

Meeting Notes

<i>Date</i>	<i>Project</i>	<i>Project number</i>	
3/23/04	UC Santa Cruz Long Range Development Plan	03055.00	
<i>Meeting date</i>	<i>Subject</i>	<i>Meeting location</i>	
3/19/04	LRDP Committee Meeting #6	Bay Tree Building	
<i>By</i>	<i>Signed</i>		
Bill MacIntosh			
<i>Present/Copies to</i>	<i>Company</i>	<i>Copies to</i>	<i>Company</i>
(see below)			

1. Introduction

- a. Welcome by Tom Vani, Chair LRDP Committee
- b. Frank Zwart gave an overview of the LRDP schedule.
 - i. This meeting concludes Phase 1 with the selection of a working number for enrollment.
 - ii. Phase 2 entails development of physical plan options for the working enrollment figure and ends June 17 with selection of a preferred approach for further development of the physical plan.
 - iii. The LRDP process is on schedule.
 - iv. Web site: planning.ucsc.edu/lrdp/index.htm
 - v. Comments: planning.ucsc.edu/lrdp/feedback.htm or email to lrdp-admin@ucsc.edu
- c. Report from Campus and Community Work Group, Emily Reilly
 - i. The meeting with the Chancellor and the presentation to the Santa Cruz City Planning Commission were appreciated.
 - ii. The Campus and Community work group is a bit behind relative to the other groups. Has had presentations on water and housing. The next topic will be transportation.
 - iii. The work group is starting to get some comments from the public.
- d. Introduction to the LRDP studies by Alex Cooper
 - i. Work being presented today is still very much in progress and "raw". CRP has studied the worst case, scenario 4, as one to focus on to accelerate the learning curve for understanding possible approaches to the site. Anything less will be easier to work with.

Meeting Notes

- ii. Likewise for traffic, KHA has studied scenario 4. Results shown will be before mitigation. It will only get better.
- iii. Attending the City Planning Commission meeting yesterday evening was very useful. CRP recognizes the sensitivity of westside neighbors regarding nascent development projects. There was an informed audience, with many former commissioners.
- iv. Three consistent issues: water, traffic and housing. Overlying all was concern for maintaining the character of Santa Cruz.

2. Infrastructure

- a. Dr. Annie Kammerer and Grant McInnes of Arup reviewed infrastructure considerations. Arup has been reviewing the existing utility systems and will continue to refine their work as new information becomes available.
- b. The LRDP is looking at both supply and consumption, water, sewer, storm water, electric, gas, and communications/data. Support space for infrastructure and related operations is also being studied and will become part of the land use options.
- c. For each utility, Arup will look at external and internal supply, consumption, internal distribution (capacity), age of internal and external systems.
- d. Internal supply consists of the cogeneration plant and wells.
- e. UCSC has long history of looking at consumption, and has focused especially on water conservation. UCSC uses 580k gallons per day now. The current supply is adequate, but shortages are projected in drought years.
- f. Water distribution on-campus has local capacity issues that will need to be studied once the plan is developed more.
- g. Water mitigation measures to be considered:
 - i. On-campus collection
 - ii. Additional conservation
 - iii. Development of reuse options (gray water, recycling)
 - iv. New sources
 - v. Additional options
- h. There are four water supply entry points to campus.
- i. Sewer capacity is adequate for the lower enrollment scenarios. Some retrofits may be required. Some storm water infiltration into the system has been found. Eliminating this can improve capacity.
- j. Storm water is generally handled by two natural drainage features. Moore Creek and Jordan Gulch. These areas are now experiencing erosion impacts from runoff. A storm water study is underway and due out shortly.
- k. The campus electrical capacity is 12MW for campus per PGE. The current usage is about 7.5MW, within capacity, however reliability is an area of concern. Avoiding power outages is an important issue for research activities.
- l. Currently approximately 1/3 of the university's electrical needs are met by a co-generation plant on campus. This plant is also aged and will likely need to be

