May 6, 2024

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

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Project Title: 2025 UC Lawrence Berkeley National Laboratory Long Range Development Plan

Lead Agency: The University of California

Project Location: Lawrence Berkeley National Laboratory, One Cyclotron Road, Berkeley, CA 94720

County: Alameda County

This Notice of Preparation (NOP) hereby informs agencies and the public that the University of California (UC or the University), Lawrence Berkeley National Laboratory (LBNL, Berkeley Lab, or the Lab) will prepare an Environmental Impact Report (EIR) that will analyze and disclose the environmental impacts from the adoption of the Berkeley Lab's 2025 Long Range Development Plan (LRDP or the "proposed Project"). UC policy stipulates that EIRs must be prepared for all campus LRDPs.

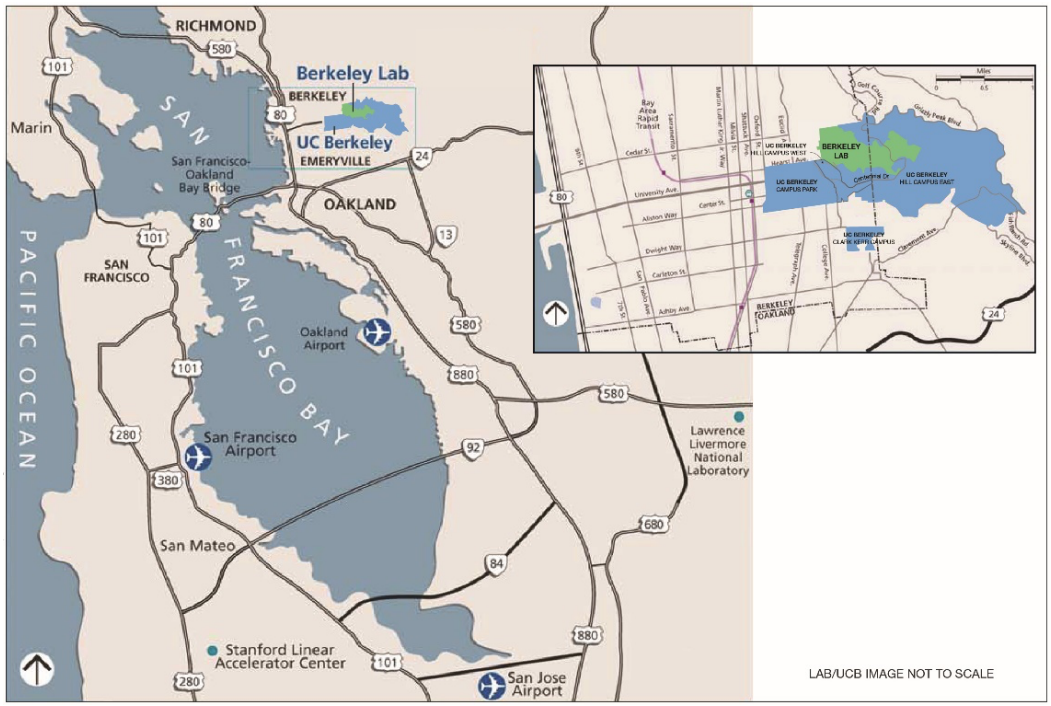
Each UC campus—including LBNL—periodically prepares an LRDP, which provides a high-level planning framework to guide land use, physical parameters, and capital investment in line with the campus's mission and strategic goals. Berkeley Lab's current 2006 LRDP forecasted campus development through the year 2025. The forthcoming 2025 LRDP would replace the current LRDP and forecast campus development through the year 2045.

UC LBNL is the Lead Agency for the proposed Project and will prepare an EIR as required by Public Resources Code (PRC) Section 21080.09. The LRDP EIR will function as a Program EIR (pursuant to CEQA Guidelines section 15168) that can be used in the environmental review of subsequent campus development projects.

