

TABLE OF CONTENTS

6.0	Growth Inducing Impacts.....	6-1
6.1	Existing Conditions.....	6-1
6.2	Growth Inducing Impacts of the 2003 LRDP.....	6-1
6.2.1	Direct Population and Employment Growth.....	6-2
6.2.2	Indirect Economic Growth.....	6-4
6.2.3	Indirect Population Growth.....	6-6
6.2.4	Provision of Infrastructure.....	6-6
6.3	References.....	6-7

6.0 GROWTH INDUCING IMPACTS

An EIR must discuss ways in which a potential project could induce growth. A project may be growth inducing if it directly or indirectly fosters economic or population growth or the construction of new housing, removes obstacles to population growth, or requires or encourages the construction of new facilities. According to CEQA Guidelines Section 15126.2(d), “it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

The analysis presented in this section discusses these factors.

6.1 EXISTING CONDITIONS

Since its initial establishment at Davis in 1906 as a center for training in agriculture and its designation in 1959 by the University of California as a general campus, the UC Davis campus has grown steadily over the years to offer 110 undergraduate majors and 70 graduate programs. In addition, the University has four professional programs: the School of Law, the Graduate School of Management, the School of Medicine, and the School of Veterinary Medicine, the latter being the only such school in California.

Commensurate with the growth in population at the state level, enrollment and employment at UC Davis have grown over the years. In 1992-93, when the last LRDP for the campus was prepared, based on a three-quarter average headcount, about 21,060 students were enrolled on the UC Davis campus. In the same year about 9,550 faculty and staff were employed on the campus. By 2001-02, the on-campus student enrollment had increased to about 24,870, and the faculty and staff had increased to approximately 10,500, an increase in the overall campus population of approximately 16 percent since 1994.

The UC Davis campus is a significant economic force in the regional economy. In 2001-02, the campus employed approximately 10,500 non-student employees and 6,400 student employees who were based on the main campus or in campus-owned or leased facilities in the City of Davis. The Campus paid approximately \$519.6 million in salaries and wages to these employees (UC Davis Information & Education Technology 2003). Apart from the income infused in the regional economy through the spending of wages and salaries by these employees, additional income is generated by the expenditures by students and visitors. Furthermore, the campus purchases goods and services from regional businesses and thereby also generates income in the region. In 2001-02, campus expenditures on goods and services (not including the hospital in Sacramento) were approximately \$400 million. This number includes School of Medicine operations, some of which occur in the Davis area and some of which are based in Sacramento (Henn 2003). Through the working of the income and employment multiplier processes, campus-related spending generates a significant number of indirect and induced jobs in the regional economy.

6.2 GROWTH INDUCING IMPACTS OF THE 2003 LRDP

Potential growth inducing impacts of the 2003 LRDP are evaluated with respect to a three-county study area surrounding the campus: Yolo, Solano and Sacramento counties. This is the area that is within easy commuting distance of the campus and currently houses about 86 percent of all students, faculty, and staff who attend school or work at UC Davis (UC Davis 2003). It is

expected that the majority of the population added to the region as a result of the 2003 LRDP would also live in this three-county study area, and therefore most of the growth impacts would occur within this area. The remainder (an estimated 14 percent) of the direct growth would occur outside this area, distributed in as many as 67 communities, and therefore is not expected to substantially affect those communities.

The 2003 LRDP would be considered growth inducing for a number of reasons:

- It would directly increase the study area population by providing facilities so that campus student population would increase from 24,870 in 2001-02 to approximately 30,000 in 2015-16. It would also cause UC Davis and non-UC Davis employment on the campus to increase from 10,650 in 2001-02 to approximately 17,740 in 2015-16. As some of the new students and most of the employees would be accompanied by dependents, the 2003 LRDP could cause the regional population to increase by an estimated 26,000 to 27,000 persons over 2001-02 levels. Assumptions used to project this growth are discussed in the following section.
- The 2003 LRDP would also indirectly increase employment and population in the region through the expenditures made by the campus, and the campus population.
- The 2003 LRDP would, however, not remove obstacles to growth or encourage the construction of new facilities not included in the 2003 LRDP.

Each of these aspects of growth inducement is discussed below, with a view to characterize the manner in which growth induced by the 2003 LRDP would affect the study area communities.

