UNIVERSITY OF CALIFORNIA
SANTA CRUZ

2021 Long Range Development Plan

Community Handbook:
A Guide to the Draft Environmental Impact Report

January 2021

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INTRODUCTION

Purpose of the LRDP

The University of California, Santa Cruz (UC Santa Cruz) 2021 Long Range Development Plan (2021 LRDP) has been prepared to guide the physical development necessary to achieve UC Santa Cruz's mission through 2040. It would replace the previous LRDP (2005 LRDP), which is currently being implemented in the LRDP area. LRDPs establish a land use framework for academic and administrative space needs, housing, open space, circulation, and other land uses that ultimately facilitates the appropriate siting of capital projects.

Each campus in the University of California (UC) system prepares an LRDP to guide campus development in anticipation of potential growth of student enrollment and new university-added programs. For UC Santa Cruz, the LRDP plans potential future development within the main residential campus and the Westside Research Park, which are collectively referred to as the LRDP area (see Figure 1). The LRDP proposes a land use plan to support potential growth within the LRDP area by developing infill sites and other sites adjacent to existing development. UC Santa Cruz anticipates that under the 2021 LRDP, the on-campus population could grow from approximately 18,500 full-time equivalent (FTE)[1] students and 2,800 FTE faculty and staff (2018-2019 academic year) to a potential enrollment of approximately 28,000 FTE students and 5,000 FTE faculty and staff by the 2040-2041 academic year. To accommodate the potential increased population, the 2021 LRDP proposes construction of an additional 3.1 million assignable square feet (asf) of academic and support building space and approximately 2.5 million asf of student and employee housing space.

The LRDP area does not include the third UC Santa Cruz property in the City of Santa Cruz, the Coastal Science Campus, which is governed by a separate Coastal Long Range Development Plan that was adopted by the UC Board of Regents and certified by the California Coastal Commission in 2008. It also does not include the Scotts Valley Center; the Silicon Valley remote satellite campus; or the UC Monterey Bay Education, Science, and Technology Center (UC MBEST), which was transferred to UC Santa Cruz by the U.S. Army and is located approximately 26 miles south of the main residential campus.

Much like a city or county general plan, an LRDP does not mandate growth or the provision of new facilities. Actual student enrollment is determined by a variety of factors, including the state's assessment of need for public university education, the potential capacity of each campus, the availability of an interest in specific programs, and the

HOW TO USE THIS GUIDE

UC Santa Cruz has developed a Draft EIR and is accepting comments on the environmental analysis in the EIR during a 60-day public review period (15 days longer than required under the State CEQA Guidelines). See page 21 of this guide for further information on how to participate in the review process.

The Draft EIR contains a considerable amount of information and complex analyses. This community handbook was prepared to provide an overview of the project and the key elements of the Draft EIR, including mitigation measures.

This handbook also provides information about the environmental review process and how to provide comments on the Draft EIR.