Campus Location and Characteristics

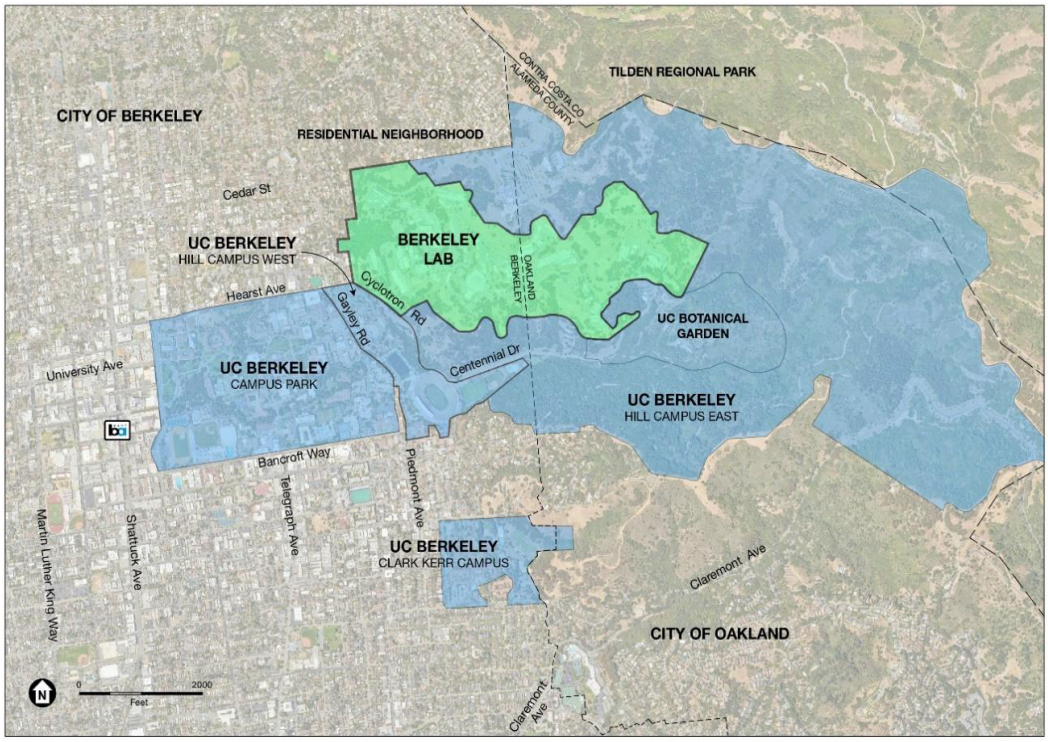
The Berkeley Lab campus occupies a 202-acre site (the campus) within 1,232 acres of land owned by the UC Regents in the East Bay hills of the San Francisco Bay Area (see regional location in

Figure 1). The campus straddles the border between the cities of Berkeley and Oakland (see Project location in **Figure 2**).



SOURCE: LBNL, ESA 2024

Figure 1
Regional Location Map



SOURCE: ESA, Google Earth 2024

Figure 2
Project Location

The campus is surrounded on the west by the UC Berkeley main campus (Hill Campus West and Campus Park) and City of Berkeley multi-unit residential developments; on the north by City of Berkeley residential neighborhoods and various UC Berkeley facilities (including the Lawrence Hall of Science, Space Sciences Laboratory, and Mathematical Sciences Research Institute); on the east by UC Berkeley's Hill Campus East; and on the south by the UC Berkeley Hill Campus West and East (including various recreational fields and pools) and Botanical Garden, and by Strawberry Canyon open space. The Berkeley Lab campus is a fenced and secured site and is accessed by three controlled vehicular entrances (see **Figure 3**).