Meeting Notes

- replaced. The capacity of a new plant will be limited by the gas supply to campus which is sufficient at present, but would need to be increased if a larger plant is needed.
- m. In summary, there are hurdles related to the infrastructure, though none is insurmountable. The principal utilities of concern are the water and electric needs of campus--which are highly tied to off campus supply. Mitigation measures including both an increase in supply and reduction in usage will be considered for nearly all utilities.
 - n. On-campus infrastructure will need some capacity upgrades, however the age and condition of the systems alone would likely require upgrades in the near future.
 - o. Question: The city just did a water master plan based on 15,000 students. What new sources on and off-campus are assumed? Response: potential on-campus sources, wells, possible gray water use, and rainwater capture, in addition to reduced rates of consumption. This could include a dramatic reduction in allowed on-campus water use during drought conditions. An off-campus source could be the possible desalinization plant. UCSC and the consultant team wants to work with city to understand how to address the water issue in a sustainable way.
 - p. Question: If UCSC captures rain water on campus, you will be working with city to understand what happens downstream? Response: Yes. Understanding the hydrology of the site is complicated, however, given the karst conditions.
 - q. Comment: Storm water infiltration into the sewer system may be happening between the campus and treatment plant. Response: Studying the sewer system lines off-campus is not in the LRDP scope. There have been discussions of possible university assistance, but a study by the city to determine needs for sewer system apparently was not done.
 - r. Comment: Was water useage noted daily consumption or peak? Response: Average daily use. Electrical usage noted was a peak summer load. Typical UCSC loads are substantially lower. Studies will account for this.

3. Transportation

- a. Jim West of Kimley-Horn Associates presented preliminary traffic studies. KHA prepared the Master Transportation Study for Santa Cruz.
- b. For assessment of the enrollment scenarios, the volume to capacity ration of key surrounding streets was analyzed. At a ratio of 1 or greater, the traffic peak extends, speeds are slower and there are longer delays. The analysis is at a street segment level now. Once an enrollment number is picked, KHA will do analysis of key intersections intersection.
- c. The analysis uses the AMBAG model, which was developed in association with Monterrey Bay area governments and projects to 2020. The model is the same used for the MTS.
- d. Without campus growth, the baseline growth in traffic increases independent of UCSC campus, with increases in congestion and delays.

Meeting Notes

- e. Factoring in the UCSC enrollment scenarios at PM peak, there is an incremental increase. In most areas, the increased congestion is negligible since traffic disperses farther from the campus. The model assumes 50% on-campus student housing. With this ratio, there is less traffic in scenario 1 than current conditions.
- f. The largest increase is in areas closest to campus. These were shown on dispersion map.
- g. KHA showed maps comparing existing conditions (volume to capacity of key streets) and 2020 baseline conditions with no UCSC growth. In Scenario 4, High Street, Story Street and one other segment go to F. Percentage of volume to capacity increases were also mapped. The V/C of High Street increases 30% over the 2020 base in scenario 4. The V/C is less farther away.
- h. KHA summarized the constraints to improving off-campus street capacity.
- i. The additional number of trips to and from campus at the PM peak was projected as follows: scenario 1: 85 trips; scenario 2 : 200 trips; scenario 3: 760 trips; scenario 4 1,320 additional trips relative to 2003, with no mitigation.
- j. KHA gave an overview of the mitigation process. Baseline growth plus projected campus growth is first analyzed. Steps are then identified to reduce demand as needed and the results further analyzed. Following this, KHA assesses if much more mitigation is needed. Further mitigation approaches could include engineering solutions and improved transit.
- k. KHA reviewed some options to reduce demand: from easiest to most difficult to implement, with a resulting estimated range of improvement from 1% to 20%. Measures include car sharing, van pool, and a possible remote off-campus lot.
- l. A recent UCSC Comprehensive Transit Study by Urbitran included recommendations for improving campus circulation and expansion of the transit system.
- m. KHA gave an overview of possible street and intersection improvements off-campus.
- n. On-campus work could include improvements to roads, pedestrian and bikes routes. Some preliminary possible approaches to improving roads and circulation were reviewed. More study is needed.
- o. On-campus parking need was projected for the enrollment scenarios, (assuming current parking policies continue for now). Additional car parking spaces: Scenario 1: 1,000; Scenario:2 2,000; Scenario 3: 3,600: Scenario 4: 4,600. Now there are about 5,000 spaces. 1988 LRDP: 8,400 spaces.
- p. Question: Does this preliminary analysis reflect the effect of intersections? Response: To some extent. This will be studied in more detail next. Capacity is influenced both by volume and intersection. Intersections are often the bottleneck.
- q. Question: The AMBAG model is being updated. Will this version be used? Response: Yes, but it may not be done until May or summer.
- r. Question: Will other west side development proposals be included in model? Response: Yes.