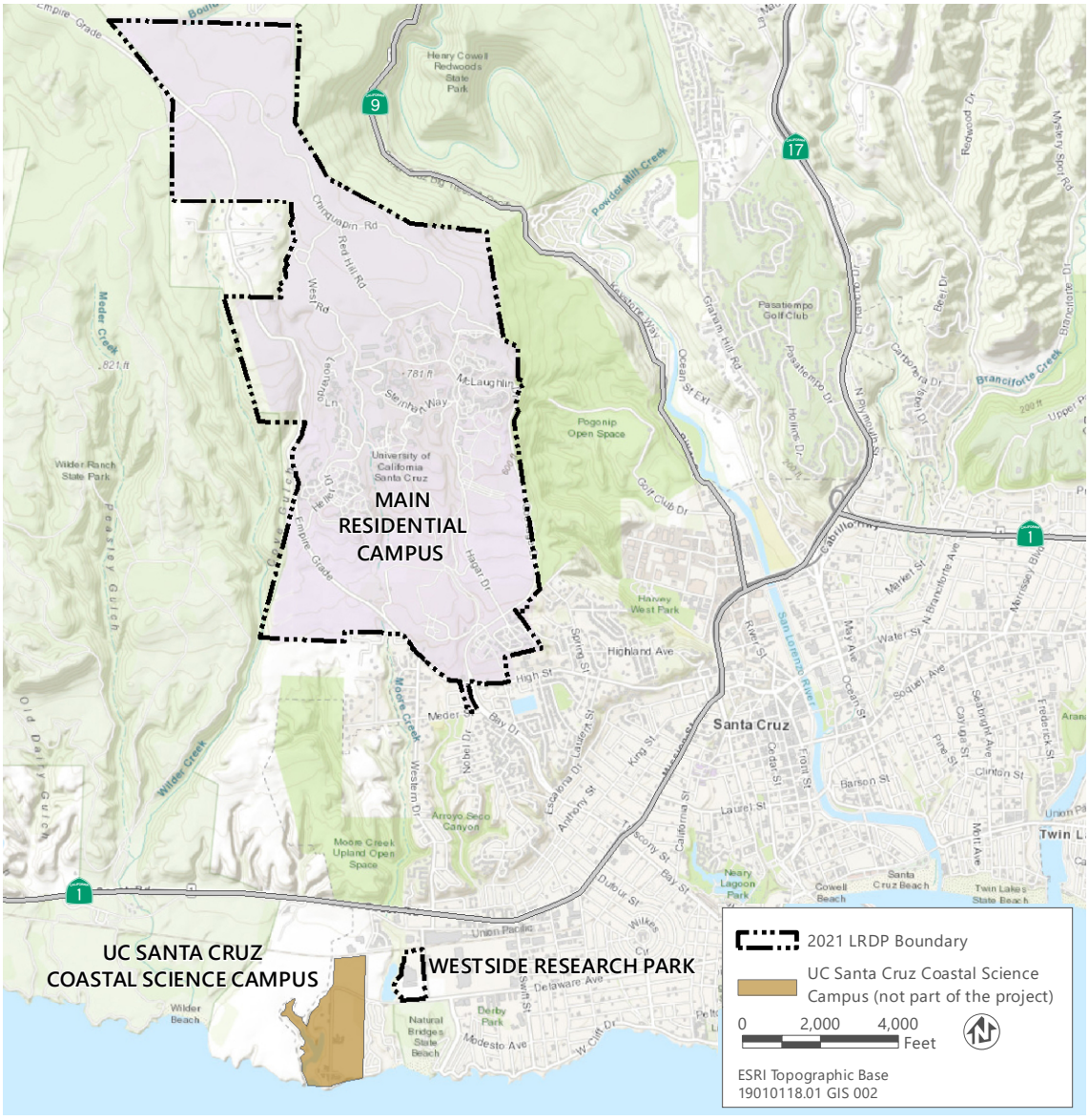
For definitions of the key terms and abbreviations used in this handbook, see pages 24 and 25 for the glossary and list of abbreviations, respectively.

[1] An FTE student is a three-quarter-average (fall, winter, and spring quarters) measure of (1) an undergraduate student who enrolls for 45 credit hours per academic year; or (2) a graduate student (master's level or doctoral student not yet advanced to candidacy) enrolled in 36 hours per year; or (3) a graduate doctoral student who has been advanced to candidacy. The LRDP campus population forecast accounts for students studying at the main residential campus and the Westside Research Park.

individual decisions of potential students. The LRDP provides a guide to the land development patterns and associated physical infrastructure that could be built to support a potential future level of enrollment and employment growth. Its approval does not constitute a commitment to any specific project, construction schedule, or funding priority, nor does it constitute a commitment by UC Santa Cruz to enrollment growth or a certain amount of development.

Further, an LRDP does not sunset, and there is no set timeframe for when a new LRDP would be needed. However, for analytical purposes, the draft environmental impact report (Draft EIR) prepared for the 2021 LRDP assumes that the forecasted student and faculty/staff growth would occur by the 2040-2041 academic year, along with development of related facilities and housing. The EIR uses the 2018-2019 academic year as the baseline year to reflect existing environmental conditions unless otherwise specified and explained in relation to a specific topic. This approach is consistent with the California Environmental Quality Act (CEQA) guideline recommendation that the date when the notice of preparation (NOP) is issued should normally constitute the date of the baseline conditions against which project conditions should be compared. At the time when the NOP was issued for the 2021 LRDP EIR, the 2018-2019 academic year represented the most complete and accurate data regarding the campus population.