SOURCE: Flad, 2023

Figure 3
Existing Site Plan

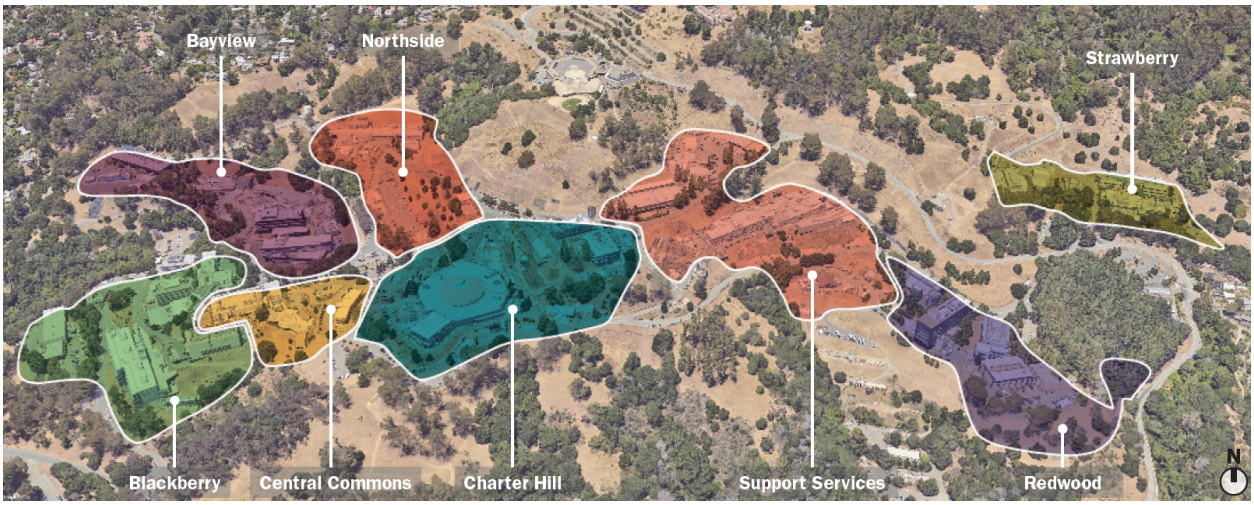
Approximately two-thirds of the Berkeley Lab campus remains undeveloped; such areas often contain challenging features such as steep slopes, soil stability issues, or riparian habitat. Campus elevations range from approximately 450 feet above sea level (asl) to approximately 1,100 feet asl. The hillside topography includes a natural pattern of radiating ridges, knolls, and valleys formed by local seasonal creek drainages. Approximately 60 percent of the campus has slopes greater than 25 percent, and about 27 percent of the campus has slopes greater than 45 percent. The campus slopes support multiple ephemeral and intermittent drainages or streams, many of which have been partially culverted under adjoining development areas. Perennial streams on the campus site include the North Fork of Strawberry Creek and Chicken Creek. The Hayward fault is located along the campus's western edge.

The campus supports a wide variety of native and non-native vegetation. Non-native annual grasses dominate on the campus. Tree species include stands of native trees such as coast live oak,

California bay, and redwood; non-native species include blue-gum eucalyptus, Monterey pine, Torrey pine, and Canary Island pine. The campus lies within a Very High Hazard Severity Zone as designated by the California Department of Forestry and Fire Protection (CalFire). Over 120 species of birds, mammals, reptiles, and amphibians are found on the campus.

The University leases Berkeley Lab campus parcels to the U.S. Department of Energy (DOE) to support all major DOE-owned buildings, which comprise most of the campus's facilities and structures. Berkeley Lab operation is managed by the University under a prime contract with DOE. Berkeley Lab also occupies off-site space on the adjoining UC Berkeley campus and in other off-site leased spaces, mostly in the cities of Berkeley, Oakland, Richmond, and Emeryville. Off-site facilities will be acknowledged but are not considered to be within the scope of the LRDP and therefore will not be analyzed in the LRDP EIR.

The Lab's major research facilities have been developed within eight loosely organized development pads or clusters that occupy most of the campus's relatively flat terraces. As illustrated in **Figure 4**, these include the Blackberry, Central Commons, Bayview, Northside, Charter Hill, Support Services, Redwood, and Strawberry clusters. Most clusters tend to have a dominant research area or support function. Parking–most often arranged in small lots or along roads–and other amenities are distributed throughout the clusters. There are currently 170 usable building facilities on the campus. These consist of approximately 90 buildings, 20 trailers, and 60 storage containers totaling about 2,145,000 gross square feet (gsf). These facilities provide space for research laboratories, accelerators, offices, machine and electrical shops, medical services, storage, food service, and communications. Many of these buildings are considered obsolete due to age, condition, or a poor seismic safety rating per the UC Seismic Performance Rating (SPR) System.



