

4.0 ENVIRONMENTAL EVALUATION

This chapter consists of thirteen individual chapters that describe the existing environmental setting within the 2020 Long Range Development Plan (2020 LRDP) area and evaluate the environmental impacts of the proposed 2020 LRDP and the Chang-Lin Tien Center for East Asian Studies.

4.0.1 SCOPE OF THE ENVIRONMENTAL EVALUATION

In accordance with Appendix G of the CEQA Guidelines, the potential environmental effects of the proposed 2020 LRDP are analyzed for the following environmental issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Seismicity and Soils
- Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Population and Housing
- Public Services
- Transportation and Traffic
- Utilities and Service System

Based upon the analysis conducted for the Initial Study,¹ which is provided in Appendix A of this EIR, impacts to agricultural resources and mineral resources were determined to be “Effects Not Found to be Significant” according to Section 15128 of the CEQA Guidelines, and are thus not analyzed in this EIR. The Initial Study also determined that the Chang-Lin Tien Center for East Asian Studies project required additional analysis for the environmental issue areas listed above, with the exception of the following:

- Hazardous Materials
- Population and Housing
- Public Services – Schools
- Public Services – Parks and Recreation

4.0.2 FORMAT OF THE ENVIRONMENTAL EVALUATION

Each of the chapters 4.1 through 4.13 begins with an introduction, as well as a summary of scoping comments received during the scoping period for this EIR. Each section follows the same general format, and consists of the following subsections:

- **Analytical Methods.** This section describes the approach used in preparing the EIR section, collecting baseline or setting information, analyzing potential impacts and determining levels of significance.
- **Regulatory Framework.** This section contains an overview of the federal and State laws and regulations applicable to each issue that would apply to development anticipated under the 2020 LRDP.

- **Local Plans and Policies.** Although the university is constitutionally exempt from local regulations when using university property in furtherance of its educational purposes, it is university policy to evaluate proposed projects for consistency with local plans and policies. This section of each chapter contains a brief overview of local plans and policies within Berkeley and Oakland that may be relevant to development under the 2020 LRDP.
- **Existing Setting.** This section describes current conditions relevant to the environmental factor reviewed.
- **Standards of Significance.** This section explains how an impact is judged to be significant in this EIR. The standards are based upon Appendix G of the CEQA Guidelines.
- **Policies and Procedures Guiding Future Project Review.** This section describes existing and proposed UC Berkeley policies and procedures, including those in the 2020 LRDP, that would influence how UC Berkeley would develop and review projects to be approved under the 2020 LRDP.
- **2020 LRDP Impacts.** This section describes potential impacts of 2020 LRDP adoption and implementation, and explains why impacts were found to be significant or less than significant based upon the standards of significance. This section also considers construction and operational impacts, where appropriate.
- **Tien Center Impacts.** This section analyzes the specific impacts of the Tien Center project, including its localized construction impacts.
- **Cumulative Impacts.** This section evaluates whether the 2020 LRDP, in combination with other reasonably foreseeable projects, including development under the City of Berkeley General Plan, UC Berkeley projects previously reviewed in accordance with CEQA, and at Lawrence Berkeley National Laboratory and University Village Albany, would result in significant cumulative impacts. The cumulative analysis methodology is described below in Section 4.0.5.
- **References.**

4.0.3 FORMAT OF IMPACT DISCUSSIONS

As stated above, each of chapters 4.1 to 4.13 contains three impact analysis discussions: 2020 LRDP Impacts, Tien Center Impacts, and Cumulative Impacts. The cumulative impact analysis is described further in Section 4.0.5. The format for the 2020 LRDP impact discussion and Tien Center impact discussion is described below. Each of these discussions has three subsections: *Effects Found Not to be Significant*, *Less Than Significant Impacts*, and *Significant Impacts and Mitigation Measures*.

EFFECTS FOUND NOT TO BE SIGNIFICANT

Based upon the analysis in the Initial Study for the 2020 LRDP and Tien Center project, certain environmental effects were determined to be “Effects Found Not to be Significant.” These effects are summarized in this subsection and the full Initial Study is presented in Appendix A.

LESS THAN SIGNIFICANT IMPACTS

This section includes a discussion of impacts which, based upon the Standards of Significance, were found to be less than significant. Since no mitigation measures are required for less than significant impacts, in most instances none are provided.

