

4.11 Population and Housing4.11-1
 4.11.1 Environmental Setting4.11-3
 4.11.2 Impacts and Mitigation Measures.....4.11-13
 4.11.3 References.....4.11-27

T A B L E S

Table 4.11-1 2003-04 (Baseline) Campus Population
 Table 4.11-2 Historical, Existing and Projected Population in the Study Area
 Table 4.11-3 Existing UC Santa Cruz Housing and Occupancy Levels
 Table 4.11-4 Current and Historical Residence Patterns
 Table 4.11-5 Existing and AMBAG-Forecast Housing Supply in Santa Cruz County
 Table 4.11-6 Estimated Distribution of New Population Associated with the 2005 LRDP
 (Scenario 1)
 Table 4.11-7 LRDP-Related Population as Percentage of Projected Population (Scenario 1)
 Table 4.11-8 Estimated Distribution of New Population Associated with the 2005 LRDP
 (Scenario 2)
 Table 4.11-9 LRDP-Related Population as Percentage of Projected Population (Scenario 2)
 Table 4.11-10 Projected Number of Housing Needed by Location and Projected Supply
 (Scenario 1)
 Table 4.11-11 Projected Number of Housing Needed by Location and Projected Supply
 (Scenario 2)
 Table 4.11-12 Projected Cumulative Demand and Supply of Housing in the Study Area

Population and Housing

This section describes existing and projected population and housing conditions at UC Santa Cruz and in surrounding communities, including the city of Santa Cruz and other central, north and south county communities. This section also describes the growth in population (students, faculty, staff, and their families) directly related to development under the 2005 LRDP, and the anticipated changes in population and housing that could result from the growth of the campus under the 2005 LRDP.

Changes in population, employment, and housing demand are social and economic effects, not environmental effects. Section 15382 of the CEQA Guidelines states: “An economic or social change by itself shall not be considered a significant effect on the environment.” According to CEQA, these effects should be considered in an EIR only to the extent that they create adverse impacts on the physical environment. This section of the EIR examines the potential for the 2005 LRDP to result in a substantial increase in employment and population, and a resultant demand for housing; the environmental consequences of the population increase and demand for housing are evaluated in other sections of this EIR.

Public comments related to population and housing were received in response to the Notice of Preparation. The comments received are summarized below.

- Commenters stated that the Campus should not grow to an enrollment level of 21,000 students; the increase in enrollment is too large; the Campus should consider no or minimal enrollment growth; or this growth should be placed in satellite campuses or at other UC campuses. Commenters stated that the City of Santa Cruz did not have the capacity for the projected growth.
- Commenters asked that the EIR estimate and report the total increase in population including dependents, and that the analysis of population growth impacts in the EIR should include both direct and indirect effects.
- Commenters asked that the impact assessment be based on the actual enrollment at the time the data are collected and not on 15,000 students, and the population increase should be projected appropriately (and not necessarily in a linear fashion) based on future enrollment levels.
- Commenters stated that the Campus should house all of the new students it enrolls under this LRDP; it should require all students to live on campus; and should develop appropriate housing to handle its growth rather than burden the city’s housing resources, especially the west side neighborhoods.
- Commenters stated that the Campus should not lower the on-campus housing goal that was included in the 1988 LRDP. In addition to building more housing on campus, the Campus should explore ways to encourage more students to choose campus housing such as by lowering rents, not requiring the purchase of meal plans, lowering the cost of meals, etc., and that the 2005 LRDP must include clearly defined and enforceable strategies to house more people on the campus.

- Commenters asked that the EIR evaluate impacts on city housing resources, including foreseeable consequences of new housing developments triggered by this growth, and should evaluate the impacts of campus growth on the county's housing stock, with adequate mitigation proposed. Impacts on housing stock should be evaluated in terms of housing prices, rent structures, and per-unit occupancy levels. The EIR should also consider non-UC growth in the city along with UC growth when evaluating population impacts.
- Commenters stated that the City of Santa Cruz is trying to create additional affordable housing by increasing the density and changing the accessory dwelling unit ordinance. The resultant increase in affordable housing units could be absorbed by the growth projected under the proposed LRDP, such that there would be no benefit to the non-student population of Santa Cruz.
- Commenters stated that the current high cost of both rental and for-sale housing in Santa Cruz may be the result of the campus-related demand for housing. Concern was also expressed about the impact on low-income persons who cannot find or afford housing in the community because cheaper housing is taken up by UC Santa Cruz students. Numerous issues were raised regarding student rentals in the west side, and that the City of Santa Cruz should adopt a local ordinance to control student rentals in family residential areas.
- Commenters asked that the Campus examine the possibility of developing more on-campus housing similar to the Campus Trailer Park, which is affordable and where student activities do not bother neighbors; the Campus should avoid displacing or eliminating the trailer park; if the trailer park is to be displaced the Campus should find a new site for it.
- Commenters stated that the Campus should build more student apartments unaffiliated with colleges and co-locate unaffiliated apartments, potentially in the Lower Quarry area.
- Commenters stated that the Campus should not use a high on-campus housing goal (70 percent) for students as students have different living preferences and many prefer to live off campus.
- Commenters stated that the Campus should make on-campus undergraduate and graduate student housing more affordable.
- Commenters stated that the Campus should consider developing off-campus cooperative housing and more off-campus housing similar to the University Town Center; campus apartments that were converted to house more than the original number of students need to be converted back; the Campus needs to adopt a policy of building the infrastructure (including housing) before the students show up, not afterwards; and the Campus should lease land to a developer to build and manage student housing on campus.

All of these issues are addressed in the analysis below with the following exceptions. Comments related to the impacts of the proposed project on the cost of housing and rent structure, and comments related to the cost of housing on campus are not addressed as environmental impacts, as these are economic impacts that are not within the purview of analysis under CEQA unless these economic impacts would result in

physical impacts on the environment.¹ The cost of rental and for-sale housing is taken into consideration in the analysis in this section in determining how many of the 2005 LRDP-related new students and employees would live within Santa Cruz County and how many would not live in the county as they would not be able to find affordable housing within the county. With respect to suggestions related to cooperative housing, note that the 2005 LRDP provides for a variety of housing types, which potentially could include cooperative housing. The suggestions regarding zero or lower enrollment growth, placement of the growth in satellite campuses or other UC campuses, and provision of more on-campus housing are addressed in Chapter 5, *Alternatives*. Placement of housing at other locations on campus was considered in developing the 2005 LRDP and in Chapter 5, *Alternatives*. The additional employment (indirect and induced jobs) and population that would be induced in the region by campus growth under the 2005 LRDP are estimated, and reported in Section 6.3, *Growth-Inducing Impacts*.

4.11.1 Environmental Setting

4.11.1.1 Study Area

The study area for the evaluation of population and housing impacts is defined to include the UC Santa Cruz campus and all incorporated and unincorporated communities in Santa Cruz County. Based on historic and current residence patterns of UC Santa Cruz students, faculty, and staff (discussed further in Section 4.11.1.2 below), an estimated 6 percent of the 2005 LRDP-related additional enrolled new students and 15 percent of new employees are expected to reside in communities outside Santa Cruz County, particularly in Monterey and Santa Clara counties. This population, when distributed between the various communities in those counties represents a very small portion of the total populations of these communities, and would not result in measurable impacts in those communities. Therefore, areas outside of Santa Cruz County are not included in the study area.

4.11.1.2 Campus Population

Campus population relevant to the analysis in this section consists of the following groups: students, faculty, staff, and dependents. Table 4.11-1 shows the population totals for each group for the baseline academic year 2003-04. The total population reported in this table and discussed in this chapter includes only the employees and students associated with the main campus, 2300 Delaware Avenue, and leased spaces in the City. Population associated with the Marine Science Campus is covered by a separate Coastal Long Range Development Plan for that campus. See Section 3.1, *Project Description* (Volume I), for details regarding campus population.

¹ It could be argued that high cost of living on campus is responsible for a lower demand for on-campus housing; therefore, more students choose to live off campus and this generates increased traffic on city streets. However, the data gathered by UC Santa Cruz housing services shows that, except in a few years recently when more housing became available in the City of Santa Cruz due to the economic downturn and students were able to find housing off campus, the housing on campus has been fully occupied. Thus, typically, only those students and employees that cannot find housing on campus would be expected to live off campus.

