



CAPITAL PROJECTS
PHYSICAL AND ENVIRONMENTAL PLANNING
300 A & E BUILDING, # 1382
BERKELEY, CALIFORNIA 94720-1382

August 29, 2003

State of California
Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

NOTICE OF PREPARATION ENVIRONMENTAL IMPACT REPORT

Project Title: UC Berkeley 2020 Long Range Development Plan and
Chang-Lin Tien Center for East Asian Studies

Project Location: University of California, Berkeley

County: Alameda County, California

Project Description: The University of California, Berkeley (UC Berkeley) proposes to prepare and adopt the 2020 Long Range Development Plan ("LRDP"), a guide to future land use and physical development for the UC Berkeley campus through academic year 2020-21. Also proposed is the Chang-Lin Tien Center for East Asian Studies, the first individual project planned under the 2020 LRDP. More information on both the 2020 LRDP and the Tien Center may be found in the attached Project Description.

Environmental Review and Comment: The University of California will be the Lead Agency and will prepare an Environmental Impact Report (EIR) to evaluate the potential environmental effects of implementing the 2020 LRDP. The EIR will provide a program level environmental review of campus development through 2020-21, and to support consideration of specific future projects as they occur. The EIR will also provide a project level analysis of the Tien Center project.

An Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the University of California Guidelines for the Implementation of CEQA, to identify the environmental issues to be addressed in the 2020 LRDP and Tien Center EIR. The 2020 LRDP and Tien Center EIR will consider potential environmental effects in the following resource 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, recreation, transportation and traffic, and utilities and service systems. The Initial Study has determined

that the 2020 LRDP would not have potential impacts on mineral resources or agricultural resources, and therefore those resource areas will not be analyzed in the 2020 LRDP EIR.

Copies of the Initial Study are available for review during normal operating hours at the offices of Capital Projects' Physical and Environmental Planning offices, 100 A&E Building on the UC Berkeley campus and at 1936 University Avenue, Suite 300, in downtown Berkeley; at the main branch of the Berkeley Public Library, 2090 Kittredge Avenue; and online at <http://www.cp.berkeley.edu>.

We appreciate your prompt acknowledgement and review of this Initial Study. Due to the time limits mandated by state law, the document's 30-day review period will extend from August 29, 2003 to September 29, 2003. Comments must be received before 5:00 pm on September 29, 2003. They may be e-mailed to 2020LRDP@cp.berkeley.edu or mailed to:

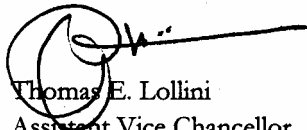
Jennifer Lawrence
Principal Planner
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1936 University Ave
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Please include a subject line indicating Scoping Comment: 2020 LRDP and Tien Center EIR.

A public scoping meeting for the 2020 LRDP and Tien Center EIR will be held on Monday, September 22, 2003 from 5 pm to 9 pm at the Clark Kerr Campus Krutch Theater, 2601 Warring Street, Berkeley. Interested individuals may offer written or oral comments on the proposed scope of the environmental analysis, which will become part of the administrative record for the EIR.

If you have any questions about the environmental review, please contact Jennifer Lawrence, Principal Planner, Physical and Environmental Planning, at (510) 642-7720.

Sincerely,



Thomas E. Lollini
Assistant Vice Chancellor
Physical and Environmental Planning
Capital Projects

Enclosures: 15 copies of the UC Berkeley 2020 LRDP and Tien Center Initial Study

cc: Notice of Preparation and Initial Study sent to addressees on attached list

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Planning
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State of California
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Sacramento CA 95814

Mr. Dwight Dutschke
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**Resource Planning &
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Mr. Dan Buford
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Sacramento Fish & Wildlife Office
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Ms. Sherry Christensen, Warden
Alameda Field Office
California Dept of Fish & Game
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Sacramento CA 95812-4025

California Department of Health
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Sacramento, CA 94234-7320

**Public Repositories
(via hand delivery)**

Environmental Design Library
Reference Desk
210 Wurster Hall
UC Berkeley Campus

Moffitt Library
Reference Desk
UC Berkeley Campus

Berkeley Public Library
Reference Desk – Main Branch
2090 Kittredge Street
Berkeley CA 94704

Oakland Public Library
Reference Desk – Rockridge Branch
5366 College Avenue
Oakland CA 94618

Albany Public Library
Reference Desk
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PROJECT DESCRIPTION

2020 LONG RANGE DEVELOPMENT PLAN AND CHANG-LIN TIEN CENTER FOR EAST ASIAN STUDIES
UNIVERSITY OF CALIFORNIA, BERKELEY

BACKGROUND

Our mission at UC Berkeley is to deliver programs of instruction, research and public service of exceptional quality to the state of California. Over the years, our performance in support of this mission has not only equaled but often outpaced the nation's elite private universities, despite their longer histories and far larger private endowments. The excellence of UC Berkeley is a testament to the vision and public spirit of the people of California, who have sustained us for over a century as a premier research university, while also ensuring a UC Berkeley education remains within reach of every deserving student.

LONG RANGE DEVELOPMENT PLAN

Each University of California campus is required to maintain a Long Range Development Plan (LRDP), a document that defines the general framework for land use and physical development within a specific timeframe. State law (Public Resources Code 21080.09) also requires an Environmental Impact Report (EIR) to be prepared for any new or updated LRDP, pursuant to the California Environmental Quality Act (CEQA).

UC Berkeley's current LRDP was approved in 1990, and was subsequently amended to increase the maximum amount of academic and support program space in 2002. However, the world and the role of UC Berkeley within it have changed significantly since 1990. A renewed vision is necessary to address the challenges UC Berkeley faces in the 21st century, and maintain our historic standard of academic excellence. These challenges include:

- to pursue exciting new fields of inquiry and discovery, and achieve excellence in every field we pursue,
- to maintain the unique breadth and variety of our academic programs, and a strong and vital intellectual community,
- to provide every student with an outstanding education, in which critical inquiry, analysis and discovery are integral to the coursework,
- to strengthen our ability to recruit and retain exceptional individuals, and ensure the campus reflects the full social and cultural spectrum of Californians,
- to provide the space, technology, and infrastructure required to meet the demands of leading edge instruction and research,
- to preserve our extraordinary legacy of landscape and architecture, and become a model of wise and sustainable growth,
- to preserve the character and livability of the city around us, and enhance the economic and cultural synergy of city and university,
- to ensure each capital investment represents the optimal use of public resources, and
- to serve the people of California, and uphold our standard as the best public research university in the world.

To enable UC Berkeley to maintain and build upon this standard, our current UC Berkeley LRDP is being updated, to guide the capital investment required to meet the academic goals of the campus and University through academic year 2020-2021.

The 2020 LRDP will describe both the scope and nature of development proposed within this timeframe, as well as land use principles and policies to guide the location, scale and design of individual capital projects.

The EIR will provide a comprehensive program-level analysis of the 2020 LRDP, and its potential impacts on the environment, in accordance with Section 15168 of the CEQA Guidelines. In accordance with section 15161 of the CEQA Guidelines, the EIR will also include a project-specific analysis of the proposed Chang-Lin Tien Center for East Asian Studies (Tien Center), the initial project to be built under the 2020 LRDP.

The Draft EIR will be presented to the public and relevant governmental agencies for review and comment, and those comments will then be taken into consideration in preparing the Final EIR. The 2020 LRDP and the Final EIR must be approved by the Regents of the University of California before the 2020 LRDP program and Tien Center project may be implemented.

The 2020 LRDP will not commit the University to any specific project. Change is inevitable, and the University must retain the ability to adjust its development priorities in response. However, the scope of the program to be described in the 2020 LRDP represents a maximum amount of net new growth in the UC Berkeley space inventory through 2020-2021, which the University could substantially exceed only by amending the LRDP. Subsequent capital projects at UC Berkeley will be reviewed for consistency with the LRDP, its EIR, and compliance with CEQA.

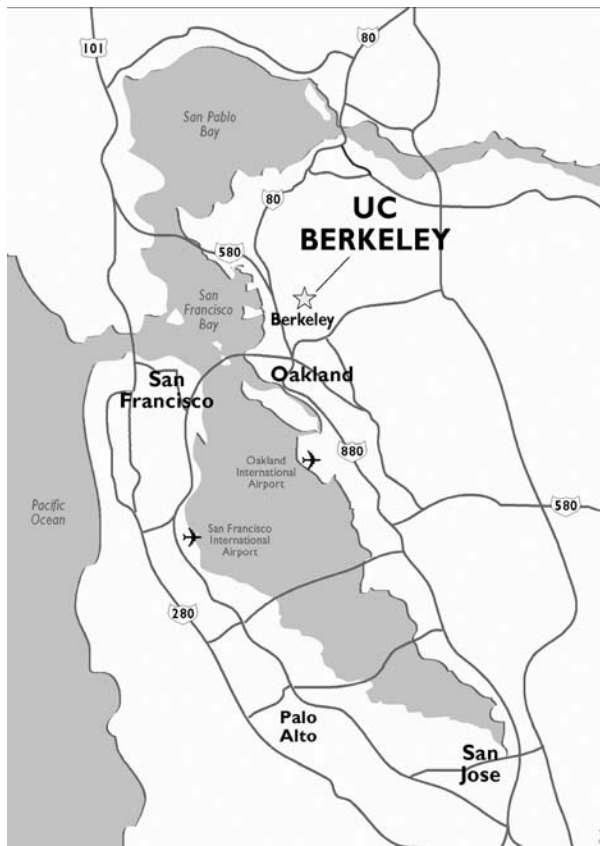


FIGURE 1. REGIONAL LOCATION

We expect to complete and submit the 2020 LRDP and Final EIR to the Regents for their consideration in Fall 2004. With this Notice of Preparation, UC Berkeley commences the CEQA process, and we invite interested agencies and members of the public to comment on the scope of the environmental analysis and evaluations of alternatives.

Because the campus is already severely constrained in terms of facilities, however, one or more urgent projects may have to commence CEQA review in advance of Regents' approval of the 2020 LRDP. Any such projects will be consistent with the 2020 LRDP, and their relationship to the 2020 LRDP program will be clearly described in their individual project-level CEQA analyses.