Meeting Notes

- s. Comment: The Home Depot has been asked to update their traffic study to reflect the UCSC LRDP.
- t. Question: How can this information be made available to the city for its use? City staff need to be informed so they can coordinate and respond. Response: These materials will be made available to Gene Arner. Larry Pageler noted how UCSC TAPS has been sharing studies with the city.
- u. Comment: Would like this for the next Campus and Community work group.
- v. Comment: Last LRDP had an additional 3,500 spaces allowed relative to today. They may not be built given funding and other issues. The projected number does not mean that this number will be built.
- w. Comment: The UCSC enrollment scenarios appear not to have a big impact except for near the campus, relative to the magnitude of traffic growth from other sources. Response: KHA concurs with this interpretation.

4. Pedestrian Landscape Experience Analysis

- a. Marcia Tobin of EDAW presented an analysis of the pedestrian landscape experience. The objective was to look at the existing experience and develop from this study a set of landscape and open space criteria for planning team to use going forward for the LRDP. The primary focus was on the campus core.
- b. Destinations and gathering areas were studied. About 30 were found, including colleges and courtyards. They are scattered; with no central gathering space spot. Existing development is in clusters. Food services area are also scattered and independent.
- c. Journeys around the campus were studied. About 24 different types of paths and experiences from natural to pedestrian streets were identified. The bridges are important elements.
- d. Special places, such as redwood rings, transition spaces, oak groves, were documented.
- e. EDAW presented an analysis drawing of the pedestrian experience in the core, showing pattern, experience, and movement (timed walking distance segments). The "landscape tartan" pattern reveals a rhythm of going in and out of natural and developed areas.
- f. Section drawings through science hill North-South and through Kresge College East-West also showed this experience, with timed segments.
- g. EDAW presented draft landscape planning criteria, in four areas: 1. Connections and Pathways, 2. Vegetation and Habitat, 3. Building siting, and 4. Open space. These are very preliminary, to be reviewed with Land Use and Environment work group. An example is siting future buildings to enhance the pedestrian experience and screen service areas as much as possible.

5. Overview of Traffic, Infrastructure and Pedestrian / Open Space Analysis

- a. Alex Cooper noted the EDAW analysis of the campus core represents a remarkable new way of understanding the campus, combining time, pattern and experience in one

Meeting Notes

unique drawing. There is an underlying order to the campus that can be enhanced to help people find their way. Naming paths would help.

- b. Alex found the small amount of UCSC traffic growth relative to the extended graph w/ 2020 traffic with no UCSC growth to be extraordinary, even in scenario 4.
- c. Alex noted the importance of the comprehensive utility plan. This is the underground support network that supports the sylvan campus. It is an image of the fragility and power of the place and tees up an understanding of what the campus is.
- d. Frank Zwart noted that the issue of fragility was brought up at the City Planning Commission meeting relative to the west side. Both the campus and city are fragile, and face a lot of similar issues for development. There is a better fit between UCSC and the community than is commonly acknowledged.
- e. Alex noted the need to understand costs related to the plan. Many of the things shown are not state funded. We are going to want to get involved in this to make sure what we show has a good chance of happening.

6. Report from Strategic Futures Committee

Gary Griggs presented a report from the Strategic Futures Committee and provided an update on membership.