**Table 4.11-1
2003-04 (Baseline) Campus Population**

Population Category	Existing (2003-04)
Students (three-quarter average)	14,050
Faculty	815
Staff	3,265
Dependents (living on campus)	680
Total Campus Population	18,810

Source: UC Santa Cruz 2004.

Notes: Data are derived from Table 3-1 in Chapter 3, *Project Description*. All numbers rounded to the nearest 5. The population totals include UC employees at 2300 Delaware and in leased spaces but do not include employees at the Marine Science Campus. Data for 2003-04 is used to present baseline conditions because this is the most recent year for which enrollment data are available for the three quarters. Enrollment data for all quarters in 2004-05 were not available at the time that the analysis was conducted for this EIR.

UC Santa Cruz main campus three-quarter average enrollment² totaled 14,050 full-time equivalent (FTE) students in 2003-04. Undergraduate students constituted about 91 percent of total enrollment, and graduate students made up about 9 percent of the total. From the mid-1980s to the mid-1990s, enrollment at UC Santa Cruz averaged around 9,500 FTE students per year. In recent years, annual enrollment levels at UC Santa Cruz have increased steadily, although total enrollment has generally been lower than projected under the 1988 LRDP for each year, in part because population growth state wide was lower than expected, and also because state budget cuts in the early 1990s resulted in the lowering of campus enrollment targets (UC Santa Cruz 2004). The Campus added about 4,500 students between academic years 1995-96 and 2003-04. Graduate student enrollment increased as a share of total enrollment during the 1980s, but has remained just under 10 percent for the last 15 years.

Based on a three-quarter average, in the academic year 2003-04, UC Santa Cruz main campus had 4,080 employees, not including students who are also employees (see Table 4.11-1). About 20 percent of the total (815) were faculty and 80 percent of the total (3,265) were staff.

4.11.1.3 Regional Population

Historical demographic data for the study area through 2000 are available from the U.S. Census (US Bureau of Census 2000). Estimates of the current and projected populations of the study area cities and the county are available from the *2004 AMBAG Population, Housing Unit & Employment Forecasts* published by Association of Monterey Bay Area Governments (AMBAG) in April 2004. Current (2004) estimates of city and county populations are also available from the California Department of Finance (DOF), which annually publishes estimated populations of California cities and counties. DOF also

² Enrollment at UC Santa Cruz varies each quarter. The Campus uses an average of the student enrollment levels in the three primary quarters (fall, winter and spring) to track changes in enrollment from one year to another. That average is referred to as the three-quarter average enrollment.

produces population projections at 10-year intervals for California counties but does not generate projections at the city level. AMBAG data for city-level projections are used throughout this section, unless noted otherwise, because they are most relevant for the analysis in this section and these data are available only from AMBAG forecasts.

Table 4.11-2 shows the current and projected population of the city of Santa Cruz, other major communities, and Santa Cruz County through 2020, the horizon year for the 2005 LRDP. The 1990 and 2000 population data are based on counts conducted by the U.S. Census. The population numbers for 2005 and the subsequent years through 2020 that are reported in this table are from AMBAG 2004 forecasts.

**Table 4.11-2
Historical, Existing and Projected Population in the Study Area**

City/County	1990 ^a	2000 ^a	1990-2000 Annual Growth Rate	Projected Population 2005 ^b	2000-2005 Annual Growth Rate (% per annum)	Projected Population			2005-2020 Annual Growth Rate (% per annum)
						2010 ^b	2015 ^b	2020 ^b	
City of Santa Cruz									
Population	49,040	54,593	1.1	56,953	0.4	57,768	58,846	59,924 ^c	0.3
Capitola									
Population	10,171	10,033	-0.1	10,869	0.8	10,978	11,041	11,104	0.1
Scotts Valley									
Population	8,615	11,385	2.8	13,182	1.6	13,667	13,864	14,062	0.4
Watsonville									
Population	31,099	44,265	3.6	52,716	1.9	56,779	61,126	65,473	1.6
Unincorporated areas in Santa Cruz County									
Population	130,809	135,326	0.3	133,824	-0.1	136,167	139,150	142,132	0.4
Santa Cruz County									
Population	229,734	255,602	1.1	267,544	0.5	275,359	284,027	292,695	0.6

Sources:

(a) U.S. Bureau of Census, 1990; 2000

Notes:

(b) AMBAG 2004.

(c) The City of Santa Cruz Integrated Water Plan EIR projects a population of 64,386 in the City of Santa Cruz by 2020, based on AMBAG 1997 forecasts (City of Santa Cruz 2005).

Note that AMBAG prepared two versions of its population forecasts: an “unconstrained growth” forecast and a “constrained growth” forecast. The unconstrained growth scenario forecast population growth based on economic trends and historic population growth. In contrast, under the constrained growth scenario, population growth was limited or projected to occur at a slower rate due to explicit constraints to growth, such as growth control ordinances and limits on housing growth within communities. The AMBAG Board of Directors adopted the constrained version of the forecast at the request of the local jurisdictions (AMBAG 2004). Under the constrained growth scenario, projections of population and housing are low, although employment growth has not been constrained and the employment projections

are high. The adopted constrained forecasts will be referred to as the “planning forecast” in the discussion below.

As discussed in Section 4.0, Environmental Setting, Impacts and Mitigation (Volume I of this EIR), according to AMBAG, its current planning forecasts do not account for the growth in campus population projected under the 2005 LRDP. In its letter to UC Santa Cruz evaluating the consistency of the 2005 LRDP with AMBAG growth projections and regional planning (AMBAG 2005), AMBAG indicated that housing provided under the 2005 LRDP is not included in AMBAG’s housing forecasts for the City of Santa Cruz, (as presented in Table 4.11-5), and that the population growth under the 2005 LRDP has not been accounted for in the regional population forecasts and planning. However, as discussed later in this section, AMBAG employment forecasts provide for substantial employment growth in the study area, and as also discussed in Section 4.0 of this volume, the AMBAG travel demand model also indicates that the campus’s employment growth is more than adequately addressed in the 2020 projections because the travel demand model is linked to this substantial employment forecast.

The population growth projections at UC Santa Cruz arise from UC program planning, and are not based on the decisions of other jurisdictions regarding housing growth, nor are they a function of the economic growth in the region.

County of Santa Cruz

According to the last census, the total population of Santa Cruz County in 2000 was 255,602, an increase of 25,868 persons over 1990 census levels. This represents an increase of 11 percent, or an average annual growth rate of just over 1 percent per year. During the same period, the population of California grew by 13.6 percent (U.S. Census Bureau 2002). The population growth in the county was concentrated in Watsonville, where over half of the countywide population growth occurred.

According to AMBAG estimates, as of 2005 the population of Santa Cruz County is approximately 267,544 persons. This represents an estimated average annual rate of about 0.5 percent in the last 5 years (2000-2005). The 2004 DOF estimate for the county is lower, approximately 259,990 persons representing an average annual rate of about 0.3 percent in the past four years. Irrespective, the rate of population growth in the County has slowed markedly since 2000 in comparison to the growth rate of the previous decade.

With respect to countywide population growth through 2020, AMBAG projects that the population will grow at a somewhat slower pace than in the 1990s—at an average annual rate of about 0.6 percent per year from 2005 through 2020. This slower growth reflects a request by the County for the use of lower population and housing unit forecasts, consistent with the County’s desire to constrain growth.

City of Santa Cruz

During the 1990s, the city grew at an average annual rate of about 1 percent, and by 2000, the city of Santa Cruz had a population of 54,593 persons. The city’s population accounted for 21 percent of the total county population, a share that has remained constant over the last decade.

Based on AMBAG forecasts, between 2000 and 2005 the city’s population has grown at an average annual rate of about 0.4 percent and as of 2005, the city has a total population of about 56,953 persons.

The DOF estimate for the population of Santa Cruz in 2004 is about 56,300 persons, which is close to the AMBAG estimate for the city. With respect to projected growth in city population between 2005 and 2020, AMBAG's planning forecast anticipates an average annual growth rate of about 0.35 percent, and a population of about 59,924 persons by 2020.