PROJECT CONTEXT

UC Berkeley is located approximately ten miles east of San Francisco, as shown in figure 1. Interstate 80, Highway 13, Highway 24, and Interstate 580 provide regional vehicular access to the campus. Regional transit access is provided by Bay Area Rapid Transit District (BART) and Alameda-Contra Costa Transit (AC Transit).

While the UC Berkeley campus today is a complex of several sites both in and outside the City of Berkeley, over half of the campus' built space is located on the historic 180 acre Campus Park, as described below. The city surrounds the Campus Park on the north, west and south with a dense mix of residential, institutional and commercial uses: the blocks adjacent to the Campus Park include several major University owned properties.

To the east, University owned land extends into the east bay hills from the Campus Park to Grizzly Peak Boulevard, which corresponds roughly with the Alameda-Contra Costa county line. The total area of the Campus Park and the adjacent Hill Campus to the east is roughly 1200 acres: over 95% of this area is located within Alameda County, with the easternmost portion in Contra Costa County.

200 of these acres are managed by the Lawrence Berkeley National Laboratory under federal jurisdiction, and are outside the scope of the UC Berkeley 2020 LRDP: LBNL is preparing its own LRDP for the land it manages. Other UC Berkeley operated properties include the 50-acre Clark Kerr Campus southeast of the Campus Park, as well as several other properties both in and outside the City of Berkeley, as described below. UC Berkeley will coordinate with LBNL to present the combined environmental effects of both LRDPs.

PROJECT SCOPE

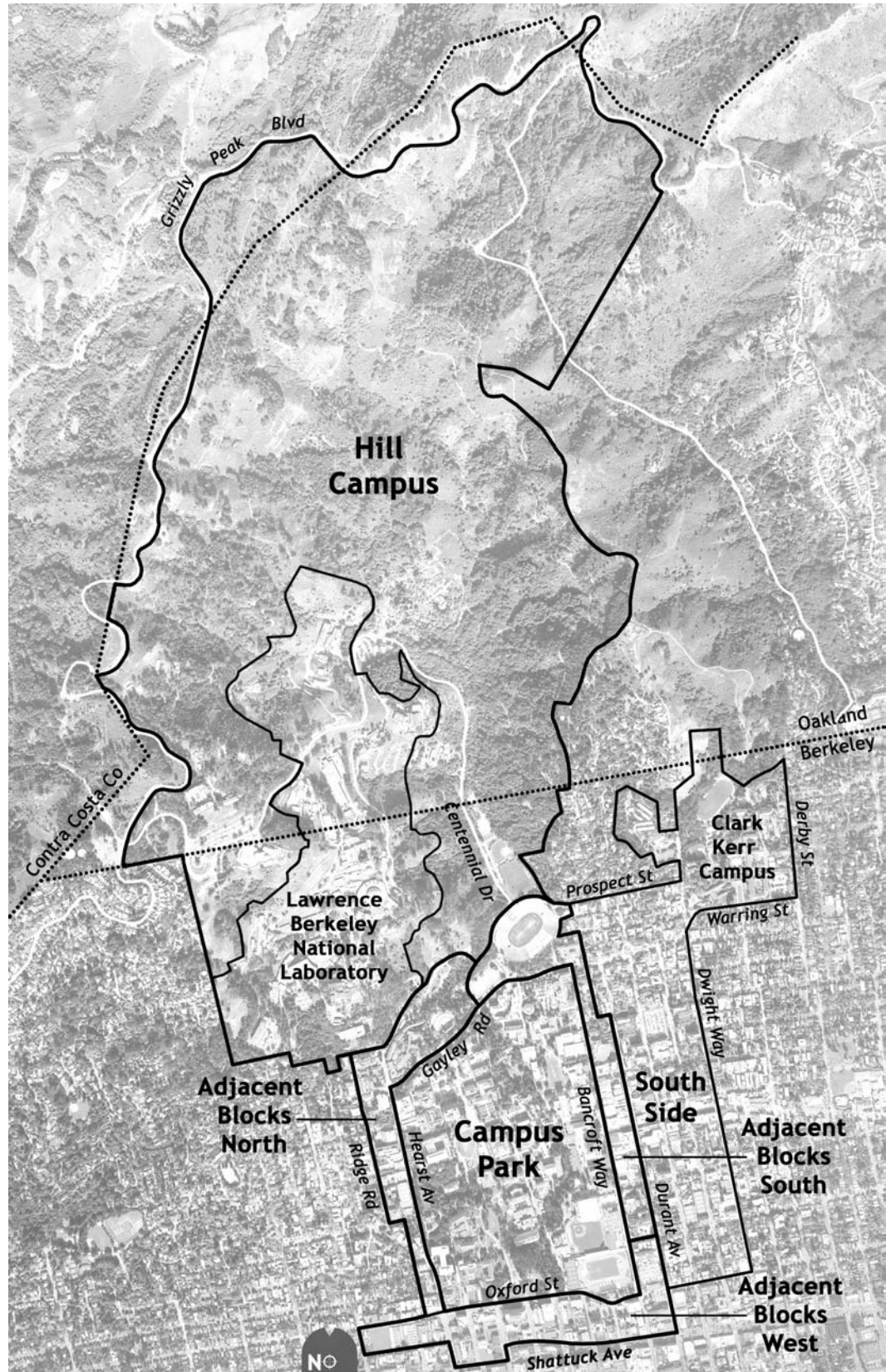
The purpose of the 2020 LRDP is to guide future land use and capital investment through academic year 2020-21. While the campus functions as a single academic enterprise, the areas that comprise it differ significantly in terms of physical capacity and environmental sensitivity. To allow more meaningful analyses, the 2020 LRDP will be organized in terms of the Land Use Zones listed below and depicted in figure 2:

- Campus Park
- Adjacent Blocks North
- Adjacent Blocks West
- Adjacent Blocks South
- Southside
- Hill Campus
- Other Berkeley Sites
- Housing Zone

As described below, the campus' objectives through 2020 include a significant program of new University housing. These objectives include location criteria which define the Housing Zone in the 2020 LRDP: new lower division student housing must be within a one mile radius of the center of campus, while other new undergraduate and graduate student housing must be within this one mile radius or within a block of a transit line providing trips to campus in under 20 minutes.

As in the current LRDP, the scope of the 2020 LRDP will exclude University Village Albany and Richmond Field Station. It also excludes remote field stations as well as other campus properties lying entirely outside the City of Berkeley: these sites are sufficiently distant and different from the Campus Park and its environs to merit separate environmental review.

FIGURE 2. LAND USE ZONES



PROJECT DESCRIPTION

The ‘project’ under consideration in this EIR includes:

- The UC Berkeley 2020 LRDP (program-level analysis with detail to support subsequent project approvals) *and*
- The Chang-Lin Tien Center for East Asian Studies (project-level analysis)

The timeframe of the 2020 LRDP will extend through academic year 2020-2021, although the actual pace and sequence of individual capital projects will depend on a number of factors that can not be entirely predicted at this time, including the availability of state and other capital resources, future directions of research and instruction, shifts in demand among academic disciplines, and the emergence of new problems of societal importance.

While the 2020 LRDP is still in preparation, UC Berkeley has established some general parameters for the capital program, as described below. These parameters will serve as the basis for the environmental analyses conducted for the EIR.

Similarly, while the Tien Center is presently at a preliminary stage of architectural design, program parameters have been established for the project which, together with the general design guidelines to be prescribed in the 2020 LRDP, will serve as the basis for the environmental analysis. As the first project to be built under the new 2020 LRDP, the Tien Center will serve as a useful example of how the principles articulated in the LRDP would be realized in the design of an actual project.

DRIVERS FOR GROWTH

Under the Master Plan for Higher Education, the University of California is charged to admit from among the top 12.5% of California high school graduates, as well as the top 4% of the graduates of each high school. Due to the projected growth in the number of these students, the University as a whole is projected to increase enrollment by over 63,000 during the period 1998-2010 to meet this mandate. As part of this strategy, UC Berkeley has been requested to evaluate its ability to accommodate an increase of 4,000 students over the base year 1998. This represents an increase in enrollment of roughly 13%: a significant challenge for any campus, but particularly for a mature, urban campus with almost no vacant land.

UC Berkeley has also experienced steady growth in research, and we expect this trend to continue. Over the last decade of the 20th century, external research funding increased in real terms by an average of roughly 3.6% per year: over 90% of this funding comes from federal, state and nonprofit organizations. While our limits on space require us to be very selective in pursuing new projects, a strong and vital research program is fundamental to our mission of public service, and must be supported by adequate capital investment.

The research and scholarship pursued by our faculty, postdoctoral students, researchers and students has led to improved agricultural and industrial productivity, to advances in human and environmental health, and to new insights into personal and social behavior. External research funds also represent a significant source of income to the regional economy, and a significant generator of new jobs both at the University and in the private sector.

But research is also integral to, and inseparable from, the quality of a UC Berkeley education. As a research university, UC Berkeley provides its students with a unique experience, one in which critical inquiry, analysis, and discovery are integral to the coursework. Our students are expected to play an active role in research, under the guidance of faculty who are themselves engaged in creating, not merely imparting knowledge. UC Berkeley must continue to pursue promising new avenues of inquiry and discovery in order to provide this experience and, in particular, to enable us to significantly expand the scope of research-based education at the undergraduate level.

STRATEGIC ACADEMIC PLAN

As the initial step toward a new capital investment strategy, UC Berkeley began work in fall 2000 on a Strategic Academic Plan. The Plan, developed by a committee of faculty, students, and academic and administrative staff, and refined through a series of campus forums, is now complete and viewable at

<http://www.berkeley.edu/news/media/releases/2003/05/sap/plan.pdf>

The Plan describes the challenges UC Berkeley must address to maintain our standard of excellence, and recommends ten key principles to guide our future practices and initiatives. While those principles cover the entire scope of the academic enterprise, several are directly relevant to the capital investment program to be defined in the 2020 LRDP. For example:

- the need to limit future enrollment growth at UC Berkeley, and focus more capital resources on renewing our aging campus to meet the demands of modern education and research,
- the need to concentrate future academic growth on the Campus Park and its adjacent blocks, to encourage the synergy among disciplines that leads to new insight and discovery, and
- the need to invest in more University housing near campus, to ensure our students have full access to the campus' academic resources and intellectual life.