Figure 1 Project Location and Plan Area



ABOUT THE LRDP

LRDP Area

The LRDP area is composed of two primary sites: the main residential campus and Westside Research Park. The main residential campus is located in Santa Cruz County, along the northern coast of the Monterey Bay. Approximately 53 percent of the main residential campus is located in the city of Santa Cruz, and the remaining acreage is located in unincorporated Santa Cruz County. The surrounding area includes open space/natural areas to the east and west of the campus, with residential uses located to the southeast, south, and southwest, and rural residential uses to the north of the campus boundary.

The main residential campus is composed of three primary subareas: the north campus, the central campus, and the lower campus. The north campus subarea is largely undeveloped except for recreational trails, unpaved service roads, and infrastructure related to water storage. This subarea is characterized by a mix of evergreen forests and some grasslands and includes the sites of long-term outdoor research projects. In the central campus subarea, development includes a series of clustered buildings nestled in the redwood forests and at the periphery of the meadows, referred to as the campus core. Campus development is generally clustered into several nodes, allowing for the retention of the redwood forest and meadows of the campus. The 10 residential colleges are arranged in an arc around the campus core. The lower campus subarea is characterized by open meadows and grasslands, the Cowell Lime Works Historic District, and low-density development.

Westside Research Park is located at 2300 Delaware Avenue on the west side of the city of Santa Cruz in the coastal zone. The surrounding area includes a mix of industrial, commercial, and housing uses and natural areas.