Other Study Area Communities

Other study area communities that are likely to experience 2005 LRDP-related population and housing effects include several small unincorporated communities in the north and central county (Davenport, Ben Lomond, Boulder Creek, Bonny Doon, Mount Hermon, Brookdale, Live Oak, Soquel, Aptos, and Felton), and the cities of Scotts Valley, Capitola and Watsonville. Community-specific current and projected population data are reported in Table 4.11-2 for the incorporated cities; the populations of the smaller unincorporated communities are included in "Unincorporated County" totals.

Based on AMBAG data, as of 2005, Capitola has a population of about 10,870 persons. AMBAG planning forecast anticipates that this city will grow at an average annual rate of about 0.2 percent through 2010, which will decline to an annual rate of growth of about 0.1 percent in the next decade. Based on the AMBAG planning forecast, the city's population by 2020 is anticipated to be about 11,100 persons.

Similarly, on the basis of AMBAG's planning forecast, Scotts Valley is projected to grow from a current population of 13,182 persons to about 14,062 by 2020, with most of the growth anticipated through 2010 and minimal growth beyond that.

Watsonville, with a 2005 population of about 52,716 persons, is the second largest city in the county. According to AMBAG's planning forecast, Watsonville is expected to continue to grow faster than the rest of the county at an average annual rate of about 2.8 percent through 2010 and about 1.5 percent between 2010 and 2020. After 2010, Watsonville will have the largest population in the county. Watsonville's population in 2020 is forecast to be about 65,470 persons.

According to DOF estimates, the total population in the unincorporated areas of the county has declined in recent years from a total of about 135,330 persons in 2000 to 134,000 persons in 2004, likely a result of the economic downturn. AMBAG planning forecast indicates that population in the unincorporated areas of the County will grow at a very slow pace—at a rate of about 0.4 percent per year over the period from 2005 to 2020.

4.11.1.4 UC Housing and Residence Patterns

This section describes the UC-owned or leased housing both on and off campus and the residence patterns of students and employees. This section does not include housing related to the UC Santa Cruz Marine Science Campus Coastal LRDP.

Student Housing

As of fall 2004, UC Santa Cruz had a total University-managed maximum student housing capacity of 7,112, measured in terms of student beds.³ These included 6,756 beds on campus and about 356 student beds in off-campus housing leased by the University in the city of Santa Cruz. On-campus facilities account for 95 percent of the total University housing stock and off-campus facilities for 5 percent.

**Table 4.11-3
Existing UC Santa Cruz Housing and Occupancy Levels**

Housing Type	Design Capacity ^a (Fall 2004)	Occupancy (Fall 2004)
On-Campus Student Housing^b		
Residence Halls	3,745	3,486
Student Apartments	2,549	2,371
Family Student Apartments	199	189
Other	42	42
Off-Campus Student Housing^b		
Apartments	108	53
Residence Hall	248	96
Student Housing Subtotal	6,891	6,237
Faculty and Staff Housing		
Hagar Court Apartments	50	50
Laureate Court Apartments	64	64
Cardiff Terrace & Hagar Meadow	80	80
Provost Houses	7	6
Staff in Single Student Housing	40	40
Subtotal	241	240
Total	7,132	6,477

Source: Current Housing Supply (2002 through 04) Table from CUHS.

Notes:

- (a) The actual capacity may vary from the design capacity and can be increased in various ways if needed.
 (b) Reported in student bed spaces.

UC housing is self supporting, i.e., state funding is not provided to the campuses to build housing. Instead, the cost associated with the construction of new housing is recovered through rents. As a result, decisions to provide more housing on the campus are based on demand.

On-campus housing for students has increased over the years as new colleges have been constructed. In addition, in response to increased demand for more student housing on campus, in 2000 and 2001 the University undertook temporary modifications to on-campus housing, such as converting residence hall lounges into bedrooms. As a result of these modifications, 414 beds were added in the residence halls, and 189 beds were added in single student apartments above the total design capacity. In addition,

³ Student beds refer to the number of students that can be accommodated in the available housing. These beds are contained in dormitories and apartments and therefore do not represent the number of housing units.

between 1999 and 2001, the Campus entered into 10-year leases for two properties in downtown Santa Cruz, where additional student bed spaces were created. This off-campus housing includes 108 student beds in apartments at the University Town Center, and residence hall accommodations at the University Inn (former Holiday Inn) for 248 students. The Campus has also added infill apartments at several of the colleges in order to house more students on campus and to provide more diversity in the types of housing available on the campus. Table 4.11-3 presents design capacity and occupancy in fall 2004. Design capacity for on-campus housing represents the actual permanent housing capacity on campus as of fall 2004. As noted above, maximum capacity may be increased temporarily from year to year as needed.

The occupancy levels of student housing fluctuate from year to year, in response to the availability of housing on the campus as well as in response to the availability and cost of housing in the City of Santa Cruz and other nearby communities. Based on data gathered by campus housing services, since 1989 occupancy levels have ranged from 93 to 106 percent.⁴ In 2003-04, occupancy levels were lower (around 91 percent of the design capacity) because in recent years more rental housing has been available in off-campus areas due to the economic downturn in the region. This has led to higher numbers of students electing to live off campus. Therefore, in some years campus housing supply has exceeded the demand.

Since 1990-91, the Campus has been monitoring the percentage of undergraduate students housed on campus. Averaged over the years, this percentage has been around 48 percent, although the percentage has ranged from a low of 45.5 percent in 1993-94 to a high of 51.8 percent in 1999-2000. If off-campus University-operated housing is included in the calculation, on an average the Campus has the capacity to provide housing for approximately 50 percent of all undergraduate students currently enrolled.

A smaller percentage of graduate students are housed on campus. Averaged over the monitoring period, the percentage of graduate students housed on campus has been around 20 percent. This percentage has ranged from a high of about 35 percent in 1990-91 to a low of about 14 percent in 2002-03.

Employee Housing

On-campus employee housing has also been growing steadily over the years. Currently there are 241 employee housing units on the campus, located mainly in four housing complexes: 64-unit Laureate Court, 50-unit Hagar Court, 19-unit Hagar Meadow, and the 61-unit Cardiff Terrace. About 47 faculty and staff are housed in employee housing located in the colleges and in other student housing. An additional 84 units of on-campus employee housing, the Ranch View Terrace project, were recently approved for construction in 2004, under the 1988 LRDP, but have not yet been built. In 2003-04, all UC Santa Cruz faculty and staff housing was fully occupied.

Averaged over the monitoring period, approximately 29 percent of the faculty has been housed on the campus. This percentage has varied from a high of about 34 percent in 1995-96 to a low of about 24 percent in 2002-03 (UC Santa Cruz 2004). For baseline year 2003-04, the total number of staff housed in campus housing was less than 50. The percentage of staff housed on the campus increased somewhat in 2004-05.

⁴ Occupancy levels over 100 percent reflect temporary modifications to accommodate larger number of students than the design capacity of the facilities.

Regional Residence Patterns

Table 4.11-4 presents recent and historic residence patterns of UC Santa Cruz students and employees. In 2003-04, approximately 41 percent of the student population lived on campus, about 40 percent lived off-campus within the city of Santa Cruz and in Bonny Doon,⁵ and about 13 percent lived in other communities in Santa Cruz County, mainly in Live Oak, Capitola, Aptos and Soquel. The remainder of the students (about 6 percent) lived outside the county.

About 4 percent of employees lived in on-campus housing, about 49 percent lived in the city of Santa Cruz, and another 34 percent lived in other communities in the county. About 13 percent of employees lived outside the county. Within Santa Cruz County, the predominant residence locations of employees (other than Santa Cruz) are Live Oak, Watsonville, Aptos, Scotts Valley, Soquel, and Capitola.

Historical data on student and employee places of residence were examined to determine whether the patterns of residence have changed appreciably in the last decade or so. This information is summarized in Table 4.11-4.

As the data in Table 4.11-4 show, the percentage of all students (undergraduate and graduate students) living on campus has remained fairly steady since about 1998 at an average of about 41 percent. As discussed earlier, the percentage of undergraduate students housed on campus is around 48 percent, but the percentage drops to around 41 percent if graduate students are included. There have been no noticeable shifts in off-campus residence patterns of the student population since 1998. The percentage of students living in the city of Santa Cruz varied slightly in each year that was sampled but has generally averaged around 39 percent. The percentages of students living in each of the other communities also did not change significantly during the period considered.