POPULATION

By 2020, we estimate our campus headcount (the number of people enrolled or employed at the University) during the regular academic year may increase by up to 12% over what it is today, as shown in table 1: the result of growth in both enrollment and sponsored research.

TABLE 1. ESTIMATED MAXIMUM CAMPUS HEADCOUNT

	Actual Headcount 2001-2002	Net Addl Headcount 2020 LRDP	Est Total Headcount 2020
Students			
Regular Terms*	31,800	1,650	33,450
<i>Summer</i>	<i>11,400</i>	<i>5,700</i>	<i>17,100</i>
Faculty**	1,758	220	1,980
Academic Staff Postdocs & Visiting Scholars**	3,041	1,840	4,870
Nonacademic Staff**	8,136	810	8,950
Other Visitors & Vendors	1,200	800	2,000
Estimated Regular Terms Headcount	45,935	5,320	51,250
Estimated On-Campus Headcount***	44,834		

* Average fall-spring headcount.

** Excludes student workers to avoid double counting.

*** Excludes off campus programs and other exclusions per April 2002 Population Report to City of Berkeley

PROGRAM SPACE

By 2020, we estimate the space demands of campus academic and support programs may grow by up to 18% over current and approved space, as shown in table 2. Our academic programs require more space not only to educate a larger student body, but also to support new methods of inquiry and discovery. The complex problems we are exploring at UC Berkeley today require a combination of focused, individual work and work in interactive teams, often comprised of several academic disciplines. The campus must provide adequate space for both, with the high performance technology and infrastructure modern research and instruction demand.

However, our estimates of future space demand are not due entirely to future program growth: some new space is required just to compensate for the shortages we have today. The most recent survey of space at UC Berkeley, in 2001-2002, revealed a space deficit of roughly 450,000 GSF in academic programs alone.

UC Berkeley also has roughly 450,000 GSF of leased space in various locations in and outside Berkeley, and some of this space is deficient in terms of life safety, functionality, or both. Our estimate of future space demand also includes a contingency for the strategic replacement of some of this leased space with new University-owned space.

We expect a substantial portion of the future space demand in academic and support programs to consist of research laboratory space, along with some expansion of our animal research facilities. Research labs at UC Berkeley are a very broad category of space and include a wide variety of types, from biology and chemistry to physics and engineering. In fact, many future research labs will house multidisciplinary teams drawn from several fields. Since we can not predict the exact combination of future lab types, our environmental analyses for the 2020 LRDP will be based on one or more lab prototypes which provide a maximum estimate of potential environmental impacts.

We also expect the demand for student services to grow, not only to serve more students, but also to improve the range and quality of those services. And, while UC Berkeley is fortunate to have one of the world's great university libraries, we must continue to augment and expand its resources to maintain their relevance to future research and scholarship.

TABLE 2. ESTIMATED MAXIMUM SPACE DEMAND

	Actual + CEQA Approved UC Berkeley Space 2001-2002	Net Additional Space 2020 LRDP	Estimated Total Space 2020
Academic & Support (GSF)*	12,100,000	2,200,000	14,300,000
Housing (bed spaces)	8,200	2,600	10,800 **
Parking (spaces)	7,600	2,300	9,900

* 2001-2002 A&S space includes all buildings except those primarily housing or parking.

* Future estimates of A&S space do not include new housing or new parking.

** 2020 estimate includes up to 200 family-suitable units for faculty, staff, or visiting scholars.

** Does not include 800-1000 beds proposed at University Village Albany: outside 2020 LRDP scope.

HOUSING & PARKING

By 2020, our objective is to increase the amount of University housing within the 2020 LRDP scope by up to 32% over current and approved beds, as shown in table 2. The shortage of good and reasonably priced housing near campus presents a formidable challenge to the pursuit of a UC Berkeley education, and future campus growth will further increase demand. More and better housing near campus is required to provide our students with the access to campus resources, and the community of peers and mentors, they require to excel. Up to 200 of the proposed new bed spaces may be designed as units suitable for faculty or staff.

By 2020, our objective is to increase the amount of campus parking by up to 30% over current and approved spaces, as shown in table 2. While UC Berkeley has an exemplary record of promoting alternatives to the private auto, the demand for parking today is greater than the supply, and future campus growth will further increase demand. More parking near campus is required to ensure full access to its programs, resources and intellectual life.

Because the state provides no funds for University housing or parking, the entire cost of construction, operation, and maintenance must be supported by housing and parking revenues. Our objectives to improve the supply of housing and parking must therefore be balanced by the need to keep prices at reasonable levels, and avoid building surplus capacity. Our 2020 targets may be adjusted in the future to reflect changes in demand and market conditions, but UC Berkeley may not substantially exceed the proposed number of net new housing bed spaces or parking spaces without amending the 2020 LRDP.

LAND USE ZONES

With the exception of the Tien Center, the 2020 LRDP will not identify specific individual projects. Rather, it will establish ‘capacity envelopes’ in each Land Use Zone for program space, housing and parking. Preliminary values for these envelopes are shown in table 3.

In order to provide the campus some flexibility in siting new projects to meet future needs, the sum of the capacity envelopes for each type of space is greater than total estimated demand. However, the cumulative net new space constructed by UC Berkeley, excluding projects already reviewed under CEQA, may not substantially exceed the NTE (not to exceed) figures in table 3 without an amendment to the 2020 LRDP. Should net new space substantially exceed a capacity envelope in any zone, subsequent environmental review would examine whether new environmental impacts not examined in the 2020 LRDP EIR would occur.

A fundamental principle of the Strategic Academic Plan is that the academic enterprise at UC Berkeley should be concentrated on and around the Campus Park, in order to support the dynamic, interactive culture a modern research university demands. 90-100% of future space demand in academic and support programs is planned to be accommodated on the Campus Park or its Adjacent Blocks, primarily the blocks adjacent to the west.

New parking is planned be located at the Campus Park perimeter or on the blocks adjacent to the west and south. In order to both maximize student access to campus and minimize student auto trips, all new student housing is planned to be located within a ‘Housing Zone’, defined as within a mile of the center of campus, or within a block of a transit line providing trips to campus in under 20 minutes, as shown in table 3.

TABLE 3. ESTIMATED MAXIMUM NEW SPACE BY ZONE

	Max Net Addl Academic & Support GSF	Max Net Addl Housing Bed Spaces	Max Net Addl Parking Spaces
Campus Park	1,000,000		600
Adjacent Blocks			
North	50,000		
West	800,000		1,300
South	400,000		600
Southside	50,000		
Hill Campus	100,000	100 *	
Other Berkeley	50,000		
Housing Zone		2,600 **	
Total Net Addl Space NTE	2,200,000	2,600	2,300

* Represents up to 100 family-suitable units for faculty and/or staff

** Includes up to 100 family-suitable units for faculty and/or staff

Note: In order to allow the university some flexibility in siting individual projects, the sum of the allocations for individual land use zones is greater than the maximum 'not to exceed' (NTE) totals for all zones combined. However, the university may not substantially exceed the NTE totals without amending the 2020 LRDP.

CONSTRUCTION PROGRAM

While project-specific environmental documents tend to view construction impacts as temporary, the program envisioned for the 2020 LRDP would entail a sequence of numerous and potentially overlapping construction projects. The 2020 LRDP EIR will assume that a number of construction projects may be underway at any one time in the Campus Park, Adjacent Blocks, Southside and Hill Campus.

DESIGN FRAMEWORK

While we are proud of, and committed to, our service to the people of California, we also recognize the campus does not exist apart from the city around it. The city is as much a part of the UC Berkeley experience as the campus itself, and each new University project should respect and enhance the city's unique character and livability. In particular, the blocks west of campus hold great potential for University initiatives that strengthen the synergy of city and campus, and support the cultural and economic vitality of downtown Berkeley.

We also recognize the campus represents an extraordinary legacy of landscape and architecture. We are committed to ensuring the capital program described in the 2020 LRDP preserves and enhances this legacy. Toward this goal, UC Berkeley recently completed the New Century Plan, an advisory document used by the campus to guide future capital investment decisions. The New Century Plan may be viewed at <http://www.cp.berkeley.edu>

At its heart, UC Berkeley remains a 'campus park', and its magnificent landscape and variety of open spaces is what gives this park its unique and memorable identity. The campus also contains many historic buildings of great distinction, and their elegance and civic presence serve as models for future University projects. University buildings tend to last far longer than their initial contents, and should have the quality, durability and flexibility to serve UC Berkeley and the people of California for generations.

The 2020 LRDP will include general design principles and guidelines for each Land Use Zone, as well as procedures for project review, to ensure these goals are as fully realized in the location and design of each future project as possible. The New Century Plan prescribes design and program guidelines for the Campus Park, and we propose to incorporate them into the 2020 LRDP. Design principles and guidelines in the 2020 LRDP for sites outside the Campus Park and Hill Campus will be informed by the policies of the relevant municipal general plans.

CHANG-LIN TIEN CENTER FOR EAST ASIAN STUDIES

The Tien Center, the first project planned under the 2020 LRDP, is a two-phase project, to be built at the base of Observatory Hill facing the Central Glades, as shown in figure 3. The Tien Center will consolidate the various programs of the East Asian Library, the Institute of East Asian Studies, and the Department of East Asian Languages and Cultures.

PROGRAM

The roughly 67,000 GSF phase 1 building will house the East Asian Library, presently located in spaces in California and Durant Halls and 2223 Fulton. Construction of phase 1 is planned to begin once the 2020 LRDP EIR is certified by the Regents and the project is approved. The roughly 36,500 GSF phase 2 building will house the Institute of East Asian Studies and the Department of East Asian Languages and Cultures, presently located in Durant and Dwinelle Halls and 2223 Fulton. Program space in phase 2 will include academic and administrative offices, as well as departmental and general campus classrooms. The schedule for phase 2 is not yet determined.