- a. The SFC charge is to deal with academic goals. Not charged to deal with environmental constraints.
- b. The figure to be presented today is a working enrollment to reach the full academic planning vision and potential at a sustainable rate. The rate of growth recently has been about 4%. SFC thinks a reduced rate is desirable.
- c. The plan must provide flexibility for the future. Implementation will be affected by the economy, new technologies, academics - internal and external factors.
- b. Maureen Callanan and Lisa Sloan lead the sub committee on academic vision. They have investigated department plans and future goals. They started with 10-year plans done in 2001, then revisited them with the deans. Topics covered included the ideal size of departments and areas of teaching and research they would like to cover. This work is still in progress. Engineering has focused on growth to have viable programs. In other departments, the focus has been on faculty just to service the students they now have. Much interesting growth has to do with research initiatives. This is increasingly interdisciplinary and focused on societal needs.
- c. Goal of 15% graduate students agreed on by chairs.
- d. The second subcommittee, lead by Don Smith, is looking at future program potential consistent with existing strengths and regional opportunities. Understanding future research goals is challenging- like understanding the future of stock market. The subcommittee has looked at the relationship of undergraduate and graduate education. Research assists funding all activities. Will need to grow research somewhat independent of undergraduate enrollment. 3,100 students 15% of 21,000

Meeting Notes

- would be adequate to accommodate currently planned research goals. This is a work in progress.
- e. The third subcommittee is looking at demographics, led by Peggy Delany. U.C. has a responsibility to educate a share of qualified high school graduates. This is an external driver to campus, in framework of the state. Reports come in every day with new information on demographics. This is an issue of access and opportunity. All projections show an increase in enrollment and in diversity of enrollment. U.C. needs to increase graduate and professional education opportunities to meet the needs of a changing economy. UCSC is the smallest UC campus. The largest have approximately 33,000 FTE.
 - f. Whatever enrollment number is settled on will not be a final number, but one point in a continuum in the life of UCSC. SFC has tried to take a conservative, mid point of demand.
 - g. Using any of these methods - demographics, new research, professional and academic programs- enrollment need could have gone to 25,000 by 2020. SFC recognized the need for balance. A fourth sub-committee has considered campus character and values and looked at principles to maintain what is most values.
 - h. Any rate of growth has to be supported by framework of issues, including faculty hiring, and how long it takes to approve new programs and realize new facilities.
 - i. SFC supports growth that is careful, and consistent with campus values. The committee desires to work with the community to address challenges of growth. This is 6 months into 3 year process.
 - j. SFC recommended enrollment 21,000 FTE
 - k. This is consistent with average historic growth rate of 400 students per year.
 - l. The SFC draft report is ready. The Final will be done in early summer. The next step is to assess and test this number
 - m. Question: Is this enrollment on-campus? Response: Yes, graduate and undergraduate.
 - n. Question: Is the number negotiable? Response: SFC's role has been to propose a working enrollment number based purely on academics and research, which is what should drive it, not just demographics.
 - o. Question: What are the opportunities for off-campus? Response: This will be studied in the next three months, including mitigation strategies. The LRDP and Strategic Futures Committees are to have combined meetings in Phase 2 to facilitate coordination.

7. Site Design Studies

- a. Alex Cooper presented studies for Scenario 4, 25,000 students, as a worst case.