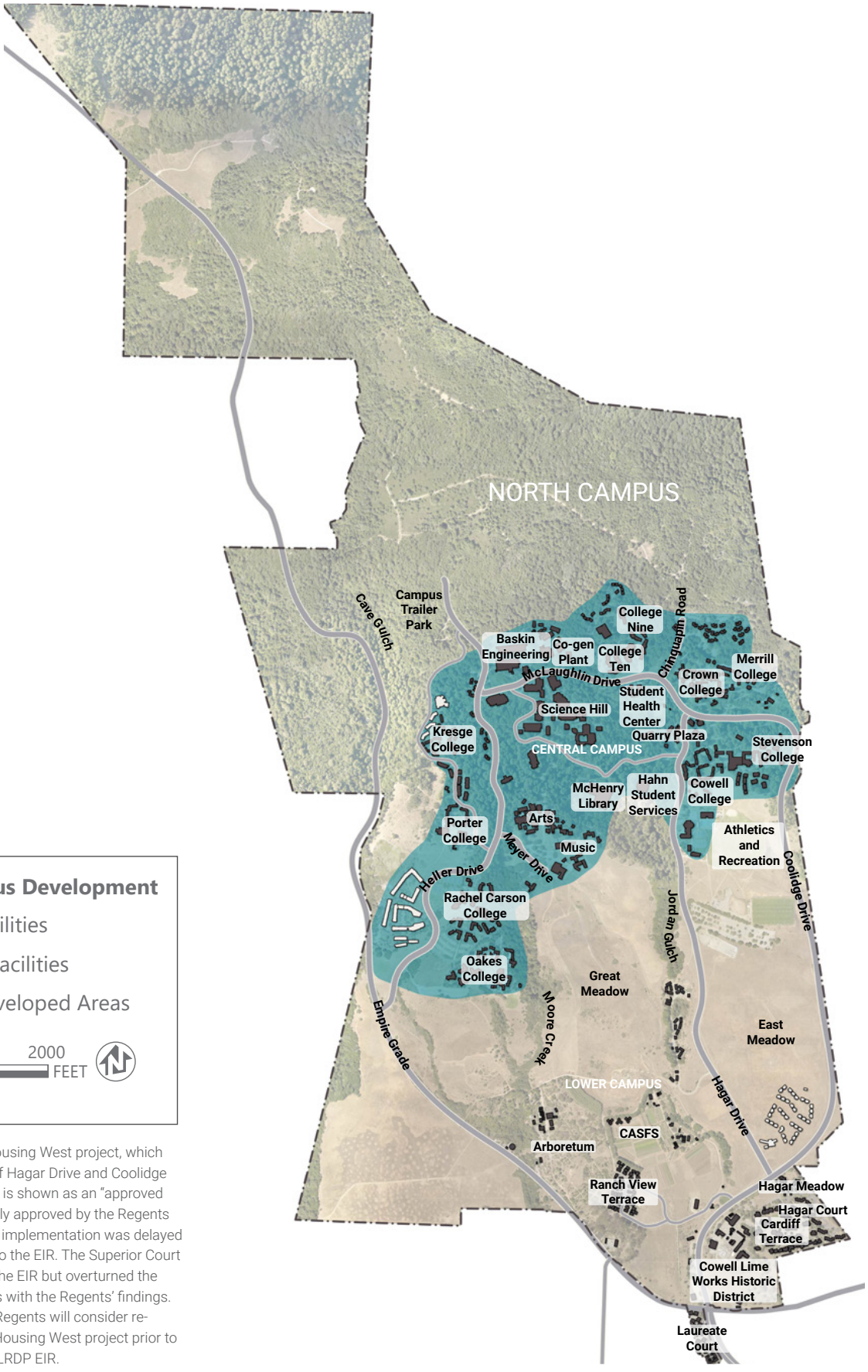
EXISTING USE

The campus's first LRDP (September 1963) established the general framework for the development of the campus, with construction starting in 1964. The 1963 LRDP responded to the challenges presented by UC Santa Cruz's collegiate structure and the large, geographically diverse site by providing for a moderately dense cluster of academic and research facilities in a central core area (the "Academic Core") encircled by self-contained colleges. As noted in the plan, "the intent is to combine the advantages of a small college with the facilities of a great university.... [T]he opportunity seems great to combine patterns of learning and living, as well as to make use of new methods of instruction, study, and communications" (UC Santa Cruz 1963).

In addition to an ambitious academic vision, a commitment to environmental stewardship has simultaneously guided the planning and development of the campus over the years. This includes protecting the diverse natural resources of the campus by clustering development in designated areas; sensitively siting new buildings to reduce effects on the natural environment, including the redwood forests, scenic viewsheds, and biological habitats, and on the cultural resources present on the campus; and, over time, concentrating academic and administrative functions in a central core area.

At present, the main residential campus includes approximately 2,000 acres. The buildings on the campus have a total of approximately 3,800,000 asf of academic and support space and residential space and approximately 9,280 beds. The 18-acre Westside Research Park was developed in 1980 and was first occupied by UC Santa Cruz in 2004. It comprises three buildings, which total 126,000 square feet, and 62,000 square feet of mechanical yards. The site also includes parking and other facilities (e.g., outdoor storage space, parcourse, courtyard, paths, and tennis courts). In all, the Westside Research Park site has approximately 800,000 square feet of existing improvements. The Westside Research Park is used by UC Santa Cruz for administrative and academic uses.

Figure 2 Subareas of Main Residential Campus



* The proposed Student Housing West project, which is located at the corner of Hagar Drive and Coolidge Drive and on Heller Drive, is shown as an "approved project" as it was originally approved by the Regents in 2019; however, project implementation was delayed due to a legal challenge to the EIR. The Superior Court upheld the adequacy of the EIR but overturned the approval based on issues with the Regents' findings. It is anticipated that the Regents will consider re-approval of the Student Housing West project prior to certification of the 2021 LRDP EIR.

Project Objectives

The overall objective of the 2021 LRDP is to guide the physical planning and development of the plan area in support of the teaching, research, and public service missions of UC Santa Cruz and the broader UC system. Four key considerations have informed the 2021 LRDP goals: (1) supporting the academic mission, (2) recognizing and connecting to the local and regional context, (3) guiding campus evolution and integrity, and (4) establishing a framework of planning resilience and long-term sustainability. UC Santa Cruz has identified the following objectives to guide implementation of the 2021 LRDP:

1. ***Expand*** campus facilities and infrastructure to allow for projected increases in student enrollment through 2040 based on statewide public educational needs and to support the academic mission, including housing for 100 percent of the additional FTE students (above the 2005 LRDP total of 19,500 FTE students) in both colleges and student housing developments, and commensurate academic and support space.
2. ***Ensure*** compact and clustered development of academic, administrative, and support facilities in the academic core and student housing and colleges around the periphery to facilitate shared resources, provide convenient access, and promote pedestrian circulation.
3. ***Provide*** for establishment of two new college pairs at the main residential campus to provide academic services and a close-knit intellectual and social environment.
4. ***Protect***, to the extent feasible, existing campus open spaces in the built environment, including areas designated as Natural Space to maintain an interconnectedness between natural resources, wildlife corridors and critical scenic viewsheds, and areas designated as Outdoor Research and Natural Reserve to protect natural features and processes for teaching and learning and to support dedicated outdoor research programs.
5. ***Provide*** spaces for events and academic facilities to allow the campus to function as a center for public cultural life in the region through public programs, events, and services.
6. ***Increase*** on-campus housing opportunities for faculty and staff at the main residential campus and the Westside Research Park, to allow up to 25 percent of the increase in faculty and staff, based on demand, to be housed on campus.
7. ***Recognize***, to the extent feasible, UC Santa Cruz and regional histories within the campus, including protecting the integrity of existing historic structures and enhancing the Cowell Lime Works Historic District as a campus gateway.
8. ***Develop*** an improved, more efficient roadway network to support transit with peripheral parking and mobility hubs.
9. ***Promote*** Transportation Demand Management (TDM) and provide infrastructure to optimize trip- and vehicle-miles-traveled-reduction benefits and efficiency of transit, bike, and pedestrian access to, from, and within the campus to reduce the use of single-occupancy vehicles.
10. ***Foster*** long-term physical and social resilience, including a response to climate change through climate resiliency and adaptation strategies and integrating sustainability leadership into campus teaching, learning, research, design, and operations.
11. ***Respect*** and reinforce the Physical Planning Principles and Guidelines to maintain the unique character of the UC Santa Cruz campus.