28 permanent staff will be housed in the East Asian Library, an increase of 5 over the 23 current permanent staff. The Library will also have 18 student workers, a number roughly equal to the current average of EAL student workers. Staff counts for phase 2 are not yet determined, but will fall within the 2020 headcount estimates for the 2020 LRDP.

Reoccupation of the space vacated by current activities is not itself expected to result in any significant increase in campus staff. The 2223 Fulton building is planned to be demolished due to seismic deficiencies as soon as it is entirely vacated. The released space in Durant, California and Dwinelle Halls is expected to be utilized to relieve overcrowding in other academic and administrative units, given the aforementioned deficit in campus academic space.

The phase 1 building will displace 31 existing surface parking spaces: these spaces will be replaced through the program of new parking construction described in the 2020 LRDP.

DESIGN

The Tien Center is envisioned as a composition of two rectangular buildings. Phase 1 will be located at the south base of Observatory Hill on the site of the existing parking lot, facing Memorial Glade and Doe Library, and aligned with the central axis of the Glade.

Phase 2 will be sited at the west base of Observatory Hill adjacent to Haviland Hall, oriented 90° to phase 1. Each building will be roughly 75' in height above the existing ground plane.

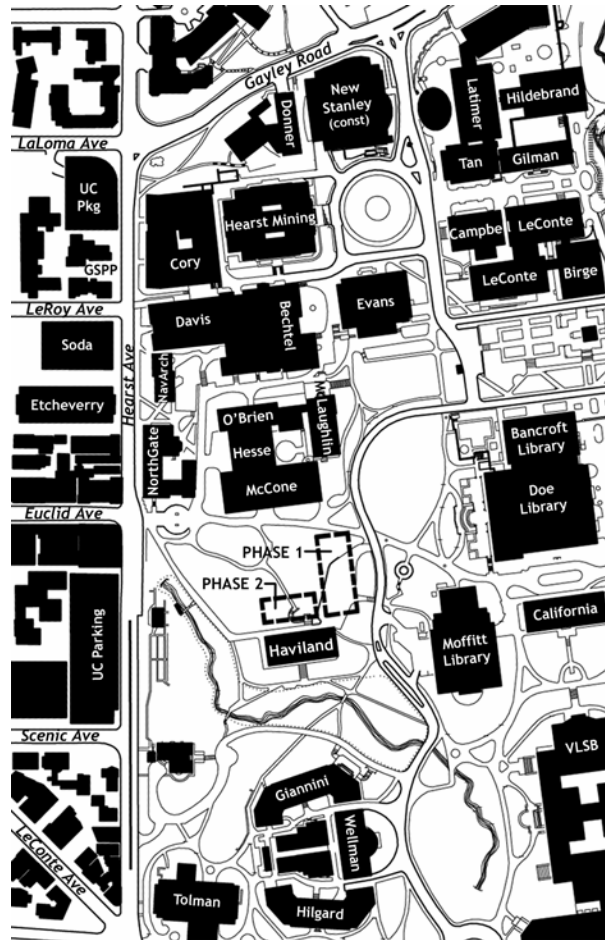


FIGURE 3. TIEN CENTER LOCATION

The Tien Center will occupy one of the most visible sites on the UC Berkeley campus, and will also be located within the campus' historic ensemble of neo-classical buildings. The project design is based on the guidelines for the classical core articulated in the New Century Plan, which include the following design criteria:

- The project shall preserve the view of Doe Library from the North Gate entrance.
- The project shall be composed of elements orthogonal in plan, and sited to respect the formal axial relationships of the classical core buildings and the central glades.
- The project shall have a hip or gable roof, with a pitch similar to existing classical core buildings.
- The project shall be fenestrated with individual punched windows that respect the structural grid.
- The project shall utilize the following materials palette:

Roofs: unglazed red clay tile
 Walls: light grey granite or architectural concrete with sand finish
 Windows: clear or lightly tinted glass
 Metalwork: copper or bronze

ENVIRONMENTAL IMPACT REPORT

The 2020 LRDP EIR will be a new program EIR, and will replace the 1990 LRDP EIR upon its certification by the Regents of the University of California. EIR analyses of potential impacts resulting from implementation of the 2020 LRDP or construction of the Tien Center shall include the following topical areas:

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

The EIR will also consider the cumulative impacts of the 2020 LRDP and the Tien Center in combination with the impacts of other known past, present and reasonably foreseeable future plans and projects, such as the recently updated City of Berkeley General Plan, the proposed Southside Plan (approved for CEQA review by the City of Berkeley Planning Commission in July, 2003) and Lawrence Berkeley National Laboratory proposals, including the proposed scope of their LRDP as published in a Notice of Preparation in 2000, and any future updates to that scope.

ALTERNATIVES

The EIR will also include an analysis of alternatives to the project, including the ‘no project’ alternative. While the final list of alternatives will be developed in conjunction with the environmental analyses, our preliminary list of potential alternatives includes:

- **No Project** (required under CEQA). No further development by UC Berkeley beyond that which already has CEQA approval under a previous EIR.
- **Reduced Enrollment Growth.** Growth in student enrollment limited to a smaller number of new students, with corresponding decreases in parking and housing demand.
- **Limited Research Growth.** Growth in student enrollment as estimated but with future growth in sponsored research limited to a rate below that assumed for the 2020 LRDP.
- **Some Research Growth Offsite.** Growth in enrollment and research as estimated, but with some percentage of future research growth accommodated at Richmond Field Station or other sites outside the campus environs.
- **Increased Research Growth in Hill Campus.** Growth in enrollment and research as estimated, but with a greater percentage of future research growth accommodated in the Hill Campus than assumed in the 2020 LRDP.
- **Reduced or No New University Housing.** Same growth in enrollment and research, but with primary or sole reliance on non-university housing to accommodate the housing demand generated by new students, faculty and staff.
- **Reduced or No New University Parking.** Same growth in enrollment and research, but with primary or sole reliance on non-university parking to accommodate the parking demand generated by new students, faculty and staff.
- **Clark Kerr Campus Development.** Development of a portion of the housing proposed in the 2020 LRDP on the Clark Kerr Campus rather than on other sites. This alternative would require changes to the existing University agreements with the City and with nearby property owners.

INITIAL STUDY**2020 LONG RANGE DEVELOPMENT PLAN AND CHANG-LIN TIEN CENTER FOR EAST ASIAN STUDIES
UNIVERSITY OF CALIFORNIA, BERKELEY****PURPOSE**

Section 21080.09(b) of the Public Resources Code requires that approval of a campus LRDP be supported by an EIR. UC Berkeley will prepare an EIR for the 2020 UC Berkeley Long Range Development Plan in compliance with this requirement. As identified in Section 15063(c) of the CEQA Guidelines, the purpose of this Initial Study is to: (1) inform responsible agencies and the public of the nature of the proposed project and its location, (2) identify impacts that will clearly not result or will clearly be less than significant and therefore will not be discussed in the EIR, and (3) provide a general description of the topics intended to be addressed in the EIR.

The environmental factors checked below could be potentially affected by implementation of the 2020 LRDP and/or by cumulative impacts resulting from implementation of the 2020 LRDP in conjunction with other expected developments. These factors will be evaluated in the 2020 LRDP EIR.

DETERMINATION

On the basis of the initial evaluation that follows, UC Berkeley finds that:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
X	The proposed project MAY have a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.
	The proposed project MAY have a "potentially significant impact" or "potentially significant impact unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable standards and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Thomas E. Lollini

Assistant Vice Chancellor

INITIAL STUDY

EVALUATION OF ENVIRONMENTAL IMPACTS

All answers take account of the whole action involved, including beneficial, direct, indirect, construction-related, operational, and cumulative impacts. A list of references used in the preparation of this Initial Study is included at the end of this document.

CEQA does not require an Initial Study where an EIR is certain to be prepared (CEQA Guidelines 15063(a)). Instead, the following study is intended to assist the preparation of the pending EIR by focusing on effects determined to be significant, identifying the effects determined not to be significant, and explaining the reasons for determining that potentially significant effects would not be significant.

Appendix G of the CEQA Guidelines provides only a suggested format to use when preparing an Initial Study. UC Berkeley has adopted a slightly different format with respect to the response column headings (refer to the definitions provided below), while still addressing the Appendix G checklist questions that are relevant to each environmental issue.

DEFINITIONS OF COLUMN HEADINGS

This Initial Study serves to identify the potential environmental impacts that will be addressed in the EIR for the proposed project.

Impact to be Analyzed applies to those environmental issues, which may or may not be significant, that will be addressed in the Environmental Impact Report. As appropriate, the analysis will include a program level analysis for the entire 2020 LRDP, intended to be of sufficient detail to support specific projects which implement the 2020 LRDP as they arise, a specific project-level analysis for the Tien Center, and a cumulative-level analysis for potential effects of LRDP implementation combined with known and reasonably foreseeable future growth in the surrounding area.

No Additional Analysis Required applies to topics where the proposed LRDP implementation, including the Tien Center, clearly would have no significant effect on the particular environmental issue, and no additional analysis, beyond that provided in this Initial Study, is warranted or required.

L = LRDP Analysis

T = Tien Center Analysis

L+T = LRDP and Tien Center Analysis

**Impact to be
Analyzed in
EIR**

**No Additional
Analysis
Required**

1. AESTHETICS

Would the 2020 LRDP allow for development that would:

a) Have a substantial adverse effect on a scenic vista?

L+T

The Campus Park, its surrounds, and the Hill Campus of UC Berkeley are visible from many Bay Area viewpoints. Vistas also occur on campus. The 2020 LRDP EIR will inventory current scenic vistas from publicly accessible viewpoints on and off campus. The 2020 LRDP EIR will assess whether development under the 2020 LRDP program or implementation of the Tien Center project could adversely impact identified scenic vistas.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcrops, and historic buildings within a state scenic highway?