SOURCE: Page, 2023

Figure 4
Development Clusters on LBNL Campus

Project Description—the 2025 Long Range Development Plan

UC LRDPs are typically updated or renewed at approximately 10- or 20-year intervals. As the 2006 LRDP approaches its 20-year milestone, Berkeley Lab is working to define its campus development vision for the next 20 years. A new LRDP would present the strategic vision for the campus site and facilities, and it would articulate a policy framework to guide the Lab's evolution in land and facility use, site circulation, open space, and infrastructure.

An overarching development theme in the forthcoming 2025 LRDP is one of modernization: in the next 20 years of development, Berkeley Lab seeks to modernize its facilities and infrastructure and realize a more orderly and sustainable campus. The proposed LRDP does not provide for substantial population growth or expansion of the campus's development footprint. Preliminary LRDP principles are included below and will be further developed for the LRDP document, along with goals and strategies to put these principles into action:

- **Principle of Scientific Mission:** Berkeley Lab's principal purpose is to perform transformative, mission-directed scientific research.
- **Principle of Campus Identity:** Berkeley Lab should be a unique and fully-realized UC campus.
- **Principle of Stewardship:** Berkeley Lab is a responsible steward of public and natural resources.
- **Principle of Community:** Berkeley Lab values and supports its community and the public.

Land Use

The current 2006 LRDP designates four land use zones that guide the siting of new campus buildings and site improvements. *Research and Academic zone* encompasses the majority of Berkeley Lab's developable area and largely corresponds with, or is adjacent to, the already developed portions of the campus. This zone includes almost all of the Laboratory's existing research functions and is primarily intended for similar uses. The *Central Commons zone* is centered around the Lab's cafeteria and outdoor gathering areas. Primary uses include food services, short-term accommodations, gatherings and meetings, mass transit hub, and other shared activities. The *Support Services zone* provides consolidated locations for the Lab's plant operations and support activities, such as machine shops, environmental services, corporation yards, central mail distribution, waste handling, and maintenance. The *Perimeter Open Space* zone is generally undeveloped and primarily reserved for trails, maintenance roads, power supply and utilities equipment and distribution, as well as for minor structures that support those functions. The 2025 LRDP would include the same four land use zones and would likely involve only minor adjustments to zone areas. The 2025 LRDP is expected to maintain the current overall land use patterns on the campus.

Population Growth Projections

Berkeley Lab campus population is expressed as "adjusted daily population" (ADP), which is a function of total Lab staff and registered guests that accounts for daily fluctuations in attendance. The current 2006 LRDP projected a campus ADP of 4,650 at full development. Immediately prior to the COVID-19 pandemic, Berkeley Lab campus ADP had reached approximately 4,500. During the pandemic, the Lab ADP plummeted. The 2024 post-pandemic campus population is estimated to be approximately 3,000 ADP, reflecting a hybrid work model where a substantial number of staff work remotely part or full time.

Under the 2025 LRDP, campus population is projected to reach 4,200 ADP by the year 2045. This would be an increase of 1,200 ADP over existing conditions, which for CEQA purposes is the time at which this NOP is issued. The 2025 LRDP ADP projection is nevertheless lower than pre-pandemic ADP levels and below the 4,650 ADP identified in the 2006 LRDP. These lower on-site population levels are attributable to continuation of the remote and hybrid work model developed during the COVID-19 pandemic.

Proposed Building Demolition

Approximately 40 existing campus buildings and structures totaling approximately 270,000 gsf are envisioned to be demolished under the proposed 2025 LRDP due to poor condition and/or safety considerations. These buildings range from small or minimally used structures–including trailers and storage containers–to larger, currently occupied buildings.

New Building Development

New construction under the 2025 LRDP would largely replace outdated facilities with modern research and support buildings and infrastructure more suited to meet the Lab's scientific mission. Such new facilities would be more efficient and sustainable, safer, and adaptable to cutting-edge research. New buildings would be constructed in infill and previously-developed areas, often in the footprints of demolished buildings.