The university would continue to comply with and implement its various established programs, procedures and policies, and these are also considered part of the project description. Where relevant, these “Continuing Best Practices” are briefly described in this section and/or in the Significant Impacts and Mitigation Measures section. Ongoing implementation of Continuing Best Practices would be monitored in conjunction with monitoring of 2020 LRDP Mitigation Measures over the lifetime of the 2020 LRDP.

SIGNIFICANT IMPACTS AND MITIGATION MEASURES

This section describes the potential environmental impacts which, based upon the Standards of Significance, were found to be significant. Feasible Mitigation Measures that could reduce the severity of each impact are described. Some impacts are determined to be significant and unavoidable because the impact cannot be eliminated or reduced to a less than significant level through the implementation of Mitigation Measures. These impacts are noted in the impact statement. Some measures can only be implemented at the discretion of other agencies. All identified impacts are summarized in Table 2-1.

In addition to feasible Mitigation Measures and Continuing Best Practices, UC Berkeley would continue to comply with all applicable state and federal laws and regulations, and such compliance is considered part of the project as described.

Each significant impact, Mitigation Measure and Continuing Best Practice called out in the *Significant Impacts and Mitigation Measures* section is separately numbered.

4.0.4 TIEN CENTER PROJECT ANALYSIS

Each section of Chapter 4 includes a project-level analysis for the Chang-Lin Tien Center for East Asian Studies. This analysis is intended to satisfy the requirements of CEQA; to inform the public, the local community, responsible, trustee and federal agencies, and the university of the potentially significant environmental impacts of the Tien Center project, and feasible measures to mitigate those impacts; and to enable The Regents to consider the environmental consequences of the Tien Center when deciding whether to approve the project. This project-specific environmental analysis builds upon the broader programmatic analysis presented above for the 2020 LRDP, and focuses on evaluating and disclosing environmental impacts not previously examined that could result if the Tien Center project is implemented as proposed.

PROTOTYPICAL ENVIRONMENTAL ANALYSIS

The evaluation of the Tien Center in this EIR is a model for future environmental reviews of any project proposed to implement the 2020 LRDP. These future projects would rely on the 2020 LRDP EIR to provide information on general background, setting, and regulatory context; on overall growth-related issues; on potential impacts evaluated in sufficient detail in the 2020 LRDP EIR, where there is no more specific information that requires further analysis, or where no new mitigation measures are required; on cumulative impacts; and on alternatives to implementation of the 2020 LRDP.

In general, environmental reviews of projects implementing the 2020 LRDP would focus on more specific project-level information not available for the 2020 LRDP. Mitigation Measures identified in the LRDP EIR that apply to significant impacts of the project would be implemented as part of the project, and would be identified in the project-specific review. Other project-specific Mitigation Measures, for significant impacts not addressed in sufficient detail in the 2020 LRDP EIR, may also be implemented as part of the project; such measures would be identified in the project-specific review.

4.0.5 CUMULATIVE IMPACT ANALYSIS

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. A cumulative impact consists of an impact created as a result of the combination of the project evaluated in the EIR together with other reasonably foreseeable projects causing related impacts.

- Where the incremental effect of a project is not "cumulatively considerable," a lead agency need not consider that effect significant, but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.
- Where the cumulative impact caused by the project's incremental effect and the effects of other projects is not significant, the EIR must briefly indicate why the cumulative impact is not significant.

The cumulative impacts analyses in chapters 4.1 to 4.13 follow the same general formula and include the following subsections:

- **Geographic Context.** This describes the geographic area affected by the cumulative effect, which may differ based on the type of environmental impact under consideration.
- **Standards of Cumulative Significance.** In general these Standards are similar or identical to those used to evaluate the potential impacts of the 2020 LRDP, except as a rule they do not include Standards for which the 2020 LRDP itself has no potential for impact.
- **Cumulative Impacts.** These may be less than significant or significant and, if UC Berkeley's contribution is cumulatively considerable, may be mitigated to less than significant by proposed mitigation measures. Or, they may be significant and unavoidable, in some instances because the required mitigation is outside the jurisdiction of the University.