6.2.1 Direct Population and Employment Growth

With the implementation of the 2003 LRDP, the total on-campus population (not including dependents living in on-campus housing) would grow from a total of 35,520 in 2001-02 to an estimated 49,870 by 2015-16. This increase of 14,350 persons would consist of 5,130 new UC Davis students, 2,130 commuting college students, and 7,090 faculty, staff, and non-UC employees.

Approximately 5,000 student beds would be provided on campus under the 2003 LRDP with about 3,000 in the Neighborhood and about 2,000 beds on the central campus. Therefore almost the entire demand for student housing under the 2003 LRDP (except for about 150 students) would be met by on-campus housing, and approximately the same number of students who currently live off-campus would live in communities near the campus. These 150 new students would be expected to live in the City of Davis or elsewhere in the three-county study area. The current distribution of student population with approximately 80 percent living in the City of Davis, 2 percent residing in Woodland, and 6 percent living in Sacramento, would be maintained (UC Davis 2003). The proposed Community Education Center could accommodate up to 2,130 community college students. Because the goal of such a facility would be to serve the local population, the student population is assumed to consist of existing local-area residents.

The 2003 LRDP would also provide for an increase of more than 7,090 faculty, staff, and non-UC employees on the campus over 2001-02 levels. Although some of the faculty and staff employees would be expected to be already living in the three-county study area around the

campus, for purposes of this analysis it is assumed that all LRDP-related faculty, staff, and non-UC employees would be non-local and would relocate into the area to work on the campus. Assuming a household size of 2.68 persons per faculty/staff/non-UC employees, approximately 11,900 dependents could also relocate into the three-county study area.

Conservatively assuming one housing unit per faculty/staff/non-UC employee, the new employee population would require 7,090 housing units. About 500 new faculty and staff housing units would be added to the on-campus housing stock in the proposed Neighborhood. As only a small portion of the total demand for faculty and staff housing (500 out of a demand of 7,090 units) would be met on campus, the majority of the new faculty and staff would be expected to seek housing in nearby communities.

As discussed in Section 4.11 Population and Housing (Volume II), a travel survey was conducted in fall 2002 to obtain a better understanding of where student, faculty, and staff currently reside that could then be used to project the likely future distribution of LRDP-related population. Based on the data collected, about 51 percent of the campus employees currently reside in the City of Davis (Yolo County), followed by the City of Sacramento (Sacramento County) with about 13 percent, Woodland (Yolo County) with about 10 percent, Dixon (Solano County) with about 3 percent, and 2 percent each in Vacaville and Winters.

Because of low housing vacancy rates and the fact that limited growth in housing stock is projected for the City of Davis, it is expected that a higher percentage of the additional population associated with the 2003 LRDP would likely live in the more distant communities than in Davis. Based on projected housing stock, an estimated 970 LRDP-related employee households, or approximately 2,600 LRDP-related persons, would live in Davis and LRDP-related new population would form approximately 4 percent of the City's 2015 population. Other communities that would have relatively large numbers of LRDP-related persons include Sacramento with about 4,000 persons, Woodland with about 3,200 persons, and Dixon with about 940 persons. Vacaville and Winters would likely house about 760 and 670 LRDP-related persons respectively. In terms of percent total 2015 population, Winters would experience the largest percentage influx with campus-related population accounting for about 6.3 percent of the City's population; followed by Woodland with about 5.2 percent, and Dixon with about 3.8 percent. Although Sacramento would experience a large influx in terms of absolute numbers of persons, because of the large size of that city, these persons would constitute less than 1 percent of the city's 2015 population. This would also be true for Vacaville.

As a result of regional demand for housing, including that generated by the 2003 LRDP, new housing would be expected to be constructed. The growth in the housing stock in these affected communities undoubtedly would result in some environmental impacts. This EIR does not attempt to characterize specific environmental effects from the development of off-campus areas as it would be speculative to do so. However, some understanding of the nature of these effects can be obtained from the EIRs prepared by the primary affected local jurisdictions in conjunction with the adoption of their current General Plans. For instance, although the City of Davis General Plan emphasizes infill and clustered development in new areas, according to the General Plan land within the city that would be developed through 2010 would result in the conversion of approximately 430 acres of prime farmland to nonagricultural uses (Jones & Stokes 2000). Furthermore, since the publication of the General Plan, the City Council has directed city staff to consider approving new construction at the rate of 250 dwelling units per year as compared to