L+T

Regional access to the campus is provided by Interstate Highways 80 and 580, and State Routes 24 and 13. None is designated or presently eligible as scenic routes (California Department of Transportation, Office of State Landscape Architecture, list of California Scenic Routes). Therefore, development under the 2020 LRDP and implementation of the Tien Center project would not affect scenic resources within a state scenic highway. No impact would occur and additional analysis is not required.

c) Create a new source of substantial light or glare which would adversely affect day- or night-time views in the area?

L+T

To accommodate the wide range of University activities in a dense campus setting, the UC Berkeley 2020 LRDP may change land uses, intensify the use of or expand use hours for existing facilities, and result in new development that could adversely affect day- or night-time views. The potential for intrusive or otherwise adverse light and glare impacts would be examined in the 2020 LRDP EIR. The project-specific analysis of the Tien Center would examine potential adverse light or glare impacts of the project on its Campus Park site and vicinity.

d) Substantially degrade the existing visual character or quality of the site and its surroundings?

L+T

The Campus Park, its surrounds, and the Hill Campus of UC Berkeley vary widely in visual character and development intensity. The potential for development under the 2020 LRDP to substantially degrade the visual character and quality of its sites and surrounds will be examined in the 2020 LRDP EIR. Project-specific impacts of the Tien Center on its Campus Park site and vicinity will also be examined.

2. AIR QUALITY

Would the 2020 LRDP allow for development that would:

a) Conflict with or obstruct implementation of the applicable air quality plan?

L+T

The Campus Park, its surrounds, and the Hill Campus of UC Berkeley are located in the San Francisco Bay Area, currently a non-attainment zone for ozone and airborne particulate matter. Construction and development activities under the 2020 LRDP would result in short- and long-term emissions of criteria air pollutants from mobile and stationary sources. These emissions would contribute to the current non-attainment status of the Bay Area for ozone and airborne particulate matter. The 2020 LRDP EIR will analyze whether implementation of the 2020 LRDP would

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Impact to be Analyzed in EIR

No Additional Analysis Required

f) Cause objectionable odors affecting a substantial number of people?

L

T

Existing campus facilities are not commonly sources of odors. However, the 2020 LRDP EIR will analyze the potential for objectionable odors resulting from construction and development activities under the 2020 LRDP. The 2020 LRDP would be a general land use plan intended to guide the pattern of development and would not articulate specific development projects, with the exception of the Tien Center. The Tien Center would house office, classroom and library space, and would not be a source for odiferous emissions; thus, the EIR would not further examine project-specific odor impacts of the Tien Center.

3. BIOLOGICAL RESOURCES

Would the 2020 LRDP allow for development that would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or US Fish and Wildlife Service (USFWS)?

L+T

Vegetation on the Campus Park and its surrounds is primarily ornamental landscaping, including trees, shrubs, lawns, and groundcover. Strawberry Creek forms an important natural corridor across most of the Campus Park and, although altered, supports remnants of natural vegetation as well as planted native vegetation. No significant natural communities exist on the Campus Park or in its surrounds, though the Wickson, Grinnell, and Goodspeed Natural Areas all contain remnant and volunteer native vegetation, planted native vegetation, and ornamental landscaping. (The designation “natural areas” is based on the general physiognomic appearance of these areas in relation to adjacent landscapes, rather than on their integrity as native plant communities.) The Campus Park and its surrounds are also characterized by a high level of human activity. As a result, sensitive natural communities and/or sensitive species are not likely to be present. Nevertheless, the biological resources analysis in the EIR will evaluate the potential for such species to occur. Additionally, the EIR will address potential effects upon roosting, nesting, and foraging opportunities for protected species such as migratory birds, as well as wildlife that are commonly associated with highly developed areas.

The Hill Campus comprises approximately 1000 acres of developed and undeveloped lands to the east of the Campus Park. Important biological features in the Hill Campus include the south fork of Strawberry Creek and its tributaries, the designated ecological study areas, areas supporting natural vegetation, and to a lesser degree stands of eucalyptus and conifer plantings. In the Hill Campus, sensitive natural communities most likely include: native perennial grasslands, riparian scrub and woodland, sage scrub, and freshwater seeps. Portions of the Hill Campus property have been included in the US Fish and Wildlife Service Critical Habitat Area for the Alameda whipsnake (*Masticophis lateralis euryanthus*). The Berkeley hills are also within the historic range of the federally threatened California red legged frog (*Rana aurora draytonii*) although the California Natural Diversity Database records show no occurrences within the Hill Campus. The CNDDDB would be a further resource for information in the 2020 LRDP EIR.

The 2020 LRDP EIR would examine the potential for development under the LRDP to adversely affect candidate, sensitive or special status species on the Campus Park, its surrounds, and the Hill Campus. The EIR would include project-specific analysis of potential adverse species effects that might be caused by the proposed Tien Center.

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Impact to be Analyzed in EIR

No Additional Analysis Required

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS?

L

T

As described above, remnant and altered riparian habitats occur in the vicinity of Strawberry Creek on the Campus Park, and some natural communities occur in the Hill Campus. The 2020 LRDP EIR will evaluate the potential for the 2020 LRDP to adversely affect riparian habitat or other sensitive natural habitat. The proposed Tien Center would not be located in or adjacent to a riparian habitat or other sensitive natural community and this will not be analyzed further in the EIR.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption or other means?

L

T

The Campus Park, its surrounds, and the Hill Campus include no known federally delineated jurisdictional wetlands, although fresh water seeps and springs in the Hill Campus may merit protection. The campus coordinates with state and federal agencies when a project impacts Strawberry Creek, other open drainage channels, and other wetlands such as freshwater seeps and springs. The 2020 LRDP EIR will evaluate the potential for development under the 2020 LRDP to adversely affect wetland areas. The project-specific analysis of the Tien Center would not address this issue because the Tien Center site is not located near federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

L+T

As described above, the landscape of the Campus Park and its surrounds is of limited native habitat value due to extensive human activity and alteration. The Campus Park is located in an urbanized area. It does not provide a geographic link between two natural areas and, therefore, it does not serve as a primary wildlife movement corridor. However, campus vegetation may provide nesting, roosting, and foraging opportunities for migratory birds. The natural qualities of the Hill Campus are of higher potential habitat value than the Campus Park. The 2020 LRDP EIR will evaluate potential effects of the 2020 LRDP and the potential project effects of the Tien Center on the movement of native or migratory species, their corridors, and native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources?

L+T

The 2020 LRDP EIR will evaluate the consistency of the 2020 LRDP with federal and state plans, policies, laws and regulations, such as the Migratory Bird Treaty Act, that are relevant to potentially occurring biological resources. Areas of the Hill Campus are designated Ecological Study Areas, preserved in a primarily natural state for instruction and field study. The 2020 LRDP would describe and plan further for the ESA lands. Local ordinances would not apply to campus projects, because the University is a state agency exempted from local controls in accordance with the state constitution. The project-specific analysis of the Tien Center will rely on the program-level analysis to address this issue.

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Impact to be Analyzed in EIR

No Additional Analysis Required

f) Conflict with any adopted Habitat Conservation Plan, Natural Communities Conservation Plan or other approved local, regional or state habitat conservation plan?

L+T

The Campus Park, its surrounds, and the Hill Campus are not located within any area designated for an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. No additional analysis is required. See also response to 3.a), above.

4. CULTURAL RESOURCES

--Historical Resources

Would the 2020 LRDP allow for development that would:

a) Cause a substantial adverse change in the significance of a historical resource as defined in CCR Section 15064.5 ?

L+T

The 2020 LRDP will include policies and programs to protect historic resources. However, development under the 2020 LRDP could potentially include adverse changes to these resources. The 2020 LRDP EIR will include a detailed assessment of potential program-level impacts on identified historical resources caused by implementation of the 2020 LRDP. The site for the proposed Tien Center project is a parking lot and portion of Observatory Hill on the Campus Park proximate to Haviland Hall, an historic resource on the National Register of Historic Places. The 2020 LRDP EIR will include a project-specific analysis of impacts of the proposed Tien Center project on historic resources.

CULTURAL RESOURCES

--Archaeological and Paleontological Resources

Would the 2020 LRDP allow for development that would:

b) Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature?

L+T

The campus does not contain unique paleontological resources or unique geologic features. During the course of development at UC Berkeley, extensive excavation for buildings and infrastructure have not revealed the presence of unique paleontological or geologic resources. No impact would occur, and no additional analysis is required.

c) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR Section 15064.5?

L+T

Potential for discovery of archaeological resources during excavations for projects developed under the 2020 LRDP will be examined in the 2020 LRDP EIR. Development under the 2020 LRDP may occur near unknown archaeological resources or historical watercourses, and could disturb prehistoric cultural resources and/or previously unknown human burial sites of Native American groups. The potential for the 2020 LRDP to result in damage to archaeological resources will be examined in the 2020 LRDP EIR. Potential project-specific impacts of the Tien Center will also be examined. Because development could potentially affect currently unknown archaeological resources, the campus will consult with the Native American Heritage Commission, as well as appropriate literature, and the EIR will analyze the potential for additional development on the campus to result in damage to archaeological resources known and unknown. The 2020 LRDP EIR will include a project-specific analysis of impacts of the proposed Tien Center project on historic resources.

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**Impact to be
Analyzed in
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**No Additional
Analysis
Required**

d) Disturb any human remains, including those interred outside of formal cemeteries?

L+T

The 2020 LRDP EIR will evaluate the potential for the 2020 LRDP to result in disturbance to human remains. The EIR will include a project-specific analysis of potential for the Tien Center to impact human remains.

GEOLOGY, SEISMICITY AND SOILS

Would the 2020 LRDP allow for development that would:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

Rupture of a known earthquake fault?

L

T

LRDP-related increases in staff, faculty, and students would create additional exposure to earthquake risk from the Hayward Fault, extending just east of the Campus Park, and other active faults in the vicinity. Seismic safety policies of the Regents, compliance with building code, and continuation of the extensive seismic safety improvement program would be incorporated into development proposed under the 2020 LRDP. The EIR will evaluate seismic hazard maps to further analyze potential impacts from earthquake faults. The Tien Center site is not on an earthquake fault.

Strong seismic ground shaking?