About 4 percent of all employees live on campus, with the majority of this group being faculty members. From the data in Table 4.11-4, it appears that compared to earlier years, more employees are commuting to the campus from out-of-county locations with the percentage increasing from about 9 percent in 1998 to 13 or 14 percent in recent years, a pattern that likely is linked to a number of factors including the availability of affordable housing, schools, and employment opportunities for spouses and dependents in Santa Cruz County. With respect to in-county commuting employees, the percentage of employees residing in each of the communities has not changed appreciably for any community.

⁵ Historical residence patterns of UC Santa Cruz students and employees were derived from UCSC Place of Residence Surveys conducted by the Campus. Because the zip code for Bonny Doon is the same as a portion of the City of Santa Cruz, Bonny Doon residents are included in the City of Santa Cruz totals.

**Table 4.11-4
Current and Historical Residence Patterns**

Population	1998		Spring 2002		Fall 2003		Spring 2004	
	Students	Faculty & Staff	Students	Faculty & Staff	Students	Faculty & Staff	Students	Faculty & Staff
Total Population	10,981	2,903	12,082	3,708	14,631	3,946	13,556	3,858
Distribution by Percentage of Total Population								
On-campus resident	41%	6%	42%	5%	38%	3%	41%	4%
Off-campus resident	59%	94%	58%	95%	62%	97%	59%	96%
Out-of-county commuters	6%	9%	6%	14%	6%	14%	6%	13%
In-county commuters	53%	84%	52%	81%	56%	83%	53%	83%
Distribution Based on Communities								
Santa Cruz	38.0%	51.8%	36.8%	47.9%	43.5%	48.8%	39.8%	49.1%
Davenport	0.1%	0.6%	0.1%	0.4%	0.1%	0.4%	0.5%	0.4%
Ben Lomond	0.6%	1.0%	0.4%	1.3%	0.5%	1.4%	0.5%	1.5%
Boulder Creek	0.6%	1.2%	0.4%	1.3%	0.3%	1.4%	0.3%	1.4%
Felton	0.8%	2.5%	0.6%	2.2%	0.8%	2.0%	0.7%	2.0%
Mt. Hermon	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.8%	0.2%
Scotts Valley	0.9%	2.2%	0.7%	2.7%	1.0%	2.9%	0.9%	3.1%
Capitola	1.6%	2.5%	1.2%	2.5%	1.2%	2.6%	1.4%	2.5%
Live Oak	5.4%	7.2%	9.2%	7.1%	5.0%	7.5%	4.9%	7.5%
Soquel	1.2%	3.0%	0.7%	3.1%	1.0%	2.8%	1.0%	2.9%
Aptos	2.2%	5.8%	1.7%	5.4%	1.5%	5.5%	1.2%	5.4%
Watsonville	1.2%	5.6%	0.5%	6.3%	1.1%	6.6%	0.8%	6.4%
Brookdale	0.1%	0.3%	0.0%	0.2%	0.0%	0.2%	0.0%	0.2%
Freedom	0.0%	0.4%	0.0%	0.2%	0.0%	0.5%	0.0%	0.5%

Source: UCSC Place of Residence Surveys provided by UCSC Transportation and Parking Services, April 2005. Note that because the zip code for Bonny Doon is the same as a portion of the City of Santa Cruz, Bonny Doon residents are included in the City of Santa Cruz totals. Also half of students and employees in zip code 95062 were assigned to Live Oak and the other half to the City of Santa Cruz. Totals used to develop the percentages reported in this table do not include students enrolled in distance learning programs.

4.11.1.5 Regional Housing

In 1990, there were approximately 19,360 housing units in the city of Santa Cruz. According to the US Census, about 2,600 housing units were added in the city of Santa Cruz between 1990 and 2000, which represented about 37 percent of all units added throughout Santa Cruz County in the 1990s and an annual growth rate of about 1.4 percent (see Table 4.11-5). Based on AMBAG forecasts, as of 2005, there are a total of 22,826 housing units in the city of Santa Cruz. Between 1990 and 2000, approximately 4,400 new housing units were added in the rest of the county, at an average annual growth rate of about 0.6 percent.

Similar to the significant increases in home prices observed throughout California, between 1998 and 2004 the median home prices in the county increased by 111 percent, from a median price of \$299,500 in 1998 to \$622,323 in 2004 (SCAOR 2005). According to Dataquick reports, between April 2004 and 2005, the median home price in the county increased by over 15 percent, and the median price of homes

sold in the county in this period was \$640,000 (BAE 2005). The California Association of Realtors measures housing affordability by the percentage of households that can afford to purchase a median-priced home in California. As of fall 2004, a minimum household income of \$106,680 was needed to purchase a median-priced home (at \$460,370) in California (Regional Analysis and Planning Services 2004). As of November 2004, only 20 percent of the households in Santa Cruz County could afford to purchase a median-priced home in the county, as compared with 32 percent that could afford a median priced home between 1994 and 1996.

Compared to the for-sale housing market, residential rents in the county have remained stable in recent years. Rents rose by about 2.3 percent between the first quarter of 2003 and the first quarter of 2005 (BAE 2005).

**Table 4.11-5
Existing and AMBAG-Forecast Housing Supply in Santa Cruz County**

City/County	1990 ^a	2000 ^a	Increase	1990-2000 Annual Growth Rate (% per annum)	2005 ^b	Increase Between 2000 and 2005	Projected 2020 ^b	Increase Between 2005 and 2020	Anticipated 2005-2020 Annual Growth Rate (% per annum)
City of Santa Cruz									
Housing Units	19,364	21,982	2,618	1.4%	22,826	844	24,510	1,684	0.5%
Rest of Santa Cruz County									
Housing Units	72,514	76,891	4,377	0.6%	80,608	3,717	88,755	8,147	0.7%
Santa Cruz County (Total)									
Housing Units	91,878	98,873	6,995	0.7%	103,434	4,561	113,265	9,831	0.6%

Sources:

(a) U.S. Census Bureau 1990; 2000

(b) AMBAG Population, Housing Unit & Employment Forecasts 2004.

Projections of new housing in the city of Santa Cruz are available from two sources; the City's General Plan Housing Element, and AMBAG 2004 forecasts.

The State of California requires the Department of Housing and Community Development to identify housing needs for each region in the state in response to projected growth in population and households. To address this, the Council of Government in each region distributes the housing needs allocation to each jurisdiction in its region. AMBAG oversees the Regional Housing Needs Determination (RHND) process for Monterey and Santa Cruz counties, and determines each jurisdiction's fair share of the regional housing need. The RHND process establishes the regional housing needs for a period of only 5 years at a time. Following the allocation and assignment of RHND goals by AMBAG, the City of Santa Cruz updated the Housing Element of its General Plan in 2003 to demonstrate how it would develop the needed housing. Although the AMBAG-assigned RHND goal for the City was 2,851 additional housing units between 2002 and 2007, the City set a lower goal of 2,167 for the near term, but is committed to meet the higher RHND goal during the General Plan Update.

Therefore, at this time, according to the City of Santa Cruz Housing Element, the City's objective is to produce 2,167 new housing units between 2000 and 2007. Through 2002, the City had already developed

886 units and, therefore, it would need to develop another 1,964 units by 2007 to meet its near term housing goal through 2007. The City plans to produce an additional 584 housing units through rehabilitation, 432 housing units through conservation, and the remainder through new construction by the year 2007.

The other source for housing projections is AMBAG planning forecast, which predicts that housing growth in the next 15 years will be slower than that experienced between 1990 and 2000, and that only 1,684 housing units would be added in the city of Santa Cruz between 2005 and 2020. Table 4.11-5 shows the projected increase in housing between 2005 and 2020 based on AMBAG forecasts. It is noteworthy that the number of new units projected in AMBAG 2004 forecasts of 1,684 housing units between 2005 and 2020 is lower than the 1,964 additional units projected in the City's Housing Element between 2002 and 2007. That is because AMBAG planning forecast represent the constrained growth scenario adopted by AMBAG. The AMBAG planning forecast is not the maximum of housing units that the city can accommodate but represents a policy decision by the City to plan for fewer housing units.

