

*copied
from Alderson papers*

Archives
LD
781
I7
A7347
1965

U C I

LONG
RANGE
DEVELOPMENT
PLAN

updating report
1 March 1965

PURPOSE

Purchase of 510 acres of so-called "inclusion areas" by The Regents led to a re-examination of Irvine campus planning to ascertain what, if any, changes in the IRDP might have thusly been generated.

The contract, which granted the original 1,000-acre campus site from The Irvine Company to the University of California, limited the use of those 1,000 acres to what is commonly accepted to be primary University functions. That is, to facilities for University teaching, research, and their directly related activities such as residence halls and apartments for students, cafeterias, student union, athletic fields, parking, and the like. The deed for the 510 purchased acres is less restrictive. In addition to all uses permitted on the original 1,000-acre campus, it also allows housing for faculty and staff, and such residential-supporting land-uses as neighborhood commercial, public schools, churches and church supported social facilities, and privately financed housing (e.g., fraternities, sororities, co-ops, apartments).

Upon examination, it was found more efficient to plan roads and utility lines in terms of the entire 1,510 acres than to complicate design with arbitrary divisions between which areas were contained in the original 1,000-acre grant and which in the subsequent purchase. Furthermore, since all uses allowed on the 1,000 acres were also permitted on the 510, it seemed reasonable to encompass the entire 1,510 acres in general land-use and circulation planning. And, since the conveyance of land from The Irvine Company did not fix forever what area is restricted to campus uses and what portion of the 1,510 acres allows the additional uses permitted to inclusion areas, it was only practical to plan the 1,510 acres as a whole, for maximization of benefit, and then to delineate what is campus and what is inclusion area according to the final overall land-use pattern.

For planning purposes the major differentiation is not so much between what is campus and what is inclusion area as it is between: (1) what activities and their facilities are most appropriate for the 450 ~~to 500~~ acres of campus core---the heart of the University where its primary functions of teaching, departmental research, library, and administration

take place; and (2) the secondary campus land-uses of a residential nature and of a peripherally supporting nature (e.g., corporation yard, mass parking, institutional research) to be located outside of the campus core. As conceptualized in this manner, the outer campus of 1,060 acres acts as a transition zone from campus heart to community just as Gateway Plaza in the campus core serves as the bridge between "Town and Gown" at the Town Center. The eastern side of campus is planned to blend from single student residence halls close to the academic buildings out through a sector of residential apartments and eventually faculty housing to the surrounding residential community. Campus uses will be compatible with the institutional research and medical complex uses planned by The Irvine Company in the vicinity of the western portion of University land.

The primary concept involved in planning U.C.I.'s 1,510 acres, which include the inclusion area, is that of not competing with development in the surrounding community. So long as the surrounding community can offer suitable housing choices to our faculty and staff and can provide all University-related persons with necessary nearby commercial and public services, there is no reason for the University to embark upon a development program in the inclusion areas. Indeed, the most valuable contribution which can be made with those inclusion areas now is to hold them in reserve until, eventually as happened at Westwood, the surrounding community can no longer offer housing within the price-reach of University personnel. That point, however, might arrive at various stages for different categories of University-related persons: Students, both married and single, need housing immediately, some of which, as in the case of co-ops and Greek letter societies, might be met in the near future on inclusion area when such groups are prepared to operate housing. (Church related facilities, too, might be realized there in the not too distant future). On the other hand, urgency for faculty housing might mature much later.

PLANNING GOALS AND GENERAL CONCEPTS

Academic Core

1. As described in the initial LRDP, the major academic divisions are organized in five quads around the park. Their growth will proceed radially along malls in sequential increments.

2. As much as practical, single student residential facilities are planned between the academic quads, which will give the campus a vitality both night and day.