Meeting Notes

- b. All program is on-campus. In the next phase, the team will consider what programmatically could go off-campus. This might include administrative space which could have a traffic impact.
- c. Environmental constraints have been updated based on new field observation, and the available land plan updated accordingly. There are more constraints in some areas, fewer in other places. The vast majority of the campus still not touched, e.g., undeveloped with buildings.
- d. Updated campus plans for the scenarios were presented. In Scenario 1 the core expands somewhat, and the Meyer extension and north loop road to a new graduate college and apartments housing are completed. This development is done farther to the north to reserve space for future uses closer to the core, such as undergraduate colleges.
- e. Alex noted that flexibility costs money and relates to supporting a long term compared to a shorter term vision.
- f. In Scenario 2 there is the same road system with more apartments and more core expansion.
- g. In Scenario 3 there are two undergrad colleges and more core expansion. All graduate apartments are bundled near the graduate college.
- h. Scenario 4 is worthwhile to consider for its implications for campus development post-2020. There are two more undergraduate colleges and more housing in the north campus, core expansion, faculty staff apartments opposite Empire Grade. Development extends just past the neck, but not all the way to far north campus.
- i. Much of the land remaining inside the loop road is environmental reserve. The planning team will want to take a look at this area given its central location to the core.
- j. Alex presented and overall illustrated plan for scenario 4. The Recreation/Events center is shown at the eastern end of east remote lot for now. Additional study is needed.
- k. For new colleges in the illustrated site plan, CRP took existing college forms and used them as pattern to better understand how the site might be developed. Colleges 11 and 12 share common dining facilities and are located inside the ring road. This relationship to the core is something new. It would provide a tremendous benefit, but may entail more expense than putting the road closer to the core. There is a ew bridge from Colleges 9 and 10 to this area. Apartments follow the current model, with parking close to the road, with recreation space behind the apartments.
- l. For the graduate college CRP has assumed somewhat the same typology as undergraduate colleges, with courtyard. It may be acceptable to have this farther from the core than the undergraduate colleges.
- m. The plan shows McLaughlin Drive depressed to allow for a pedestrian connection above, connecting engineering and science hill. There it the potential for additional core expansion to the north.

Meeting Notes

- n. For Colleges 13 and 14 there is a bridge back to core.
- o. The updated core study shows fewer at new buildings at College 9 and 10, an opening to north campus to facilitate possible future expansion. Buildings have been shifted to avoid slopes and to reflect previous studies in the arts area, the Quarry amphitheater, and Meyer Drive.
- p. The planning team is optimistic that many of the goals for maintaining the character of the campus and enhancing the pedestrian experience can be achieved with an enrollment of 21,000 students. This will enable less density in the core than shown in this study.

8. Question and Answer

- a. Question: Why not look at the land west of Porter College, as an East-West expansion?
Response: this area is designated as protected landscape in the 1988 LRDP. This is a first pass maintaining those land use boundaries. We will look at it. John Isbister, who was involved in last LRDP, noted this designation was very controversial.

9. Next steps

- a. Public Workshop #3, April 21 [6:00- 9:00 PM, UCSC Inn, Sierra Room]
- b. LRDP Committee Meeting #7, Thursday, April 22. Joint meeting with SFC. [5:30- 9:30 PM, University Town Center, 1101 Pacific Avenue, Rms. 221-223,]

Meeting Notes

Committee members present:

Tom Vani, Chair
Gene Arner
Tamara Belknap
Mike Bolte
Donna Blitzer
Harriet Deck
Peggy Delany
Pamela Edwards
Maggie Fusari
Gary Griggs
Gail Heit
Karen Holl
Francisco Hernandez
Liz Irwin
Ilse Kolbus
Larry Merkley
Meredith Michaels
Robert Miller
Fran Owens
Mary O'Keefe
Larry Pageler
Emily Reilly
David Rinehart
James Sheldon
Jean Marie Scott
Wes Scott
Ron Suduiko
Christina Valentino
Carl Walsh
Matt Waxman
Mardi Wormhoudt
Frank Zwart

Members Not Present

Jack Zimmermann
Robert Miller
Patrick LeCuyer
Michael Bade
Leslie Sunell
Wlad Godzich
Amy Everitt
Greg Gilbert
Jim Dunne
James Sheldon
Carl Walsh
Gary Glatzmaier
Robert Bartee
Mike Bolte
Teresa Buika
Bill Hyder
Steve Kang

Staff present:

John Barnes
Teresa Buika
Dean Fitch
Galen Jarvinen
Ken Thomas

Consultants present:

Alex Cooper
Bill MacIntosh
Jim West
Marcia Tobin
Annie Kammerer

Grant McInnes