With respect to the rest of the county, AMBAG planning forecast shows that about 8,147 housing units would be added between 2005 and 2020.⁶ About 47 percent of these new units would be added in Watsonville and about 46 percent are projected for unincorporated areas of the county. AMBAG planning forecast projects limited housing growth in Capitola and Scotts Valley.

4.11.2 Impacts and Mitigation Measures

4.11.2.1 Standards of Significance

The following standards of significance are based on Appendix G of the CEQA Guidelines. For the purposes of this EIR, the proposed project would have a significant impact on population and housing if it would:

- Directly induce substantial population growth in the area by proposing new housing and employment
- Indirectly induce substantial population growth in an area (for example, through extension of roads or other infrastructure)
- Contribute substantially to a cumulative demand for housing that could not be accommodated by local jurisdictions

⁶ Note that AMBAG planning forecast shows additional units will be added both in the city and the rest of the county between 2020 and 2030 but those are not included in this analysis because those units would be added to the regional housing inventory outside the planning horizon of the 2005 LRDP.

4.11.2.2 CEQA Checklist Items Adequately Addressed in the Initial Study

- Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The 2005 LRDP would not displace a substantial number of existing housing units. The Family Student Housing Redevelopment Project would temporarily (for about 2 years) remove about 100 units on the campus. However, this housing would be replaced with twice the number of housing units over a period of about two years (see Chapter 3 in Volume III of this EIR). Because the affected housing would be replaced, there would be no long-term impact relative to displacement of housing. Construction of the new colleges may require the removal of the Campus Trailer Park, which currently provides 42 student beds. The potential removal of this housing was taken into account in planning additional student housing that would be provided on the campus under the 2005 LRDP. Therefore, no impact would occur, and no additional analysis is required. Note that even without increased population on campus, the Campus might elect to construct additional housing in order to meet on-campus housing demand for certain types of housing.

4.11.2.3 Analytical Method

The impact analysis presented below examines the population and housing impacts on the study area that would result from the population added to the study area as a result of campus growth under the 2005 LRDP. To forecast the distribution of the new population in the study area, historical and current residence patterns of students and employees were examined. Methods and assumptions used to develop the forecasts are summarized below. Note that the indirect and induced employment⁷ and population growth that would result from campus growth under the 2005 LRDP is discussed in Section 6.3, *Growth Inducing Impacts*.

New Student Population

Number of Students. The analysis in this section is based on the campus's projected increase in student enrollment to 21,000 by 2020-21 and the assumption that all the additional students would be "new" to the study area. As a result of this assumption, the estimated increase in study area population is higher than would actually occur because the number has not been discounted for those students who may already be living in the study area at the time that they seek admission to the campus. Furthermore, the number of additional students used in the analysis is based on the difference between 2003-04 and the projected 2020-21 enrollment data, even though the campus has grown by about 162 FTE students

⁷ Indirect employment refers to jobs that are created or supported by direct jobs or direct spending of the campus. For instance, an indirect job is created/supported in an office supply store when the Campus buys office supplies locally. Induced employment, on the other hand, refers to jobs that are created/supported when persons employed in direct and indirect jobs spend their wage incomes to purchase goods and services. A job in a grocery store would be considered an induced job.

between the 2003-04 academic year and the 2004-05 academic year under the 1988 LRDP. Thus, the actual growth between the current year and 2020-21 would be slightly less than the total projected.

Student Dependents. Dependents are children, spouses, parents or other persons living in a household who do not contribute to the household income. The number of dependents of students living off campus was estimated based on the current ratio of on-campus dependents to the total number of students living on campus.

Projected On-Campus Student Housing. Under the proposed 2005 LRDP, by 2020-21, the student population at UC Santa Cruz could increase beyond the 2003-04 baseline enrollment by 6,950 students to an enrollment level of up to 21,000 students, consisting of 17,850 undergraduate students and about 3,150 graduate students. The 2005 LRDP designates land adequate to build housing on the campus for 50 percent of all undergraduate and 25 percent of all graduate students by 2020. In order to meet the LRDP student housing targets, the Campus would need to add approximately 3,220 student beds to its existing on-campus housing stock. Based on the land designated for housing, approximately 3,390 additional student beds could be built, which would more than meet the housing targets.

Distribution of LRDP-Related Student Population. To estimate the number of new LRDP-related students that would live off campus in housing not owned or leased by the Campus within the county, the following assumptions were used:

- Out of the total 6,950 new students, based on current residential patterns, six percent (about 417 students) would live in neighboring counties and would not relocate into the study area. Therefore, a total of 6,533 new students would seek housing in the study area.
- A total of 3,390 student beds that are included in the 2005 LRDP would be constructed on the campus by 2020-21.⁸ UC housing is a self-supporting enterprise that brings housing on line based on demand. Limited growth in housing is projected in the study area communities. Therefore, there would likely be a greater demand for UC-owned housing in the future and it is reasonable to expect that the Campus would construct all of these additional student beds. Historically, the Campus has been able to provide housing for about 48 percent of all undergraduates on campus over the last 15 years, and with these 3,390 new student beds, the Campus would house 50 percent of the undergraduate students and 25 percent of the graduate students.
- The new student beds would have 100 percent occupancy. This is a reasonable planning assumption because, based on past occupancy data, the occupancy levels of on-campus student housing have been close to 100 percent of design capacity. In 2003-04, the occupancy rate was lower (about 89 percent based on maximum capacity and 91 percent based on design capacity) because the Campus had created student beds by converting lounges into bedrooms, and at about the same time more housing became available off campus due to the economic downturn. Therefore, based on the above

⁸ In the event that the projected number of on-campus student beds were not constructed by 2020, a higher number of students would seek housing in the study area.

assumptions, out of the 6,533 new students requiring housing in the study area, 3,390 students would be housed in UC-owned housing.

With respect to the remainder of the new students (about 3,143) who would seek housing within the county, these students were distributed between the city of Santa Cruz and the rest of Santa Cruz County based on a housing demand model (BAE 2005). This model transforms the off-campus new student population into student households based on three students to a student household and assumes that each student household would demand one rental housing unit. The model then distributes these households between the Primary Market Area, which is the city of Santa Cruz, and the Secondary Market Area, which is the rest of Santa Cruz County, based on the incomes of student households and the projected supply and cost of rental housing in the Primary and Secondary Market Areas. The model also uses the assumption that the first preference of students who would live off campus would be to live in the city of Santa Cruz, and that students would choose other communities for residence only if rental units within their price range were not available in the city of Santa Cruz (BAE 2005).

Faculty and Staff Population

Total Number of New Employees (Two Scenarios). Estimated numbers of new faculty and staff (hereinafter employees) were derived based on the projected student enrollment levels and current staffing ratios. Development under the 2005 LRDP would involve an increase in faculty and staff of about 1,520 new employees, and by 2020-21 the Campus would employ a total of 1,185 faculty and 4,415 staff, for a total of 5,600 employees.

With respect to new employees, the analysis was conducted for two scenarios:

Scenario 1. The first scenario is conservative and assumes that all new employees that would be hired under the 2005 LRDP would be hired from outside the county; it does not discount for those employees already residing in the study area when they are hired by the University.

Scenario 2. The second scenario assumes that 68.6 percent of the new employees would be hired from within the county and 31.4 percent of the new hires would be from out-of-county areas. These percentages are based on an analysis of 10 years of campus hiring data (academic year 1991-92 through 2003-04), which shows that between 31 and 34 percent of the new employees hired during these years were hired from outside the county and the rest were hired from within the county (UCSC 2005).

Employee Dependents. The number of dependents associated with the new campus employee households who would move into the study area was estimated based on an average household size of 2.44 persons per household, which is the 2000 Census average household size for the city of Santa Cruz (US Bureau of Census 2002).

On Campus Employee Housing. The Campus has a target to house 25 percent of all faculty and 3 percent of staff on campus by 2020. The Campus estimates that it needs to add 103 new employee housing units to its existing and approved on-campus housing stock of 325 units to meet its 2020 housing targets for employees. The LRDP provides adequate land to build about 2.5 times as many units as the estimated need for new on-campus housing units for employees. For analysis in this EIR, it is assumed

that 125 new housing units for employees would be constructed on campus within the timeframe of this LRDP, in addition to housing units already approved under the 1988 LRDP, but not yet constructed.