Parking

3. In the long run, parking spaces within the ~~400~~ 500-acre campus core will be limited to only those required by faculty, staff, handicapped students, visitors, and employees. Commuter and resident students' parking will be located outside of the campus core: (a) on the former sanitary land fill area (which has otherwise quite limited usability) to the west and (b) near the recreation

center site on the eastern periphery of University land. However, during the initial 10 or 15 years, enough parking space is anticipated within the campus core to accommodate students also. Within the foreseeable future, economics does not justify the use of costly parking structures (\$1500 per stall versus only \$250 per surface stall) which must be fully amortized by users. All envisioned parking needs have therefore been satisfied with surface lots so as to keep student costs minimal.

Social-
Cultural

4. Social-cultural-recreational facilities are planned at points of greatest pedestrian traffic: (a) the Student Union at Gateway Plaza next to the Library and on the entrance to the Town Center; (b) a complex of church and private sponsored social facilities and a small student-oriented commercial cluster central to the greatest number of single student residences and astride the main route to the recreation fields and student parking lot; and (c) a conference center-faculty club adjacent to University House overlooking the campus from "The Hill" and astride the natural route from the likely largest faculty housing neighborhood down to campus.

Housing

5. No sharp site delineations between single student, married student, and faculty housing are planned because in fact no clear demarcations exist between those people. For example, young married students without children frequently have life patterns more closely related to their single peers than to older married students with children many of whom have already started into their professorial careers as TA's and RA's and on to instructorships. However, in an idealized way, single student residences (whether in halls, apartments, or co-ops, etc.) will be located closest to the academic center; faculty, the farthest out; married students generally occupying the middle ground. In this manner neighborhood facilities can be designed more efficiently for their most likely users---e.g., elementary schools and grocery stores in a family neighborhood, in contrast to the snack bar and sporting types of land-uses catering more to the collegian.
6. Housing should follow market-like principles: It should be constructed according to need---with a wide variety of housing types and with a commensurate range of rents within the area "zoned" in this plan for residential use. Some housing will have to be built to rent at rates within the reach of the 20% to 25% of eligible University students who cannot now afford University housing; local private housing will not be able to satisfy this need as it can where a stock of old, already amortized homes exist. Other housing,

such as apartments on University land, should offer the more mature students (43% of the eventual 27,500 student enrollment being at graduate level) the privacy and independence not possible in traditional type residence halls. Married student apartments and faculty housing, too, need a range of prices and types. Emphasis should be placed upon keeping residential structures at human scale rather than achieving higher densities through the relatively monumental scale appropriate for academic buildings.

Vehicular
Circulation

7. The primary task of the circulation system is to facilitate the efficient movement of cars into and out of campus. The degree of efficiency must be geared to the peak morning and afternoon hours. The western student-parking lot needs outlets onto the Corona del Mar Freeway, California Avenue, and Jamboree Boulevard. The eastern student-parking lot can empty onto Culver and Bonita Canyon Drives. More difficult to serve is parking in the campus core: Some cars coming from the northeast will want to park on the southwest side and other cars coming from the southwest will want to park on the northeast side. Culver, University, and Bonita Canyon Drives provide a great circumferential route around the full campus and town center. An inner circumferential route is also needed to serve campus core traffic. Campus Drive, University Drive, and California Avenue satisfy that need. Running into these circles come spoke-like routes to take cars most directly into and out of campus. Within the campus core proper, a loop road would be open only to service vehicles, delivery trucks, handicapped persons with special parking permits, and a shuttle bus system if and when it were developed.

Alterations

8. Specific changes from the initial LRDP: (a) bay-front site switched from the south to the north side of the channel to remain contiguous with the county park now planned on the north side and to gain easier access from public streets; (b) schools of law, administration, and education transferred from the outer campus Jamboree arm to the Social Science quad; (c) medical center moved westward to gain greater proximity to its directly related biological quad; and (d) the finalized campus boundaries delineated.