L+T

LRDP-related increases in staff, faculty, students and developed area would create additional exposure to earthquake risk from the Hayward Fault, which extends east of the Campus Park, and other active faults in the vicinity. Much of the Campus Park, its surrounds, and the Hill Campus would be subject to “violent” or “very violent” shaking intensity in a magnitude 7.3 earthquake on the Hayward Fault (Figure IV.1-1, *City of Berkeley General Plan DEIR*, 2001). Seismic safety policies of the Regents, compliance with building code, and an extensive seismic safety improvement program would be incorporated into development proposed under the 2020 LRDP. The EIR will analyze susceptibility to groundshaking based on soil characteristics and proximity to earthquake faults, and include project-specific analysis of such risks for the Tien Center.

Seismic -related ground failure, including liquefaction?

L+T

The Campus Park, its surrounds, and the Hill Campus are not located in a liquefaction zone (Figure IV.1-1, *City of Berkeley General Plan DEIR*, 2001). However, site-specific geologic investigations of campus development sites have found variable soil composition and variable density of naturally occurring alluvial materials. Uncontrolled fills and high water-table levels have required correction of compaction and drainage conditions to provide acceptable foundation support. These and other potential ground failure risks that could pose hazards to people or property due to development under the 2020 LRDP will be further analyzed in the 2020 LRDP EIR. Project-specific analysis of soil properties for the Tien Center will also be included in the 2020 LRDP EIR.

Landslides?

L

T

Landslide conditions occur in the Hill Campus. The 2020 LRDP EIR will examine the potential for development under the 2020 LRDP to pose hazards to people or property due to landslide conditions. The EIR would not further analyze this issue for the Tien Center, which would be sited on the Campus Park and not subject to significant landslide risk.

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Impact to be Analyzed in EIR

No Additional Analysis Required

b) Result in substantial soil erosion or the loss of topsoil?

L+T

Although site drainage systems can influence and reduce erosion, erosion is likely to occur during construction under the 2020 LRDP. Soil erosion can cause numerous types of environmental impacts, which could impact the water quality of Strawberry Creek and San Francisco Bay. Soils can contain nitrogen and phosphorus, which when carried into water bodies can trigger algal blooms. Extensive blooms of algae can reduce water clarity, deplete oxygen concentrations, and create unpleasant odors. Excessive deposition of sediments in stream channels can blanket fauna and clog streambeds, degrading aquatic habitat. Increased turbidity due to suspended sediments may also reduce photosynthesis that produces food supply and aquatic habitat. Finally, sediment from onsite erosion could accumulate in the downstream drainage facilities, which could interfere with flow, aggravating downstream flooding conditions. The 2020 LRDP EIR will examine the potential loss of topsoil and potential for substantial soil erosion under the 2020 LRDP development program. Project-specific analysis of soil erosion or topsoil impacts of the proposed Tien Center project will be included in the EIR.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse?

L+T

As described above, the potential for development under the 2020 LRDP to occur on lands that expose people or properties to risk due to landslide, liquefaction, or other soils-related condition will be examined in the 2020 LRDP EIR; the analysis will include project-specific review for the Tien Center.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?

L+T

As described above, the potential for development under the 2020 LRDP to occur on lands that expose people or properties to risk due to landslide, liquefaction, or other soils-related condition such as expansive soils, will be examined in the 2020 LRDP EIR; the analysis will include project-specific review for the Tien Center.

6. HAZARDOUS MATERIALS

Would the 2020 LRDP allow for development that would:

a) Create a significant hazard to the public or the environment through the routine transport, use, production, or disposal of hazardous materials?

L

T

Implementation of the 2020 LRDP could result in the development of additional research laboratories and other research facilities, including animal care and research facilities, that would use, store, and require the transportation of hazardous materials and disposal of hazardous waste. Also, solvents, adhesives, cements, paints, cleaning agents, degreasers, and fuels in construction and other vehicles are among the types of existing hazardous materials used on campus that could increase if the 2020 LRDP is implemented.

The 2020 LRDP EIR will characterize hazardous materials use, transport and disposal on campus, will identify projected increases in these activities that could occur under the 2020 LRDP, and will evaluate potential impacts associated with these increased activities. The Tien Center would house office, classroom and library space, and would not significantly expand hazardous materials use on the campus.

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Impact to be Analyzed in EIR

No Additional Analysis Required

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

L

T

The 2020 LRDP EIR will characterize hazardous materials use in research, operations, maintenance, and construction, along with their transport, handling and disposal; the EIR will similarly characterize hazardous waste handling on the campus. It will identify projected increases in these activities that could occur under the 2020 LRDP, and will evaluate associated potential impacts, including potential risks from upset or accident conditions. The Tien Center would house office, classroom and library space, and would not release hazardous materials in the event of upset or accident conditions.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

L

T

Campus activities under the 2020 LRDP could potentially emit hazardous emissions or handle hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. The 2020 LRDP EIR will characterize hazardous materials transport, use and disposal on campus as well as increases projected in these activities under the 2020 LRDP. The 2020 LRDP EIR will also evaluate the potential impacts of such increased activity, including potential exposure of and effects on children. The Tien Center would house office, classroom and library space, and would not handle or emit hazardous materials within one-quarter mile of an existing or proposed school.

d) Be located on a hazardous materials site as listed on the "Cortese List" (compiled pursuant to Government Code Section 65962.5) and that, as a result, creates a significant hazard to the public or the environment?

L

T

The Campus Park, its surrounds, and the Hill Campus currently have one hazardous materials site that is listed on the Department of Toxic Substances Control's Cortese List compiled pursuant to Government Code 665962.5: the UC Garage site located at 1952 Oxford Street, formerly the location of gasoline and oil dispensing operations dating to the 1920s. The site contaminants include: gasoline, diesel, dichloroethane, benzene, toluene, ethylbenzene and xylenes. The campus has completed an extensive underground storage tank removal and soil clean up program since the time of the 1990 LRDP and does not expect to perform further clean up activities on campus properties in Berkeley. The 2020 LRDP EIR will examine whether residual contaminants create a significant hazard to the public or the environment through implementation of the 2020 LRDP. (Soil clean up activities at campus properties in Richmond are underway, but reviewed under separate CEQA documentation and outside the scope of the 2020 LRDP.)

7. HYDROLOGY AND WATER QUALITY

Would the 2020 LRDP allow for development that would:

a) Violate any water quality standards or waste discharge requirements?

L+T

Development under the 2020 LRDP could result in an increase of impermeable surface area, which could produce additional volume and pollutant loading of urban runoff. The Regional Water Quality Control Board has expressed water quality concerns for Strawberry Creek and its receiving waters (the San Francisco Bay) based on releases of sediment, bacteria, nutrients, metals and hydrocarbons. Additionally, increased water usage that could result from implementation of the 2020 LRDP could cause increases in wastewater discharges that could exceed waste discharge

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Impact to be Analyzed in EIR

No Additional Analysis Required

requirements for water quality or quantity. The 2020 LRDP EIR will evaluate impacts to water quality from runoff and characterize current waste discharge volumes of the campus and wastewater treatment capacity at EBMUD’s wastewater treatment plant, and evaluate whether the implementation of the 2020 LRDP would result in a violation of applicable standards or waste discharge requirements. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

b) Substantially deplete groundwater supplies or quality, or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

L+T

Groundwater supplies in Berkeley, on the Campus Park, its surrounds, and the Hill Campus, are not a local water supply source, and do not serve local or planned land uses (*City of Berkeley Draft General Plan EIR*, February 2001, p. 220). The 2020 LRDP EIR will only analyze this issue to the extent that the campus water supplier, EBMUD, may draw upon groundwater supplies and be impacted by potential additional demand under the 2020 LRDP. The EIR will describe anticipated water consumption and general system capacity to determine potential impacts on groundwater supplies. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

c) Substantially alter existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion, siltation or flooding on- or off- site?

L+T

Minor stream alterations are occasionally undertaken on the Berkeley campus to improve safety of people or property, or restore natural stream conditions. No substantial alterations have occurred since the 1990 LRDP, and none is anticipated under the 2020 LRDP. Development under the 2020 LRDP could increase impervious surfaces and could alter drainage patterns of building sites, which could result in increased runoff. The 2020 LRDP EIR will characterize campus-wide drainage patterns and will evaluate the potential for flooding as a result of increased runoff under the 2020 LRDP program. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

L+T

Development under the 2020 LRDP could increase impervious surfaces, which could increase the volume of surface water runoff and increase levels of urban contaminants in stormwater. The 2020 LRDP EIR will evaluate if the existing/planned drainage system could accommodate increased runoff generated as a result of development under the 2020 LRDP. The 2020 LRDP EIR will also evaluate potential impacts associated with stormwater pollution under the 2020 LRDP. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

e) Otherwise substantially degrade water quality?

L+T

See responses to other hydrology and water quality topical questions, above.

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Impact to be Analyzed in EIR

No Additional Analysis Required

f) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

L+T

Strawberry Creek poses a flood hazard for portions of the Campus Park. The Campus Park would not be an identified housing area under the 2020 LRDP. Except for small areas located within the 100- and 500- year flood zones the majority of Berkeley is defined by the Federal Emergency Management Agency as being subject to minimal flooding. Housing proposed under the 2020 LRDP would not be constructed within a 100- or 500- year flood zone. Therefore, no impact would occur and no additional analysis is required.

g) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

L+T

The 2020 LRDP EIR will evaluate the potential for development under the LRDP to occur within 100-year flood hazard zones and address the potential for construction in these zones to impede or redirect flood flows. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

h) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

L+T

The Campus Park, its surrounds, and the Hill Campus are outside the inundation hazard area for Berryman Reservoir. The 2020 LRDP and the Tien Center would therefore not expose people or structures to inundation as a result of dam or levee failure.

i) Be subject to inundations by seiches, tsunamis, or mudflows?

L+T

The Campus Park, its surrounds, and the Hill Campus are sufficiently inland and at a sufficiently high elevation that tsunamis are not an anticipated risk. No large, open bodies of water that would represent a substantial seiche risk are located on or around campus properties. Possible mudflows in the Hill Campus area would not be of a scale to risk inundation.