Distribution of LRDP-Related Employee Population. The new employees that were estimated under the two scenarios described above were distributed among the study area communities in the following manner.

In conjunction with Scenario 1 (all new hires are non-local), the following assumptions were made:

- Of the projected 1,520 new employees through 2020-21, approximately 15 percent (about 228 employees) would live in neighboring counties and would not relocate into the study area, and the balance of 1,292 would relocate into the study area and would add to housing demand in the study area.
- Of these 1,292 new employees, approximately 138 employees would reside in the 125 new on-campus housing units, assuming 1.1 employee per housing unit.⁹

With respect to the remainder of the new employees (about 1,154) who would seek housing within the county, these employees were distributed between the city of Santa Cruz and the rest of Santa Cruz County based on the housing demand model described earlier in this section (BAE 2005). The housing demand model takes into account the projected incomes of the new employees, the supply and cost of both for-sale and rental housing in the study area, and employee preferences with respect to place of residence, and then distributes projected new employees between the city and the rest of the county. To transform new employees into households, the model assumes 1.1 new employee per household. The analysis further assumes that each household will require one housing unit.

With respect to Scenario 2, the following assumptions were made:

- Out of the 1,520 new employees, 68.6 percent or 1,042 employees would be hired from within the county and the remainder (about 478 employees) would be hired from outside the county.
- Of these 478 new employees that would relocate into the study area, approximately 138 employees (125 employee households) would reside in the new on-campus housing, assuming 1.1 employee per housing unit.

The remaining 340 employees (309 employee households) that would relocate into the study area were distributed between the city of Santa Cruz and the rest of the county based on the housing demand model described above.

⁹ BAE conducted an analysis of UC Santa Cruz employee database and determined that the current rate of household formation within the UC Santa Cruz employee population is 1.1 employees per household (BAE 2005).

4.11.2.4 2005 LRDP Impacts and Mitigation Measures

LRDP Impact POP-1: Development under the 2005 LRDP would directly induce substantial population growth in the study area by accommodating increased enrollment and additional employment.

Significance: Significant

LRDP Mitigation: No mitigation available

Residual Significance: Significant and unavoidable

Growth of the campus under the 2005 LRDP would directly increase the study area population by an amount ranging from a high of about 9,520 persons under Scenario 1 to a low of about 7,820 persons under Scenario 2. The population increase under each scenario is discussed below.

Scenario 1

Table 4.11-6 below presents the distribution of LRDP-related population in the study area under Scenario 1. Of the estimated 9,522 new persons in the study area under this scenario, based on assumptions listed earlier in this section, about 4,028 persons are expected to reside on the campus, about 3,514 persons are expected to live in the city of Santa Cruz, and an estimated 1,979 persons are expected to live elsewhere in the county.

**Table 4.11-6
Estimated Distribution of New Population Associated with the 2005 LRDP (Scenario 1)**

Residence Location	Students	Employees	Student Dependents	Employee Dependents	Total
On Campus	3,390	138	320	180	4,028
City of Santa Cruz	2,253	434	203	625	3,514
Rest of the County	555	563	50	811	1,979
<i>Total in Study Area</i>	<i>6,198</i>	<i>1,135</i>	<i>573</i>	<i>1,616</i>	<i>9,522</i>
Out-of-County	417	228	-	-	645
Residual Demand	335	157	-	-	492
Total New Population	6,950	1,520	573	1,616	10,659

Note:

Residual demand refers to the number of persons who would not be able to find housing within the study area at a price that they can afford based on their household income.

This increment of population that would be added to the study area as a result of campus growth under the 2005 LRDP would be substantial compared to the projected population growth in the city and the rest of Santa Cruz County. As Table 4.11-7 below shows, with about 3,514 LRDP-related persons living in Santa Cruz, LRDP-related new population would form approximately 6 percent of the city's 2020 population, and the persons added to the city under the proposed LRDP would make up more than the total increase in population projected for the city in the AMBAG forecasts. With respect to the rest of the county, LRDP-related population would constitute just under 1 percent of the total 2020 population and would make up about 9 percent of the projected growth. As noted earlier in this section, although on-

campus employment is more than adequately accounted for in AMBAG forecasts, growth in student enrollment and on-campus residential population is not accounted for in AMBAG forecasts for the city of Santa Cruz.

**Table 4.11-7
LRDP-Related Population as Percentage of Projected Population (Scenario 1)**

Community	Total 2005 LRDP-Related Population	2020 Population (AMBAG Forecast)	LRDP Population as Percent 2020 Population	AMBAG Projected Growth in Population Between 2005 and 2020	LRDP-Related Population as Percent of AMBAG Projected Growth
UC Santa Cruz	4,028	0	-	-	-
City of Santa Cruz	3,514	59,924	5.9%	2,971	118%
Rest of the County	1,979	243,393	0.8%	22,180	8.9%
Santa Cruz County Total	9,522	292,695	3.2%	25,151	37.8%

Note:

4,021 persons who would live on campus are not included in the City total but are included in the Santa Cruz County total.

Scenario 2

Table 4.11-8 below presents the distribution of LRDP-related population in the study area under Scenario 2. Under this scenario, of the estimated 7,821 new persons added to the study area, about 4,028 persons are expected to reside on the campus, about 2,958 are expected to live in the city of Santa Cruz, and an estimated 835 persons are expected to live elsewhere in the county.

**Table 4.11-8
Estimated Distribution of New Population Associated with the 2005 LRDP (Scenario 2)**

Residence Location	Students	Employees	Student Dependents	Employee Dependents	Total
On Campus	3,390	138	320	180	4,028
City of Santa Cruz	2,253	206	203	296	2,958
Rest of the County	555	94	50	136	835
<i>Total in Study Area</i>	<i>6,198</i>	<i>438</i>	<i>573</i>	<i>612</i>	<i>7,821</i>
Out-of-County	417	1,042	-	-	1,459
Residual Demand	335	40	-	-	375
Total New Population	6,950	1,520	573	612	9,655

As Table 4.11-9 below shows, with about 2,958 LRDP-related persons living in Santa Cruz under Scenario 2, LRDP-related new population would form about 5 percent of the city's 2020 population, and the persons added to the city under the proposed LRDP would almost equal to the total increase in population projected for the city in the AMBAG forecasts. With respect to the rest of the county, LRDP-related population would constitute about 0.3 percent of the total 2020 population and would make up about 3.7 percent of the projected growth.

The growth in study area population due to the 2005 LRDP would likely fall between the estimates derived under the two scenarios, and would make up between 2.7 and 3.2 percent of the study area 2020 population, and between 31 and 38 percent of the projected population growth.

**Table 4.11-9
LRDP-Related Population as Percentage of Projected Population (Scenario 2)**

Community	Total 2005 LRDP-Related Population	2020 Population (AMBAG Forecast)	LRDP Population as Percent 2020 Population	AMBAG Projected Growth in Population Between 2005 and 2020	LRDP-Related Population as Percent of AMBAG Projected Growth
UC Santa Cruz	4,028	0	-	-	-
City of Santa Cruz	2,958	59,924	4.9%	2,971	99.3%
Rest of the County	835	243,393	0.3%	22,180	3.7%
Santa Cruz County Total	7,821	292,695	2.7%	25,151	31.1%

Note: 4,021 persons that would live on campus are not included in the City total but are included in the Santa Cruz County total.

As noted earlier, although the increase in employment on the campus under the LRDP is fully accounted for in the AMBAG employment forecasts, the residential population is not included nor is the increase in student population. A substantial increase in residential population in itself is not a significant environmental effect. However, the environmental effects associated with land development, increased traffic, and expanded infrastructure and services to serve this population could be significant. The impact analyses in this EIR includes evaluations of the cumulative impacts of this LRDP-related growth and other regional growth for the study area in Section 4.12, *Public Services*, Section 4.13, *Recreation*, Section 4.14, *Traffic*, and Section 4.15, *Utilities*, and mitigation measures are included to reduce the impacts that would result from LRDP-related growth. Potential land development impacts are described in Section 6.3, *Growth-Inducing Impacts*. The effects of 2005 LRDP-related population growth on the study area transportation system and water supply are identified as significant and unavoidable environmental effects. Accordingly, the effect of increased population from the proposed project is also considered to be a significant impact. Because the proposed project is a program that includes campus population growth as an essential component, no mitigation is available to avoid or reduce this impact. Therefore, the impact is considered significant and unavoidable.