STANDARDS

1. Housing Densities: In accordance with recommendations of Real Estate Research Corporation, which was contacted by the University of California to analyze student housing markets and alternate University housing programs, the Irvine campus should consider eventually

accommodating approximately 70% of its 27,500 student body. Because: the expected surrounding neighborhood development is unlikely to house any significant proportion of the expected 80% of enrollment which will prefer to live within a mile of the campus core. To allow maximum choice between high-rise and low-rise structures, ground-cover by buildings can reach 50% of site area excluding streets. With the space available for housing, the following net densities will be required:

- a. Single students---campus core: 120 students per acre
 ---outer campus: 70 students per acre, including parking provisions.
- b. Married student apartments: An average of 23 per acre.
- c. Faculty---apartments: 12 per net acre.
 ---town houses: 10 per net acre.
 ---single cluster housing: 8 per acre
 ---single family detached: 5 per net acre.

2. Parking: Within campus core---100 cars per acre (includes more internal planting).

Outer campus, student lots---135 cars per acre (planting screen primarily around periphery).

3. Roads in the outer campus should be constructed to meet extant standards of the local jurisdiction so that the University might retain a choice of dedicating or of not dedicating those streets, depending upon which choice is the more advantageous.

SPATIAL BUDGET

The attached map "zones" major land-use categories as academic quads, residential, parking, green belts, recreational areas, neighborhood centers (commercial and social), and elementary schools. Circulation routes indicated include major and minor vehicular roads, pedestrian-bicycle ways, and pedestrian malls. Appendix I lists acreages for these land-uses. Appendix II indicates (a) how many persons can be housed at these densities and acreages and (b) parking provisions.

APPENDIX I

SPATIAL BUDGET ("ZONING" ACREAGES) for a 27,500-student Campus

	<u>SUB-NET</u>	<u>NET</u>	<u>CATEGORY GROSS</u>	<u>TOTAL</u>
CAMPUS CORE				500
Academic & Service Buildings	45	140	417	
Medical School Site (with parking)	50			
Malls and Walks	45			
Open Space		159		
The Park	22			
Greenbelts	69			
Phys. Ed. fields	68			
Paved		124		
Roads	51			
Parking	73			
Faculty-Conference Center		13		
Single student housing		64	83*	
Apartments	30.5			
Residence Halls	32.5			
OUTER CAMPUS				1010
Housing (includes its own parking)		490	771**	
Single students---apartments	57.5			
---living groups	27.5			
Married students apartments	243			
Faculty	143			
Parks	19			
Academic (supporting)		105	213***	
Bay front	9			
Corporation yard	16			
Research & Institutional	80			
Paved		261		
Roads	194			
Parking	67			
Open Space		89	26	
Flood control	26			
Greenbelts & canyons	23			
Recreation	40			
Residential Supporting		65		
Social-recreational-cultural centers	15			
Neighborhood commercial	20			
Elementary schools and parks	30			
		TOTAL		<u>1510</u>

Note: *Includes allowance for roads and greenbelt operation.

**Includes (a) proportional share of roads, 140 ac., (b) supporting areas; (c) recreation; (d) 36 ac. parking.

***Includes (a) proportion of roads, 54 ac.; (b) greenbelts; (c) commuter parking, 31 ac.

APPENDIX II

STUDENT HOUSING (27,500 enrollment, 70% housed)

	<u>Percent of housed</u>	<u>Students Housed</u>	<u>Ratio to Units</u>	<u>Dwelling Units</u>	<u>Density Per Ac.</u>	<u>Net Acreage</u>
<u>Outer Campus</u>						
Married Student Apts.	29	5,585	1:1*	5,585	23 d.u.	243.0
Single Student Apts.	21	4,040	3:1	1,345	70 stud.	57.5
Living Groups	10	1,925	---	---	70 stud.	27.5
<u>Inner Campus</u>						
Apartments	19	3,660	3:1	1,220	120 stud.	30.5
Residence Halls	<u>21</u>	<u>4,040</u>	---	---	120 stud.	<u>33.5</u>
TOTALS:	100	19,245				392.0

Note: *If, in 10% of the units, both partners were students, the overall percentage housed would actually run 72%, which is still within long-run probable needs.