about 221 units per year assumed in the General Plan. This could also result in the conversion of additional farmland to urban uses. Similarly, the City of Woodland General Plan EIR notes that about 450 acres of prime farmland would be converted to residential uses through 2020 (J. Laurence Mintier & Associates 1996). The City of Dixon General Plan designates 1,400 acres to accommodate residential growth through 2025, and notes that some of this acreage would be prime farmland (City of Dixon 1993). In addition to conversion of farmland, other types of environmental impacts are also likely from the construction of new housing including impacts to plant and wildlife habitat and traffic-related noise and air quality impacts. However, as the City of Davis General Plan EIR notes, additional land developed pursuant to the City's land use diagram would result in significant impacts on biological resources through the removal of sensitive habitats that are present in the planning area, but that the impacts would be reduced to a less-than-significant level by mitigation measures identified in the EIR.

To minimize the environmental effects of new housing and other urban uses, the General Plans of the affected jurisdictions contain policies to control urban encroachment, especially on agricultural lands and sensitive habitats. Furthermore, the environmental review process of each affected jurisdiction is also designed to avoid or minimize environmental effects of specific development projects as they are proposed. However some significant and unavoidable impacts, especially related to prime farmland and habitat conversion, would be expected, and by virtue of being a contributor to the regional demand for new housing and urban amenities, the campus would contribute to these environmental impacts of overall growth in regional housing and other urban amenities.

Similarly, LRDP-related population that resides off campus in regional communities would place a demand on utilities and services such as sewer, schools, and parks in these affected communities. The impacts of this demand in conjunction with the demand due to regional growth on utilities and services in the affected communities are discussed in Section 4.12 Public Services, Section 4.13 Recreation, and Section 4.15 Utilities (Volume II). By virtue of inducing regional growth, the campus would contribute to the impacts from utility improvements.

6.2.2 Indirect Economic Growth

In addition to the direct population changes described above, additional changes in regional population would result as campus-serving businesses or other businesses move into or expand in response to the increased demand for goods and services. Therefore, apart from the direct jobs on the campus, the operation of the campus under the 2003 LRDP would result in the creation of new indirect and induced jobs. (Indirect jobs are those that are created or sustained when the campus purchases goods and services from businesses in the region, and induced jobs are created or sustained when wage incomes of those employed in direct and indirect jobs are spent on the purchase of goods and services in the region.) Although campus-specific data are not available with respect to the number of indirect and induced jobs that would be expected to result from a new job on the campus, studies conducted for other UC campuses have found the employment multiplier to range from less than 1 to about 2 (University of California 2003; Sedway Group 2001). In other words, one direct job on the campus could potentially generate or sustain one to two additional indirect or induced jobs in the region. This suggests that the 7,090 new direct faculty, staff, and non-UC employee on-campus jobs related to the 2003 LRDP could lead to 7,000 to 14,000 additional jobs in the regional economy. Additional induced jobs could also be created or supported by the new direct student jobs on campus. Preliminary results from an

ongoing study of economic impacts of UC campuses indicate that the UC Davis campus, may in fact support a total of 25,645 to 34,475 direct, indirect, and induced jobs in the region (University of California 2003). This represents a preliminary employment multiplier between 2.4 and 3.2.

Indirect jobs would be created in the three-county study area to the extent that the campus purchases goods and services from communities within this three-county area. Induced jobs would be created or sustained in those communities where campus-related income is spent. It should be noted that the extent to which a region or a specific community captures these indirect and induced effects of primary or direct jobs depends on the opportunities available to the direct job holders to spend money in the regional or local economy. If such opportunities are not available or are limited, the income “leaks” out of the local economy into other areas. For instance, an economic impact analysis conducted by the City of Davis in 1996 in support of the General Plan Update process found that, excluding grocery and automobile sectors, Davis area retail sales amounted to only 54 percent of community demand, and that much of the retail sales associated with apparel and general merchandise leaked to Sacramento and Woodland. On the other hand, the Davis area was found to be effective in capturing the sales associated with eating and drinking establishments, theater, cinema, and service establishments (Jones & Stokes 2001). The General Plan includes recommendations to further reinforce the City’s strengths and to develop opportunities to capture some of the sales that are lost to other communities.

