td>1971</td>
<td>186,137</td>
<td>162,774</td>
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<td>Ratcliffe, Slama, Cadwalader</td>
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<td>Student Music East</td>
<td>1967</td>
<td>2,531</td>
<td>2,249</td>
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<td>University House</td>
<td>1967</td>
<td>6,514</td>
<td>5,156</td>
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<td>Ratcliffe, Slama, Cadwalader</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td>1,141,792</td>
<td>818,904</td>
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## EXISTING BUILDINGS

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<tr>
<th>NAME</th>
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<th>ASF³</th>
<th>Architects/Engineers</th>
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<tr>
<td><strong>Lower Campus:</strong></td>
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<td></td>
</tr>
<tr>
<td>Arboretum</td>
<td>1895/1967/1975</td>
<td>5,477</td>
<td>4,974</td>
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<tr>
<td>Blacksmith Shop</td>
<td>1845/1967</td>
<td>1,219</td>
<td>1,157</td>
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</tr>
<tr>
<td>Carriage House</td>
<td>1845/1964</td>
<td>8,029</td>
<td>5,989</td>
<td>Bates Elliott</td>
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<td>Cook House</td>
<td>1845/1964</td>
<td>3,606</td>
<td>2,336</td>
<td>Bates Elliott</td>
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<tr>
<td>Cowell House &amp; Garage (Cardiff)</td>
<td>1845/1968</td>
<td>2,671</td>
<td>2,418</td>
<td>UCSC Physical Planning &amp; Construction</td>
</tr>
<tr>
<td>Farm Chalet</td>
<td>1975</td>
<td>983</td>
<td>814</td>
<td>UCSC</td>
</tr>
<tr>
<td>Farm &amp; Garden buildings</td>
<td>various</td>
<td></td>
<td></td>
<td>UCSC</td>
</tr>
<tr>
<td>at Farm, lower campus and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at Garden, near Merrill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garage</td>
<td>1971</td>
<td>2,725</td>
<td>2,492</td>
<td>Gulli &amp; Del Campo</td>
</tr>
<tr>
<td>Granary</td>
<td>1845/1972</td>
<td>1,481</td>
<td>1,346</td>
<td>UCSC Physical Planning &amp; Construction</td>
</tr>
<tr>
<td>Hay Barn</td>
<td>1845/1970</td>
<td>5,028</td>
<td>4,940</td>
<td>UCSC Physical Planning &amp; Construction</td>
</tr>
<tr>
<td>Paint Shop</td>
<td>1956</td>
<td>960</td>
<td>894</td>
<td>UCSC</td>
</tr>
<tr>
<td>Powder House</td>
<td>1845/1972</td>
<td>143</td>
<td>120</td>
<td>UCSC Physical Planning &amp; Construction</td>
</tr>
<tr>
<td>Shop Barn</td>
<td>1845/1967</td>
<td>14,229</td>
<td>10,487</td>
<td>UCSC</td>
</tr>
<tr>
<td>Stone House</td>
<td>1845/1964</td>
<td>1,324</td>
<td>890</td>
<td>Bates Elliott</td>
</tr>
<tr>
<td>Storage Barn</td>
<td>1845/1968</td>
<td>14,002</td>
<td>12,410</td>
<td>Edwardson &amp; Steiner</td>
</tr>
<tr>
<td>Tack House</td>
<td>1845/1968</td>
<td>2,868</td>
<td>2,670</td>
<td>UCSC</td>
</tr>
<tr>
<td>Theatre Barn</td>
<td>1845/1968</td>
<td>5,942</td>
<td>4,517</td>
<td>Henrik Bull</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td>70,687</td>
<td>58,454</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>2,040,025</td>
<td>1,431,486</td>
<td></td>
</tr>
</tbody>
</table>

¹All years referred to prior to the establishment of the Santa Cruz campus are approximate.