Note that regional growth induced by the 2005 LRDP via the income and employment multiplier process is addressed in Section 6.3, *Growth-Inducing Impacts*.

LRDP Impact POP-2: Campus growth under the 2005 LRDP would not indirectly induce substantial population growth in the area through extension of roads or other infrastructure.

Significance: Less than significant

LRDP Mitigation: Mitigation not required

Residual Significance: Not applicable

Additional growth beyond that directly associated with the proposed project can be triggered if the infrastructure to serve the proposed project is constructed with excess capacity, or where the lack of infrastructure is an obstacle to growth, that obstacle is removed by the project.

As discussed in Section 4.15, *Utilities*, the campus is provided water and wastewater service by the City of Santa Cruz, natural gas and electricity by Pacific Gas and Electric Company, and telecommunications by telecom providers. Under the proposed 2005 LRDP, utility systems would be expanded and extended to new areas on campus that would be developed pursuant to the 2005 LRDP. In addition, to reduce its demand for City water, as mitigation the Campus would consider the use of an existing on-campus well to draw water for irrigation purposes during drought years. All of these utility improvements would occur in conjunction with the growth in academic and administrative space that would be developed to serve increased enrollment, new research programs, and other initiatives on the campus proposed under the 2005 LRDP. The environmental effects of the growth within the confines of the campus that would be facilitated by these utility extensions are analyzed in the other sections of this EIR.

Growth in off-campus areas would not be triggered by the utility extensions serving the campus, as most of the surrounding neighborhoods are built out, and the undeveloped lands adjacent to the campus are within city or state parks and are protected from development. Cave Gulch, a small unincorporated community that is developed with a private school and rural residential homes, is not served by the city water service or wastewater collection service. Therefore, extension of these utilities to the north campus would not induce growth in the Cave Gulch neighborhood.

In addition, campus growth would not trigger growth in the Bonny Doon and the Cave Gulch area through improvements to Empire Grade Road and as a result of growth pressures. The 2005 LRDP does not propose any improvements (such as widening) to Empire Grade Road, which is a county road. Furthermore, the County has a growth management ordinance that places an annual limit on the number of residential permits for new construction that can be issued for projects in the county (this does not include UC growth). Therefore, the communities of Bonny Doon and Cave Gulch would not be expected to grow substantially as a result of indirect growth pressures from campus development.

In summary, the 2005 LRDP would not induce substantial population growth indirectly through the extension of roads and utilities or through growth pressures.

4.11.2.5 Cumulative Impacts and Mitigation Measures

LRDP Impact POP-3: Growth of the campus under the 2005 LRDP, in conjunction with other regional growth, would create a demand for housing that combined with demand created by other growth in the county, would exceed the supply.

Significance: Significant

LRDP Mitigation POP-3: The Campus shall work with the City of Santa Cruz to identify means

of providing additional housing in the city, including affordable housing, particularly in areas with good access to public transit.

Residual Significance: Significant and unavoidable

The increased population associated with the 2005 LRDP, discussed above under LRDP Impact POP-1, would result in increased demand for housing in the study area. The 2005 LRDP designates additional land area for the construction of student housing to satisfy at least 50 percent of the total projected need for all undergraduate housing and 25 percent of all graduate student housing. With respect to increased projected need for employee housing, the 2005 LRDP provides additional land area sufficient for the construction of 125 housing units on campus, which is about 8 percent of the demand for employee housing that would be produced by the increase in employees associated with the implementation of the 2005 LRDP. With respect to the rest of the students and employees who would not be housed on the campus, the housing impacts of this population on study area housing resources in conjunction with need for housing as a result of other household growth in the study area are discussed below.

LRDP-Related Need for Study Area Housing

As noted earlier, the analysis of population and housing impacts in this section is based on two scenarios. LRDP-related off-campus housing need is discussed below by each scenario.

Scenario 1. The analysis under Scenario 1 assumes that all of the new students and all of the new employees would be non-local (i.e., living outside the county) and that the vast majority of these persons would relocate into the study area, and thereby add to the study area population. Table 4.11-10 presents the projected distribution of students and employees by residence location under Scenario 1, along with the estimated number of housing units in each community that may be demanded by 2005 LRDP-related population. The assumptions and methodology used to distribute the new population are described in Section 4.11.2.3.

Of the total 6,950 new students projected under the 2005 LRDP, 3,390 would be housed on campus, about 417 would commute from homes outside Santa Cruz County, and the rest (about 3,143 students) would seek housing in the study area. Of the 1,520 new employees, 138 would be housed on campus, about 228 would commute in from homes outside the county, and 1,151 employees would seek housing in the city or the county of Santa Cruz. Assuming three students per student household and 1.1 employees per employee household, there would be 1,048 student households and 1,047 employee households that would seek a total of 2,095 housing units in the study area.

If the cost of housing (both for-sale and rental units) and income levels of student and employee households are factored in, the analysis of housing preferences and affordability conducted by BAE finds that approximately 1,144 LRDP-related households would seek and would be able to obtain affordable housing in the city of Santa Cruz. Those student and employee households that are unable to obtain housing in the city would seek housing in the rest of the county, and approximately 696 households would be able to obtain affordable housing in the rest of the county. However, not all of the students and employees who wish to live in the city or the county would be able to find housing in the study area that they could afford. As Table 4.11-10 shows, there could be about 112 student and 143 employee

households (indicated in the table as residual demand) that would be unable to find housing in the study area. This residual demand reflects the lack of an adequate number of housing units at prices or rents that the lower-income student and employee households could afford. Note that this residual demand was calculated by BAE based on the income of households, the assumption that only 30 percent of the household income would be spent on housing, the projected number of housing units in different price ranges, and the cost of for-sale and rental housing.

**Table 4.11-10
Projected Number of Housing Needed by Location and Projected Supply (Scenario 1)**

Location of Residence	No. of Students	No. of Housing Units required^a	No. of Employees	No. of Housing Units required	Total Units Needed	Projected New Housing Supply
On Campus ^b	3,390	3,390	138	125	3,515	3,515
City of Santa Cruz	2,253	751 ^c	434	395 ^d	1,146	1,684
Rest of Santa Cruz County	555	185 ^c	563	512 ^d	697	8,147
Off Campus Study Area Subtotal	2,808	936	997	907	1,843	9,831
Outside of Santa Cruz County	417	-	228	-	-	-
Residual Demand	335	112	157	143	255	-
Total	6,950		1,520		5,613	13,346

Source: BAE 2005; URS 2005.

Notes:

- (a) On campus, the number of units represent student beds.
- (b) On campus, the number of units needed is equal to the number of students housed.
- (c) Based on 3 students per housing unit.
- (d) Based on 1.1 employee per housing unit.

With respect to student households that are unable to find housing that they can afford (about 112 student households or 335 students), it is considered likely that instead of living in groups of three as is the current average for student households, in order to live in the study area, these students would live together in groups of more than three students per household. With respect to the employee households that are unable to find affordable housing, it is likely that these households would either pay more than 30 percent of the household income for housing or would live outside the county. Assuming that these employees would be willing to spend more than 30 percent of their incomes on housing, there would be enough housing in the study area to accommodate all of the employees. As discussed earlier in Section 4.11.1.5, although housing prices are also high in the neighboring counties, the existing housing inventory is larger than in Santa Cruz County; therefore, some of these employees may choose to live outside Santa Cruz County. It is also possible that more housing may be built in the region in the future than is currently reflected in AMBAG forecasts through 2020, and that the Campus may add more housing than it currently projects if it is evident that there is sufficient demand for University housing.

Note that the estimated demand for off-campus housing under this scenario is a conservative estimate (that is, likely overestimates the housing demand) for two reasons: it does not discount for those students

and campus employees who may already be living in the study area, and the analysis keeps the percentages of out-of-county commuting students and employees at current levels. As discussed under Scenario 2, a large percentage of employees could be living in the study area already when they are hired and, therefore, would not require housing. In addition, it is possible that increases in the cost of housing in the County may cause more of the new population to live outside the county in the future. Although like Santa Cruz County, housing prices in the neighboring Santa Clara, San Mateo and Monterey counties are also high, the housing inventories are somewhat larger and therefore it is possible that in the future, a greater percentage of the new students and employees would live there.