Under the 2025 LRDP, approximately 545,000 gsf of new building space would be constructed on the campus. Subtracting out the estimated 270,000 gsf of demolition identified above, the resulting net new building space under the proposed 2025 LRDP would be about 275,000 gsf. Added to the Lab's existing building space (2,145,000 gsf), full campus development under the proposed 2025 LRDP would be 2,420,000 gsf, an increase of approximately 13 percent over existing conditions.

Table 1 provides a summary of existing (2024) campus population and building space, as well as previous (2006 LRDP) and prospective (2025 LRDP) campus population and space program projections. As shown, the total projected campus population under the proposed 2025 LRDP would be less than that previously anticipated under the 2006 LRDP. In addition, there would be no increase in total building space projected under the proposed 2025 LRDP as compared with the 2006 LRDP; both identify the same total building space projection of 2,420,000 gsf.

TABLE 1
SUMMARY OF POPULATION AND SPACE PROJECTIONS AT LBNL CAMPUS (2024-2045)

	Existing 2024	Projected 2025 (per 2006 LRDP)	Projected 2045 (per 2025 LRDP)	Project Increase over Existing Conditions (for CEQA Analysis)	2025 LRDP parameters change from 2006 LRDP parameters
Population (ADP)[a]	3,000 ADP	4,650 ADP	4,200 ADP	1,200 ADP	– 450 ADP
Building Space (gsf)[b]	2,145,000 gsf	2,420,000 gsf	2,420,000 gsf	275,000 gsf	0 gsf

NOTE:
a. ADP = Adjusted Daily Population
b. gsf = gross square feet

SOURCE: UC LBNL, 2024

The LRDP does not mandate on-going growth or the development of new facilities; it is a planning guide and not an implementation plan. Varying factors affect campus population levels, which might fluctuate differently from the pace of facilities development. The LRDP does not determine the campus's ultimate population or space capacity. Further, UC LRDPs do not expire, but remain in effect until updated or replaced.

Environmental Review—LRDP EIR

In July 2007, The Board of Regents of the University of California (The Regents) certified the LBNL 2006 LRDP Final Environmental Impact Report (Final EIR) and adopted the LBNL 2006 LRDP. The 2006 LRDP Final EIR has been updated since 2007 with two supplements and an addendum.

UC LBNL has determined that an EIR shall be prepared for the proposed 2025 LRDP. As provided under Section 15060 of the CEQA Guidelines (Title 14 Cal. Code Regs.), Berkeley Lab has not prepared an Initial Study and will instead begin work directly on the EIR. Upon certification by the UC Regents—anticipated to be in 2025—the 2006 LRDP EIR would be replaced by the new 2025 LRDP EIR.

The 2025 LRDP EIR will use 2024 as its baseline year to reflect existing environmental conditions. For additional context, pre-pandemic years may be referenced to illustrate long-term growth trends. As required, the 2025 LRDP EIR will focus on the significant effects of the proposed Project and will document the reasons for concluding that other effects will be less than significant. Where significant or potentially significant environmental impacts are identified, the EIR will identify feasible mitigation measures to avoid or reduce impacts. The EIR will also analyze a reasonable range of potentially feasible alternatives designed to meet most of the Project's objectives and reduce significant impacts. The 2025 LRDP EIR will evaluate the potential environmental effects of the proposed Project in a wide range of CEQA environmental issue areas, including:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources, including Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise and Vibration
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Services Systems
- Wildfire
- Cumulative Impacts
- Alternatives
- Growth Inducement

Construction Program

The timing and intensity of demolition, construction of new buildings and infrastructure, and other large-scale construction activities envisioned under the 2025 LRDP would depend on funding availability and DOE priorities. Based on the historical pattern of Lab development, it is anticipated that such activities would be ongoing throughout the 20-year LRDP period. Consequently, the EIR will analyze the environmental impacts from construction under the 2025 LRDP as an on-going activity based on estimated annual average amounts of demolition and new building development.