8. LAND USE

Would the 2020 LRDP allow for development that would:

a) Physically divide an established community?

L+T

The City of Berkeley has developed around and in conjunction with the campus, and their social and physical histories are interrelated. Today, Berkeley’s city and campus communities are profoundly interwoven. The 2020 LRDP would not include any development that would physically divide an established community.

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Impact to be Analyzed in EIR

No Additional Analysis Required

b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect ?

L+T

The University of California is constitutionally exempt from local land use plans and regulations. However, the City of Berkeley General Plan, and the general plans for other cities within the scope of the 2020 LRDP, will inform the land use policies in the 2020 LRDP for properties outside the Campus Park and Hill Campus, as will the Southside Plan, once adopted by the City of Berkeley. The land use analysis in the 2020 LRDP EIR will then focus upon potential conflicts between existing on- and off-campus uses and new campus uses that could be developed under the 2020 LRDP. The proposed Tien Center will be analyzed for consistency with the land use policies in the 2020 LRDP.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

L+T

The Campus Park, its surrounds, and the Hill Campus are not located within any area designated for an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. No additional analysis is required. See also discussion above under Biological Resources, Item 3.a) addressing critical habitat area.

9. NOISE

Would the 2020 LRDP allow for development that would:

a) Expose people to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, without mitigation?

L+T

Increases in traffic, mechanical equipment associated with new structures, and increases in campus population could result in potential long-term increases in noise levels. Additionally, operation of construction equipment could result in substantial short-term noise increases. The 2020 LRDP EIR will model the magnitude of these noise increases, and will evaluate whether the increased noise levels associated with implementation of the 2020 LRDP would exceed applicable standards or ordinances. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

b) Result in a substantial permanent increase in ambient noise levels in the project vicinity, without appropriate mitigation?

L+T

The 2020 LRDP EIR will model the magnitude of potential permanent noise increases under the 2020 LRDP, and will evaluate whether the increased permanent noise levels would exceed applicable standards or ordinances. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

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Impact to be Analyzed in EIR

No Additional Analysis Required

c) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity, without appropriate mitigation?

L+T

Operation of construction or other equipment could result in substantial temporary or short-term noise increases. The 2020 LRDP EIR will use current noise modeling methods to predict the magnitude of these temporary noise increases, and will evaluate whether the increased temporary noise levels associated with implementation of the 2020 LRDP would exceed applicable standards or ordinances without appropriate mitigation. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

d) Expose people to or generate excessive ground-borne vibration or ground-borne noise levels, without mitigation?

L+T

Construction activities, particularly if pile driving is required, could result in generation of excessive groundborne vibration or groundborne noise levels. The EIR will evaluate the potential impacts of these construction activities. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

10. POPULATION AND HOUSING

Would the 2020 LRDP allow for development that would:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

L

T

The proposed 2020 LRDP would accommodate an increase in enrollment during the proposed planning horizon. Related increases in the number of staff and faculty would occur, as outlined in the project description (above). The EIR will estimate the combined demand for University housing and other housing within the City of Berkeley and adjacent areas. The EIR will evaluate the potential for this demand to exceed the projected housing supply, and determine whether such growth could result in the demand for additional housing, goods and services, that could induce additional population growth. The Tien Center would house existing campus staff and library services and could only house small incremental increases in staff. The Tien Center proposal would not support and is not associated with an increase in enrollment. Project-specific impacts of the Tien Center on population and housing would therefore not be analyzed further in the 2020 LRDP EIR.

b) Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

L+T

Implementation of the 2020 LRDP is not anticipated to require the displacement of people or housing. Further, the 2020 LRDP would propose additional housing that is not anticipated to require displacement of existing housing facilities. Therefore, no further analysis is required. If future projects are proposed that would require the displacement of existing housing, the effects of such proposed displacement would be evaluated as required by CEQA on a project-specific basis.

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Impact to be Analyzed in EIR

No Additional Analysis Required

11. PUBLIC SERVICES

--Police Protection

Would the 2020 LRDP allow for development that would:

a) Result in the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, service times, or other performance objectives for police protection?

L+T

Police protection services for the Berkeley campus are provided by the University of California Police Department and the City of Berkeley Police Department. The 2020 LRDP EIR will evaluate whether implementation of the 2020 LRDP would increase the demand for police protection and compare the potential increase in demand to existing and planned equipment and staff levels. The EIR will evaluate the potential impacts of new, expanded, or altered facilities, if they are required to meet an increase in demand. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

PUBLIC SERVICES

--Fire and Emergency Protection

Would the 2020 LRDP allow for development that would:

b) Result in the need for new or physically altered fire or emergency medical services facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, service times or other performance objectives for fire and emergency protection?

L+T

The 2020 LRDP EIR will evaluate whether implementation of the 2020 LRDP would increase demand for fire protection services and compare the potential increase in demand with existing and planned equipment and staff levels. The EIR will also evaluate the potential impacts of new, expanded, or altered facilities, if they are required to meet an increase in demand. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

c) Expose people or structures to a significant risk of loss, injury or death involving wildland fires?

L

T

There is an annual seasonal fire risk in the East Bay hills due to their mix of scrub and conifer and eucalyptus stands. The risk becomes particularly pronounced during the periodic one- or two- day shifts from the normal northwesterly winds to ‘Diablo’ winds blowing in from the warm, dry regions to the east. Twentieth century Diablo wind fires have burned over ten times the acreage of normal wind condition fires, and include the firestorms of 1923 and 1991. The generally steep terrain and poor roads in the Oakland and Berkeley hills present enormous obstacles to fire response, and some areas such as Claremont Canyon, served by only a single road, may be indefensible in Diablo wind conditions. To reduce risks from and to campus lands, the campus conducts an annual fuel management program on campus properties. The program is designed and guided by the UC Fire Mitigation Committee, which is chaired by a campus forestry professor and staffed by a fire ecology consultant who co-chairs all committee meetings. The campus is also one of eight member agencies in the Hills Emergency Forum (HEF), a consortium of jurisdictions mutually concerned with fire and disaster risks in the East Bay area. The Campus coordinates its fire fuel management activities with all HEF members, which include the Cities of Oakland, Berkeley, and El Cerrito, the East Bay Regional Park District, the East Bay Municipal Utility District, the Lawrence Berkeley National Laboratory, and the California Department of Forestry and Fire Protection.

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Impact to be Analyzed in EIR

No Additional Analysis Required

Development under the 2020 LRDP could potentially expose people or structures to risk of loss, injury or death due to wildland fires by bringing additional population to the area. The 2020 LRDP EIR will assess the effects of growth under the 2020 LRDP against the campus’ ability to protect life and property threatened by wildland fire. At its urban Campus Park site the risk of wildland fires to the proposed Tien Center would be minimal, and this impact would not be studied further in project-specific analysis for the Tien Center.

d) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? **L+T**

The campus Office of Emergency Preparedness (OEP) (<http://public-safety.berkeley.edu/ocpweb/>) has prepared a Multi Hazard/Disaster Response handbook and regularly conducts trainings and updates rosters to maintain readiness in the event of an emergency. Development under the 2020 LRDP could potentially exceed the campus’ emergency response capabilities, which could impair implementation of the disaster response plan. New development projects under the 2020 LRDP may have the potential to physically interfere with the campus response. The 2020 LRDP EIR will characterize the campus’ emergency response plans and capabilities, and will assess the effects of growth under the 2020 LRDP on the campus’ ability to manage emergencies. The 2020 LRDP EIR will also address the potential for the Tien Center to impair implementation of, or interfere with, emergency response efforts.

e) Result in inadequate emergency access? **L+T**

The proposed 2020 LRDP would result in land use changes and cause roadway changes that could affect or hinder emergency access. The 2020 LRDP EIR will evaluate potential impacts to emergency access resulting from the 2020 LRDP, and will evaluate project-specific emergency access for the proposed Tien Center.

PUBLIC SERVICES

--Schools

Would the 2020 LRDP allow for development that would:

f) Result in the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, service times or other performance objectives for schools? **L** **T**

Increased student enrollment, combined with associated increases in faculty and staff, may increase the number of school-age children that could enroll in local schools. The 2020 LRDP EIR will evaluate potential effects of increased enrollment on the capacity of local schools, as well as the potential environmental impacts of new, expanded or altered facilities, if any are required to meet an increase in demand. The Tien Center would house existing campus staff and library services and could only house small incremental increases in staff. The Tien Center proposal would not support and is not associated with an increase in enrollment. Project-specific impacts of the Tien Center on schools would therefore not be analyzed further in the 2020 LRDP EIR.

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Impact to be Analyzed in EIR

No Additional Analysis Required

PUBLIC SERVICES

--Parks and Recreation

Would the 2020 LRDP allow for development that would:

g) Result in the need for new or physically altered parks and recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, service times or other performance objectives?

L

T

Campus recreational facilities, including gymnasiums, pools, sport fields, ball courts, and fitness centers, are primarily used by UC students, faculty and staff. The campus population also uses community facilities. Increased student enrollment, combined with the associated increase in faculty and staff, may increase demand for existing or planned neighborhood, community and regional parks. The 2020 LRDP EIR will evaluate the potential impacts of new, expanded and/or altered facilities, if they are needed to meet an increase in demand. The Tien Center would house existing campus staff and library services and could only house small incremental increases in staff. The Tien Center proposal would not support and is not associated with an increase in enrollment. Project-specific impacts of the Tien Center on parks and recreation would therefore not be analyzed further in the 2020 LRDP EIR.

h) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

L

T

The 2020 LRDP EIR will evaluate whether the increase in campus population would exceed the capacity of existing neighborhood, community, and regional parks or other regional facilities, contributing to their substantial physical deterioration. The Tien Center would house existing campus staff and library services and could only house small incremental increases in staff. The Tien Center proposal would not support and is not associated with an increase in enrollment. Project-specific impacts of the Tien Center on parks and recreation would therefore not be analyzed further in the 2020 LRDP EIR.

i) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

L

T

The 2020 LRDP would be a general land use plan intended to guide the pattern of campus development and would not articulate specific projects or structures other than those proposed as part of the Tien Center proposal. However, additional recreational uses may be developed as part of the implementation of the 2020 LRDP; therefore, the EIR will evaluate the potential effects of recreational uses within the context of the effects of general campus development. The Tien Center would house existing campus staff and library services and could only house small incremental increases in staff. The Tien Center proposal would not support and is not associated with an increase in enrollment. Project-specific impacts of the Tien Center on parks and recreation would therefore not be analyzed further in the 2020 LRDP EIR.