Scenario 2. Table 4.11-11 presents the estimated number of housing units that would be needed to house the LRDP-related population in the study area, assuming that about 69 percent of the new employees would already be living in the county at the time that they are hired. As this table shows, the out-of-county relocating students and employees would together seek and obtain approximately 1,209 housing units off campus in the study area. This number would represent approximately 12 percent of the projected new housing units that would be added in the study area by 2020. There would be about 149 households that would be unable to find affordable housing within the study area.

Table 4.11-11
Projected Number of Housing Needed by Location and Projected Supply (Scenario 2)

Location of Residence	No. of Students	No. of Housing Units Required ^a	No. of Employees	No. of Housing Units Required	Total Units Needed	Projected New Housing Supply
On Campus ^b	3,390	3,390	138	125	3,515	3,515
City of Santa Cruz	2,253	751 ^c	206	187 ^d	938	1,684
Rest of Santa Cruz County	555	185 ^c	94	86 ^d	271	8,147
Off Campus Study Area Subtotal		<i>936</i>		<i>273</i>	<i>1,209</i>	<i>9,831</i>
Outside of Santa Cruz County	417	-	-	-	-	-
Residual Demand	335	112	40	37	149	-
Employees Already Living in County	-	-	1,042	-	-	-
Total	6,950		1,520		4,873	13,346

Source: BAE 2005; URS 2005.

Notes:

- (a) On campus, the number of units represent student beds.
- (b) On campus, the number of units needed is equal to the number of students housed.
- (c) Based on three students per housing unit.
- (d) Based on 1.1 employee per housing unit.

Cumulative Demand for Housing in the Study Area

With respect to other regional population growth, according to AMBAG planning forecasts, between 2005 and 2020 the population of the city of Santa Cruz is projected to increase by about 2,970 persons. Based on a household size of 2.44 (the average household size for Santa Cruz per the 2000 Census), this projected growth translates into about 1,220 new households. During the same time period, according to

AMBAG planning forecasts, the city is expected to add 12,185 new jobs, which at 1.5 employed residents per household, represents about 8,123 new households, or more than six times the number of households projected based on population increase unrelated to employment. Between 2005 and 2020, based on AMBAG planning forecasts, the city is projected to add 1,684 housing units. Compared to the new households derived from the population growth (1,220), the number of projected new housing units (1,684) would be more than adequate to accommodate the projected new households, with about 1.38 units for every new household. If on the other hand, the projected new housing units (1,684) were compared to the number of households derived from new employment in AMBAG planning forecasts (8,123), there would be only 0.21 new housing unit for every household (or about 0.21 unit for every 1.5 new jobs) in the city.

Similar disproportion is evident in the projected AMBAG data for the rest of the county as well. According to AMBAG planning forecasts, between 2005 and 2020 the population in the rest of the county will increase by approximately 22,180 persons. Based on a household size of 2.71 (the average household size for Santa Cruz County per the 2000 Census), this translates into 8,185 new households. During the same time period, about 25,783 new jobs would be added in the rest of the county, which based on 1.5 employed residents per household, would translate into 10,313 new households, or more than 2,000 additional households above the number projected based on population growth only. Between 2005 and 2020, the rest of the county is projected to add 8,147 housing units. If the new housing units are compared to new households derived from population growth, it shows that there would be slightly fewer homes than the number needed to accommodate the projected increase in population (0.99 housing unit for every household). If the number of new housing units is compared to the number of projected new households derived from new employment, there would be a substantial housing deficit in the rest of the county, with about 0.79 new housing unit for every new household or 0.39 new housing unit for every 1.5 new job. Therefore, based on AMBAG's 2004 housing and employment forecasts, the growth in employment would be in excess of the growth in housing, both in the city and the rest of the county.

As discussed above, during the same period under the 2005 LRDP the Campus would add 1,520 jobs, 6,950 students and about 3,515 housing units, and based on the cost of housing, income levels, and other variables, the LRDP-related off-campus population would potentially occupy about 1,843 off-campus housing units in the study area under Scenario 1, and 1,209 off-campus housing units under Scenario 2. Table 4.11-12 compares the cumulative demand for housing to the projected supply.

**Table 4.11-12
Projected Cumulative Demand and Supply of Housing in the Study Area**

City/Community	Projected New Housing	LRDP Related Demand	Demand based on Regional Population Growth	Demand based on Regional Employment Growth	Total Demand based on Population Growth^a	Total Demand based on Employment Growth^b
Scenario 1						
City of Santa Cruz	1,684	1,146	1,220	8,123	2,366	9,269
Rest of Santa Cruz County	8,147	697	8,185	10,313	8,882	11,010
Residual Demand		255			255	255
Total	9,831	2,098	10,310	18,436	11,503	20,534
Scenario 2						
City of Santa Cruz	1,684	938	1,220	8,123	2,158	9,061
Rest of Santa Cruz County	8,147	271	8,185	10,313	8,456	10,584
Residual Demand		149			149	149
Total	9,831	1,358	9,405	18,436	10,763	19,794

Notes:

- (a) Sum of columns 3 and 4.
(b) Sum of columns 3 and 5.

Table 4.11-12 shows that if the off-campus housing need of LRDP-related households under Scenario 1 is combined with the housing need of the new households projected by AMBAG in the study area as a whole, and this number is compared to the additional housing that is projected through 2020, the supply would fall short of the need by about 1,672 housing units. If the projected employment growth were taken into account, however, the study area's housing supply would fall short of the demand even without campus growth. The incremental demand placed by LRDP-related population on the study area housing resources would further challenge the imbalance between the demand for and supply of housing in the study area. This would occur both in the city of Santa Cruz and the rest of the county. Under Scenario 2, the results are similar except that the shortfall in housing is smaller (about 932 housing units) compared to Scenario 1.

In summary, campus growth under the 2005 LRDP, in conjunction with other employment growth in the study area, would result in a demand for housing that would exceed the existing and projected housing supply. This cumulative impact would be significant. Because the demand generated by campus growth would constitute a substantial portion of the total housing demand, the project's contribution would be cumulatively considerable.

The implications of this unmet demand might be that the communities would build more housing which could result in significant effects on the environment that are discussed in Section 6.3. Alternately, the communities might not provide additional housing, and the lack of sufficient affordable housing in the study area would continue. This would force the new population to commute to the study area from communities at greater distances, which in turn would result in increased travel on regional roads and air emissions from vehicles traveling over greater distances.

To address this cumulative impact, pursuant to LRDP Mitigation POP-3, the Campus shall work with the City of Santa Cruz to encourage and facilitate the development of additional housing that could support city workforce, UC Santa Cruz faculty, staff and students, in areas with good access to public transit. Because it is uncertain that even with these efforts by the City and the Campus, adequate additional affordable housing would be built, this EIR concludes conservatively that the impact of cumulative population growth with respect to housing supply would be significant and unavoidable.

4.11.3 References

- AMBAG (Association of Monterey Bay Area Governments). 2004. 2004 AMBAG Population, Housing Unit and Employment Forecasts. April.
- AMBAG (Association of Monterey Bay Area Governments). 2005. Letter from Todd Muck, AMBAG Senior Transportation Planner, to S. Barati, URS Corporation, regarding a determination of consistency for the UC Santa Cruz 2005 Long Range Development Plan, dated July 14.
- Bay Area Economics (BAE). 2005. 2005 LRDP Housing Impact Analysis. Memorandum prepared for UC Santa Cruz. October.
- Regional Analysis and Planning Services. 2004. 2004 State of the Region Report for Monterey, San Benito, and Santa Cruz Counties.
- Santa Cruz Association of Realtors. 2005. Market Statistics – 2005 –1996 Santa Cruz County Single Family Residential Statistics.
- State of California. 2005. City/County Population and Housing Estimates, 2004. State of California, Department of Finance. May.
- UC Santa Cruz. 2004. Marine Science Campus. Coastal Long Range Development Plan Final Environmental Impact Report. September.
- UC Santa Cruz. 2005. UC Santa Cruz staff recruited from outside Santa Cruz County.
- U.S. Bureau of Census. 1990. Census of Population and Housing.
- U.S. Bureau of Census. 2002. Census 2000.