²Based upon FDX 1204-B4, Spring 1977 Building listing, General; OGSF = Outside Gross Square Feet

³ASF = Assignable Square Feet
LRDP APPENDIX B

EXISTING AND PROJECTED BUILDING AREAS

<table>
<thead>
<tr>
<th></th>
<th>Base OGSF</th>
<th>ASF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Buildings:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Campus</td>
<td>824,546</td>
<td>554,128</td>
</tr>
<tr>
<td>Colleges and Residential</td>
<td>1,141,792</td>
<td>818,904</td>
</tr>
<tr>
<td>Lower Campus</td>
<td>70,687</td>
<td>58,454</td>
</tr>
<tr>
<td><strong>Total (rounded)</strong></td>
<td>2,040,000</td>
<td>1,431,000</td>
</tr>
</tbody>
</table>

**Projected Buildings at 10% increase:**
(6,600 students)

<table>
<thead>
<tr>
<th>Projected Buildings at 10% increase:</th>
<th>6,000</th>
<th>5,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Science 1st floor</td>
<td>3,500</td>
<td>3,000</td>
</tr>
<tr>
<td>Community Center at Student Apartments</td>
<td>3,000</td>
<td>2,000</td>
</tr>
<tr>
<td>College V Art</td>
<td>30,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Administrative</td>
<td>36,000</td>
<td>24,000</td>
</tr>
<tr>
<td>Non-Residential College</td>
<td>20,000</td>
<td>16,000</td>
</tr>
<tr>
<td>21 apartments</td>
<td>12,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Science Library</td>
<td>30,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Academic</td>
<td>30,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Support</td>
<td>29,500</td>
<td></td>
</tr>
<tr>
<td>Institutes, Professional schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>200,000</td>
<td>140,000</td>
</tr>
</tbody>
</table>

**Projected additional Buildings at 25% increase:**
(7,500 students)

<table>
<thead>
<tr>
<th>Projected additional Buildings at 25% increase:</th>
<th>200,000</th>
<th>140,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleges/Professional Schools/Institutes</td>
<td>50,000</td>
<td>35,000</td>
</tr>
<tr>
<td>Academic</td>
<td>50,000</td>
<td>35,000</td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>300,000</td>
<td>210,000</td>
</tr>
</tbody>
</table>
LONG RANGE DEVELOPMENT PLAN

BIBLIOGRAPHY

Planning Studies and Reports

Academic Plan for the University of California at Santa Cruz,

General Plan for the University Environs,
Santa Cruz, California, Williams and Mocine, 1963.

Guide to the Preparation of a Long Range Development Plan,
Office of the Vice President Physical Planning and Construction, University of California, 1976.

Long Range Development Plan,
University of California at Santa Cruz; John Carl Warnecke & Assoc.; September 1963; U.C.S.C. Physical

Planning Studies for UCSC,

Preliminary and Supplementary Report,
Ad Hoc Committee charged with reviewing the UCSC Long Range Development Plan (Michael Cowan, Chair)
1975.

Report of the Space Plan Task Force,
UCSC Space Committee — Special Task Force (Robert F. Adams, Chair), 1978.

Natural Environment

A Proposed UCSC Natural Resources Management Plan,
Study Group (Resource Accessiblity Study Team), August 1977.

Natural Resources Study,
Robert Twiss, October 1966.

Housing

Campus Housing Review 1974-75,
UCSC Campus Housing Office, January 1976.

Living On-Campus, Living Off-Campus: Changes in Student Housing Patterns,
Ira S. Fink and Albert Sukoff, UC Systemwide Administration, July 1976.
Transportation

*Regional Transportation Plan for Santa Cruz County,*
Santa Cruz County Planning Department, 1977.

*To and From Campus: Changing Student Transportation Patterns,*
Ira Fink, UC Systemwide Administration, October 1974.

*Transportation Study for UCSC,*

Energy Resources

*Drainage Study for UCSC,*
Kennedy Engineers, November 1971.

*Utilities Master Plan 1972-1980,*
UCSC Campus, Kennedy Engineers, 1972.

Community

*General Plan Revision*
ACKNOWLEDGEMENTS

The final responsibility for the preparation of the 1978 Long Range Development Plan rests with Chancellor Robert L. Sinsheimer. However, many of the faculty, students, staff and general community were involved in its preparation.

The Campus Facilities Committee reviewed the Plan during its preparation.

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Daniel H. McFadden
Charles Posey
Deborah Wolinsky
Bruce C. Lane, staff
Theresa H. Yuen, staff

The Plan was prepared by Esherick, Homsey, Dodge and Davis, Architects and Planners, Linda Rhodes, Principal Planner, under the general direction of F. Louis Fackler, Director of Facilities and Theresa H. Yuen, Principal Planner. John E. Wagstaff, Campus Architect Emeritus served as consultant.

Cover & graphics by Charles Krumenacker, EHDD