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Impact to be Analyzed in EIR

No Additional Analysis Required

12. TRANSPORTATION AND TRAFFIC

Would the 2020 LRDP allow for development that would:

a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

L

T

Implementation of the proposed 2020 LRDP would increase the amount of campus building space, on-campus population, and the number of parking spaces on campus, which could result in increased vehicular traffic on local streets and the adjacent regional highway system. The EIR will analyze the impact of additional LRDP-related and cumulative traffic on the local street networks, including intersection capacity, and the regional highway network, including the impact on the capacity of Congestion Management Program designated roadways and freeway ramps and adjacent segments. The campus anticipates applying criteria that mirror criteria used in the City of Berkeley General Plan Draft EIR to measure this impact. The Tien Center would house existing campus staff and library services and could only house small incremental increases in staff. The Tien Center proposal would not support and is not associated with an increase in enrollment. Project-specific impacts of the Tien Center on traffic, circulation and parking would therefore not be analyzed further in the 2020 LRDP EIR.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

L

T

The EIR will analyze the impact of additional 2020 LRDP-related and cumulative traffic on the local street networks, including intersection capacity, the regional highway network, and including roads and highways designated by the Alameda County Congestion Management Agency. The Tien Center would house existing campus staff and library services and could only house small incremental increases in staff. The Tien Center proposal would not support and is not associated with an increase in enrollment. Project-specific impacts of the Tien Center on traffic, circulation and parking would therefore not be analyzed further in the 2020 LRDP EIR.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

L+T

Development associated with the 2020 LRDP or the Tien Center is not anticipated to affect or contribute air traffic to existing patterns. No additional analysis is required.

d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Create unsafe conditions for pedestrians or bicyclists?

L+T

The 2020 LRDP is a general land use plan intended to guide the pattern of campus development and does not articulate specific projects or structures other than the Tien Center. The EIR will evaluate the potential for future changes to the campus circulation system or development of incompatible uses to increase hazards to traffic, pedestrians or bicyclists. The 2020 LRDP EIR would include project-specific safety analysis of circulation considerations for the proposed Tien Center.

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Impact to be Analyzed in EIR

No Additional Analysis Required

e) Result in inadequate parking capacity?

L+T

The LRDP 2020 EIR will evaluate the adequacy of existing and proposed campus parking, based upon existing and projected parking demand. The EIR will also include an analysis of the campus transportation demand management (TDM) program, including new TDM measures that may be considered under the 2020 LRDP to address trip and/or parking demand reduction strategies. The Tien Center would house existing campus staff and library services and could only house small incremental increases in staff. The Tien Center proposal would not support and is not associated with an increase in enrollment. However, the site for initial phase construction of the Tien Center is located on an existing surface parking lot on the Campus Park; the project-specific analysis of the Tien Center parking impacts will rely on the program-level evaluation of the 2020 LRDP to address this issue.

f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

L+T

The proposed 2020 LRDP will describe alternative transportation modes and include policies to promote and expand their use; the 2020 LRDP EIR will analyze whether the implementation of the 2020 LRDP would conflict with applicable LRDP policies supporting alternative transportation. The 2020 LRDP EIR will also address the project-specific impacts of the proposed Tien Center.

13. UTILITIES AND SERVICE SYSTEMS

--Water

Would the 2020 LRDP allow for development that would:

a) Exceed the capacity of existing and planned water entitlements and resources?

L+T

Implementation of the proposed 2020 LRDP would increase the amount of campus building space and the campus daytime and residential population, which could result in an increase in water usage. The 2020 LRDP EIR will evaluate whether possible water demand increases would exceed available or planned entitlements or capacity; the environmental impacts of new, expanded, or altered facilities, if any are required to meet the increased demand, would also be evaluated in the EIR. Using methodologies derived from California State Senate Bills 221 and 610, the 2020 LRDP EIR will address water supply assessments. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

b) Require or result in the construction of new or expansion of existing water facilities, the construction of which could cause significant adverse effects?

L+T

The 2020 LRDP EIR will evaluate whether projected water demand increases associated with increased population would exceed available or planned entitlements or capacity; the environmental impacts of new, expanded, or altered facilities, if any are required to meet this increased demand, would also be evaluated in the EIR. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

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No Additional Analysis Required

UTILITIES AND SERVICE SYSTEMS

--Wastewater

Would the 2020 LRDP allow for development that would:

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments? **L+T**

The East Bay Municipal Utility District operates a wastewater treatment plant that serves the Berkeley area. The 2020 LRDP EIR will characterize the capacity of the EBMUD plant and analyze the impact of projected increases due to development under the 2020 LRDP. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

d) Require or result in the construction of new or expansion of existing wastewater treatment facilities, the construction of which could cause significant adverse effects? **L+T**

Growth under the 2020 LRDP could increase the quantity of wastewater discharged to wastewater treatment facilities. The 2020 LRDP EIR will evaluate the increased demand on wastewater treatment and conveyance facilities under the 2020 LRDP, and evaluate potential impacts associated with any new or expanded facilities, if any would be required to meet this demand. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

e) Exceed wastewater treatment requirements of the Regional Water Quality Control Board? **L+T**

The 2020 LRDP EIR would examine the potential for growth under the 2020 LRDP to exceed wastewater treatment requirements of the Regional Water Quality Control Board. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

UTILITIES AND SERVICE SYSTEMS

--Stormwater

Would the 2020 LRDP allow for development that would:

f) Require or result in the construction of new or expansion of existing stormwater drainage facilities, the construction of which could cause significant adverse effects? **L+T**

Development under the 2020 LRDP could increase impervious surfaces, which could increase the volume of stormwater drainage. The 2020 LRDP EIR will characterize campus-wide drainage, will evaluate the increased demand for stormwater drainage facilities under the 2020 LRDP, and will evaluate potential impacts associated with any new or altered drainage facilities, if any would be required to meet this demand. The 2020 LRDP EIR will also address the project-specific stormwater drainage improvements needed to serve the proposed Tien Center.

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**Impact to be
Analyzed in
EIR**

**No Additional
Analysis
Required**

UTILITIES AND SERVICE SYSTEMS

-- Solid Waste

Would the 2020 LRDP allow for development that would:

g) Violate any applicable federal, state, and local statutes and regulations related to solid waste? **L+T** |

The EIR will evaluate the impact of implementation of the 2020 LRDP on campus compliance with applicable statutes and regulations related to solid waste. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

h) Exceed the permitted capacity of a landfill that serves the project's solid waste disposal needs? **L+T** |

Implementation of the proposed 2020 LRDP could result in an increase in campus solid waste generation, including debris from construction activities. The 2020 LRDP EIR will evaluate whether existing landfill capacity is sufficient to accommodate growth under the 2020 LRDP. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

UTILITIES AND SERVICE SYSTEMS

--Energy

Would the 2020 LRDP allow for development that would:

i) Require or result in the construction of new or expansion of existing energy production and/or transmission facilities, the construction of which could cause significant adverse effects? **L+T** |

Implementation of the 2020 LRDP could result in the consumption of additional energy, including electricity, natural gas and other fossil fuels. The EIR will quantify the potential net increase in campus-related energy usage and determine whether implementation of the LRDP would require new or expanded energy production and/or transmission facilities which may cause adverse effects. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

j) Would the project encourage the wasteful or inefficient use of energy? **L+T** |

Implementation of the 2020 LRDP could result in the consumption of additional energy, including electricity, natural gas and other fossil fuels. The 2020 LRDP would be responsive to Regents' policy on sustainability (<http://www.ucop.edu/regents/regmeet/june03/102june.pdf>). The EIR will quantify the potential net increase in campus-related energy usage and examine whether implementation of the LRDP would encourage wasteful or inefficient energy use. The project-specific analysis of the Tien Center will rely on the program-level evaluation of the 2020 LRDP to address this issue.

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Impact to be Analyzed in EIR

No Additional Analysis Required

UTILITIES AND SERVICE SYSTEMS

-- Steam and Chilled Water

Would the 2020 LRDP allow for development that would:

k) Require or result in the construction of new or expansion of existing steam and/or chilled water facilities, the construction of which could cause significant adverse effects? **L+T**

The 2020 LRDP EIR will characterize existing steam and chilled water services, will evaluate the potential increased demand for these services under the 2020 LRDP, and will evaluate potential impacts associated with any new or altered facilities required to meet this demand. The 2020 LRDP EIR will also address the project-specific steam and chilled-water improvements that may be needed to serve the proposed Tien Center.

14. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? **L+T**

As indicated above, implementation of the 2020 LRDP has the potential to result in significant impacts that could degrade the quality of the environment. Because the campus and its surrounds are densely developed, the potential for the 2020 LRDP to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal is considered low. The 2020 LRDP EIR will evaluate the 2020 LRDP and the Tien Center for their potential to result in significant impacts that could degrade the quality of the environment, reduce habitat for a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other projects, and the effects of probable future projects)? **L+T**

The 2020 LRDP EIR will evaluate whether impacts associated with growth under the 2020 LRDP (including the proposed Tien Center), in combination with past, current, and reasonably foreseeable future projects, have the potential to be cumulatively considerable.

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**Impact to be
Analyzed in
EIR**

**No Additional
Analysis
Required**

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

L+T

As discussed in the checklist sections above, the proposed 2020 LRDP and Tien Center have the potential to result in significant impacts. The 2020 LRDP EIR will evaluate if these impacts have the potential to result in substantial adverse effects on human beings, either directly or indirectly.

REFERENCES

City of Berkeley, *Draft Environmental Impact Report, Draft General Plan*, February 2001 SCH#2000102107

City of Berkeley, *Final Environmental Impact Report, Draft General Plan*, June 2001 SCH#2000102107

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