Impact Analysis and Illustrative Development Scenario

The 2025 LRDP will identify key parameters—notably campus construction, demolition, and population—in aggregate terms. Future building dimensions and footprints are currently speculative at best and not within the LRDP scope. However, aggregated data does not allow for much detailed analysis in an EIR. For this reason, the 2025 LRDP EIR will include an analysis of an Illustrative Development Scenario (IDS), a conceptual portrayal of potential campus development at full 2025 LRDP development. The IDS will portray new buildings and infrastructure that could potentially be built under the 2025 LRDP parameters based on current trends and development patterns. Berkeley Lab planners will help inform the potential locations, footprints, and dimensions of such future buildings, along with other key campus development data (utility infrastructure, roads and parking lots, demolition, etc.). The IDS will thereby allow the LRDP EIR to conduct a full and detailed environmental impact analysis of potential 2025 LRDP development. The analysis would likely be conservative, as actual 2025 LRDP development would be funding dependent and thereby may be less intense than portrayed in the IDS. A similar IDS approach was used in the 2006 LRDP EIR.

CEQA and LRDP Schedule

The Project's CEQA public scoping period is from May 6, 2024 to June 6, 2024. Draft EIR preparation is anticipated to take place through the remainder of 2024. The Draft EIR is expected to become available for public review in early 2025 with an accompanying public comment period and public hearing. The Draft LRDP also would be available for public viewing during this time. A Final EIR that includes responses to public comments on the Draft EIR is expected to become available around the fall of 2025. Thereafter, the proposed 2025 LRDP and the Final EIR would be submitted to the UC Regents for their consideration and approval decision at their next available meeting (UC Regents meetings typically occur every other month).

Public Review and Comment

Availability of Information

A webpage dedicated to the 2025 LRDP and CEQA process is available at: **https://gcr.lbl.gov/community/long-range-development-plan.** This webpage includes information about the 2025 LRDP and EIR schedule, document availability, and opportunities for the public to provide comments.

This NOP is available for downloading at the above-referenced webpage.

Public Scoping Meeting

As part of the 2025 LRDP EIR CEQA process, UC LBNL will host an online public scoping meeting on May 22, 2024, beginning at **5:30** PM, via Zoom. Those interested in participating should register at: **https://lbnl.zoom.us/meeting/register/tJIrfu6oqzksE9OWF-rIIX4fCUCtp9gYqn4i#/registration**

The public scoping meeting will include brief presentations by Berkeley Lab followed by an opportunity for the public to provide comments on the scope of the EIR.
The public scoping meeting is an opportunity for the community to provide oral feedback pertinent to the scope of the forthcoming EIR. This allows UC LBNL to learn about potential concerns early, as well as to further define the issues, feasible alternatives, and potential mitigation measures that may warrant in-depth analysis in the environmental review process. The meeting will be recorded and a transcript prepared by a court reporter to become part of the Project's public record.

Public Comment

UC LBNL requests comments and guidance on the scope and content of the EIR from interested public agencies, organizations, and members of the public. With respect to the comments from Responsible and Trustee Agencies, UC LBNL requests the agency provide comments related to those environmental issues that are germane to the agency's statutory responsibilities with respect to the proposed Project.

Due to time limits mandated by State law, public comments should be sent at the earliest possible date, but no later than the close of the 30-day scoping period. To be considered in the preparation of the Program EIR, **all comments must be received or postmarked by 5:00 PM on June 6, 2024**. All comments should be directed to the attention of Jeff Philliber and may be provided as follows:

- Oral comments may be delivered at the May 22, 2024 public scoping meeting described above.
- E-mailed comments may be sent to: Planning@lbl.gov
- Hard-copy comments may be mailed to:

  Jeff Philliber
  Sr. Site & Environmental Planner
  1 Cyclotron Road, M/S 50A1148
  Berkeley, CA 94720

For questions about document availability or this Project's CEQA process, please consult the Project webpage at https://gcr.lbl.gov/community/long-range-development-plan or contact Jeff Philliber or Patricia Jung at Planning@lbl.gov.