In light of the above, it would be expected that most of the indirect and induced jobs in the food, entertainment, and service sectors would be created in the City of Davis where the majority of the off-campus population currently resides and where most of the local purchasing by students, faculty, and staff occurs. This is expected to continue to occur under the 2003 LRDP. It would be expected that the campus-related indirect and induced employment growth would result in more commercial infill development on lands that are vacant or underutilized, especially in those parts of the city that are near the campus. The City’s General Plan identified parcels of vacant or underutilized commercial land to accommodate this growth, and environmental impacts from this designation within the City of Davis through 2010 are analyzed in the General Plan Update EIR. Furthermore, as specific development projects are proposed, they will be subject to environmental review.

Some of the induced jobs would be created in other regional communities where wage incomes of the new population associated with the 2003 LRDP who live in those communities would be spent. Communities such as Sacramento and Woodland would also continue to benefit from the leakage of some of the campus-related income, as it would perhaps not be cost effective for the larger warehouse-type businesses to establish in the Davis area due to the nature of the local market.

The direct, indirect, and induced jobs described above represent the bulk of the changes in employment that would result from the implementation of the 2003 LRDP. However, additional growth is also probable. This growth is related to the “magnet effect” of campuses whereby campus-serving businesses locate in close proximity to the campus, and the “incubator effect” of university campuses whereby businesses are established near a campus by persons associated with the campus. Both types of effects vary widely by campus, and the magnitude of growth, especially due to the incubator effect, cannot be predicted with much precision. However, in anticipation of such growth, the 2003 LRDP provides for about 76 acres of land adjacent to I-80

(under the Research Park Master Plan) and on the west campus for research park initiatives. The program-level environmental effects of designating this land for this use are analyzed in Volumes I and II of this EIR, and the effects of the development of the I-80 Research Park are addressed in Volume III of this EIR.

6.2.3 Indirect Population Growth

The indirect and induced employment that would result from the implementation of the 2003 LRDP could in turn result in additional population growth as individuals move into the study area to fill these jobs. A small portion of the indirect and induced jobs can be assumed to be filled by new members of the regional population. However, a large influx of non-local population into the study area in response to the indirect and induced jobs is not expected for a number of reasons. Many of the indirect and induced jobs would be in retail or service sectors and would not require special skills. Therefore it would be reasonable to assume that these jobs would be filled by persons already in the study area who are unemployed, or by students at UC Davis, or by dependents and spouses of the persons who move into the study area in response to the new jobs on the campus. The indirect population growth that could be generated in association with the 2003 LRDP would be too small to have a significant effect.

6.2.4 Provision of Infrastructure

Growth can be triggered if the infrastructure to serve the proposed project is constructed with excess capacity, or if the lack of infrastructure is an obstacle to growth, and that obstacle is removed by the project. As discussed in Section 4.15 of Volume II of the EIR, most utilities are provided to on-campus users by the campus, and therefore, the campus controls the development of utility sources and the distribution systems. This pattern would continue under the 2003 LRDP, and as discussed in Section 4.15 Utilities (Volume II), utility systems would be expanded and extended to new areas on campus as a result of the 2003 LRDP. All on-campus expansions and extensions would occur in conjunction with the growth in building space that would be developed to serve increased enrollment and new research programs and initiatives on the campus. Because campus utilities do not serve off-campus areas, utility extensions and expansions would not lead to urban growth outside the boundary of the campus. The environmental effects of the growth within the confines of the campus due to the 2003 LRDP are analyzed in the other sections of this EIR.

With respect to off-campus utilities provided to UC Davis by other entities, no changes to the electrical system outside the campus are necessary in order to serve the needs of the campus under the 2003 LRDP. Providers of telecommunications also have fiber optic cables and other communication lines within the city streets adjacent to the campus from where additional service could be provided as needed. The one off-campus utility expansion that would be implemented to serve the growth on campus is a PG&E gas line along Russell Boulevard up to either the CHCP or the proposed Neighborhood, or a new gas pipeline from the intersection of Union Pacific Railroad and Old Davis Road to the central campus (assessed further in LRDP Impact 4.15-7). As these parts of the City of Davis adjacent to the campus are already built out and lack of natural gas service is not an obstacle to growth, the construction of the natural gas pipeline would not induce growth in Davis.

6.3 REFERENCES

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