STUDENT PARKING (27,500 enrollment)

	<u>Ratio Cars/Unit</u>	<u>Units</u>	<u>Spaces</u>
<u>Requirements</u>			
Married Student Apts.	1.2/family	5,580	6,700
Resident Single Students	2/3 persons	13,670	9,100
Commuting Students	1/2 persons	8,250	<u>4,125</u>
TOTAL REQUIRED:			19,925
<u>Provided with Residences</u>			
Resid. Apts., Married Students	1.5/apt	5,580	8,370
Resid. Apts., Single Students	1.5/apt	1,325	1,990
Living Groups	1/2 students	1,050	<u>525</u>
TOTAL SPACES ON-SITE:			10,885
TOTAL IN PERIPHERAL LOTS:			9,040
ACREAGE REQUIRED FOR PERIPHERAL LOTS (At 135 cars per acre):			67

STUDENT HOUSING PROJECTIONS

Year	1	2	3	4	5	6	7	8	9	10	11	12	Total Apartments (Col.5 & 12)
	(1) Enroll- ment	% Housed	Students	MARRIED STUDENTS		S I N G L E S T U D E N T S							
				% Married	No.of Units	Univ.Res.Halls		Pvt. Living Groups		Apartments			
						%	Students	%	Students (2)	%	Students	Units	
1970-1	5,000	50	2,500	10	250	50	1,250	--	--	40	1,000	335	585
1975-6	10,000	60	6,000	15	900	40	2,400	5	300	40	2,400	800	1,700
1980-1	15,000	65	9,750	20	1,950	32	3,125	8	775	40	3,900	1,300	3,250
1985-6	20,000	70	14,000	25	3,500	25	3,500	10	1,400	40	5,600	1,875	5,375
1990-1	25,000	70	17,500	28	4,900	22	3,850	10	1,750	40	7,000	2,325	7,225
1995-6	30,000	70	21,000	30	6,300	20	4,200	10	2,100	40	8,400	2,800	9,100

(1) U.C.I. Staff projection; unofficial.

(2) Averaged at 3 students per apartment

NET HOUSING ACREAGES (includes interior streets and open area only; no outer streets)

Student Housing

Acreages	S I N G L E S T U D E N T S				Married Student Apts.**	Total Acreage Used
	CENTRAL CAMPUS*		OUTER CAMPUS**			
	Res. Halls	Apts.***	Apts.***	Lvng.Gps.		
1970-1	10.4	--	14.3	--	10.1	34.8
1975-6	20.0	--	34.3	4.3	39.1	97.7
1980-1	26.0	12.5	34.3	11.1	84.8	168.7
1985-6	29.2	26.7	34.3	20.0	152.2	262.4
1990-1	32.1	26.7	54.3	25.0	213.0	351.1
1995-6****	33.5	30.5	57.5	27.5	243.0	392.0

PER ACRE NET DENSITIES:

Units		40	23		23
Persons	120	120	70	70	70

* Excludes provisions for parking

** Includes provisions for parking within site hence lower densities

*** Averaged at 3 single students per unit

**** Densities must increase if enrollment exceeds 27,500 students

Faculty Housing*

	<u>Net Acres</u>	<u>Units Per Net Acre</u>	<u>Dwelling Units</u>	<u>Persons Per Unit</u>	<u>Population (rounded)</u>
Single Family detached	67	5	335	4.0	1,340
Single Family attached	32	8	255	4.0	1,020
Town Houses	16	10	165	4.0	640
Apartments	<u>28</u>	<u>12</u>	<u>335</u>	<u>3.7</u>	<u>1,250</u>
TOTALS	143	7.25 av.	1,090	3.9 av.	4,250

Note: *It is presumed that faculty will want and can afford a rather individualistic-type housing appropriate for steeper slopes which at least the larger, economy-conscious student housing will have to avoid. Hence, considerably lower densities for faculty housing than for student housing is necessitated by the topographic conditions involved.