While the geographic contexts for cumulative environmental impacts may differ by type of impact, the analyses in chapters 4.1 to 4.13 share several basic underlying assumptions:

- Population projections for cities, counties and the Bay Region are based on ABAG *Projections 2003*, except where a jurisdiction has requested us to substitute its own projections, as the city of Berkeley has done.²
- ABAG staff have advised the university that *Projections 2003* does not include the increment of growth in enrollment and employment proposed in the 2020 LRDP. Therefore, this EIR conservatively assumes that the entire 2020 LRDP program, as well as the program proposed for the Lawrence Berkeley National Laboratory 2004

LRDP,³ represents population growth above and beyond the 2020 conditions forecast in *Projections 2003*. This is a particularly conservative assumption because city of Berkeley projections, which are included in ABAG's modeling, include an allowance for growth at UC Berkeley, per the city of Berkeley General Plan EIR.

- The cumulative impact analyses assume private sector development would follow the patterns described in current city and county general plans and other adopted land use plans and policies, as well as the proposed city of Berkeley Southside Plan.
- Within the relevant geographic context each cumulative impacts analysis considers the combination of effects due to the 2020 LRDP, the Lawrence Berkeley National Laboratory 2004 LRDP, proposed UC Berkeley development likely to occur even if the 2020 LRDP is not approved, including build-out of the projects analyzed in the NEQSS EIR and the Underhill Area Projects EIR, proposed UC Berkeley development at University Village Albany, and anticipated growth under the relevant city and/or county general plans and other land use plans and policies in determining the significance of cumulative impact.
- The cumulative impacts analyses also consider the transportation improvements proposed under the AC Transit Major Investment Study, Berkeley/Oakland/San Leandro Corridor.
- The cumulative impacts analyses do not assume any additional development at the UC Berkeley Richmond Field Station. While such development is possible within the timeframe of the 2020 LRDP, at present there are no plans that define the nature or magnitude of such development to a level sufficient to allow environmental analysis. Any such development would be evaluated in a separate, future environmental review.

4.0.6 CONSTRUCTION ACTIVITY

The construction of 2020 LRDP projects is expected to continue throughout the life of the 2020 LRDP, at varying levels of intensity and varying locations. The environmental analyses in Chapter 4 assume no more than one million gross square feet of construction would be underway at any one time within the Campus Park, Adjacent Blocks, Southside and Hill Campus land use zones, which is approximately equal to the maximum level of construction underway at the time the Existing Setting data were collected in 2002 and 2003. Thus, the aggregate effects of the maximum level of construction foreseen under the 2020 LRDP are already reflected in the existing setting.

TABLE 4.0-1
CUMULATIVE ANALYSIS ASSUMPTIONS

Jurisdiction	2000	Population		2000	Households		2000	Jobs	
		Net Change	2020		Net Change	2020		Net Change	2020
Berkeley ^a	106,350	6,750	113,100	44,955	3,655	48,610	77,200	6,630	83,830
El Cerrito	23,171	1,229	24,400	10,208	682	10,890	7,970	800	8,770
Albany	16,444	1,556	18,000	7,011	389	7,400	4,890	2,340	7,230
Oakland ^b	399,484	37,606	437,090	150,790	15,460	166,250	193,950	41,050– 46,050	235,000– 240,000
North Oakland ^b	46,912	1,788	48,700	22,590	980	23,570	16,537	1,493	18,030
Emeryville	6,882	2,618	9,500	3,975	1,555	5,350	18,590	4,410	21,390
Alameda	72,259	10,841	83,100	30,226	3,824	34,050	27,160	15,450	42,610
Richmond	99,216	19,184	118,400	34,625	7,085	41,710	42,340	11,470	53,810
Kensington	4,772	278	5,050	2,123	135	2,258	52	13	65
LBNL ^c	4,300	1,200	5,500	n/a	n/a	n/a	included in population		

^a Phil Kamlarz, city of Berkeley, Letter to UC Berkeley, July 10, 2003, page 5.

^b Hausrath Economics Group, *Summary of Cumulative Growth Scenario for Oakland*, April 2003.

^c LBNL, *Revised Notice of Preparation: Draft EIR*, October 28, 2003, page 8.

Source: ABAG *Projections 2003* except where noted above.

4.0.7 REFERENCES

- ¹ UC Berkeley, *Notice of Preparation: Environmental Impact Report for the 2020 LRDP and Chang-Lin Tien Center for East Asian Studies*, August 29, 2003.
- ² Kamlarz, Phil, City of Berkeley. Written communication, July 10, 2003.
- ³ Lawrence Berkeley National Laboratory (LBNL), *Revised Notice of Preparation: Draft Environmental Impact Report*, October 28, 2003, page 8.