Project Characteristics

The 2021 LRDP proposes to accommodate 100 percent of the potential increase in students beyond approximately 19,500 FTE students and up to 25 percent of the potential additional 2,200 FTE faculty/staff members in on-campus housing. It would accommodate 8,500 additional students in campus housing (for a total of 17,800 students residing in campus housing), compared to existing on-campus housing capacity for approximately 9,300 students.

The 2021 LRDP embraces a compact academic core with colleges and student housing around the periphery. Employee housing would be strategically located near campus entries to allow access to community resources. An enhanced historic district at the entrance to the main residential campus would provide an improved community interface. Designated reserve areas would be set aside for ecological, cultural, and educational uses, and natural space would protect wildlife corridors and scenic views. To improve circulation, the 2021 LRDP includes an improved and more efficient roadway network and enhanced alternative transportation strategies throughout the main residential campus. The 2021 LRDP plans for the Westside Research Park to be developed with mixed-use academic, research, and housing on the west side of Santa Cruz. More characteristics of the project are summarized as follows:

- **Proposed Land Use Plan:** The proposed land use plan includes a mix of land use categories to accommodate academic, residential, open space, and facilities and operational uses (see Figure 3). The plan was the product of a comprehensive LRDP planning process that included community input and feedback that reflects current campus needs and functions.
- **Campus Enrollment and Population:** The total on-campus population could grow from approximately 22,350 persons (2018-2019 academic year) to approximately 35,230 persons in 2040-2041, an increase of 12,830 persons. On-campus student population is projected to grow from 18,518 FTE students to approximately 28,000 FTE students, an increase of 9,482 students. The number of faculty and staff is anticipated to increase by approximately 2,200 FTE persons, to an estimated total of approximately 5,000 FTE; and the number of non-UC employees (e.g., visitors, consultants, construction workers, etc.) is projected to increase from about 640 persons to approximately 990 persons.
- **Building Program:** Total building space on the campus would increase from approximately 3.8 million asf (5.8 million gross square feet [gsf]) in 2018-2019 to approximately 9.4 million asf (14.1 million gsf) upon full implementation of the 2021 LRDP, anticipated in 2040. As currently envisioned and shown in Figure 4, development under the 2021 LRDP would occur primarily in the central and lower campus subareas.
- **Circulation, Parking, and Transportation Infrastructure:** The 2021 LRDP includes an integrated transportation strategy that envisions integrating alternative modes of transportation (transit, pedestrian, and biking) with peripheral parking to promote a walkable campus. Integral to this concept is the proposed Meyer Drive extension, which would create an inner campus roadway loop for more efficient transit, and the development of mobility hubs for a more seamless transfer from one mode to another. The planned circulation, parking, and transportation infrastructure improvements as envisioned in the 2021 LRDP's integrated transportation strategy are intended to enhance alternative transportation opportunities and increase connectivity within the campus and to the city.
- **Infrastructure and Utilities Framework:** UC Santa Cruz has identified preliminary utility improvements/projects that would be undertaken to address specific infrastructure needs through the lens of proposed development under the 2021 LRDP, as well as to address long-term and aged infrastructure issues that UC Santa Cruz has identified to reduce the risk of failures related to sensitive geological and environmental conditions in the LRDP area.

Figure 3 **LRDP Proposed Land Use Designations**

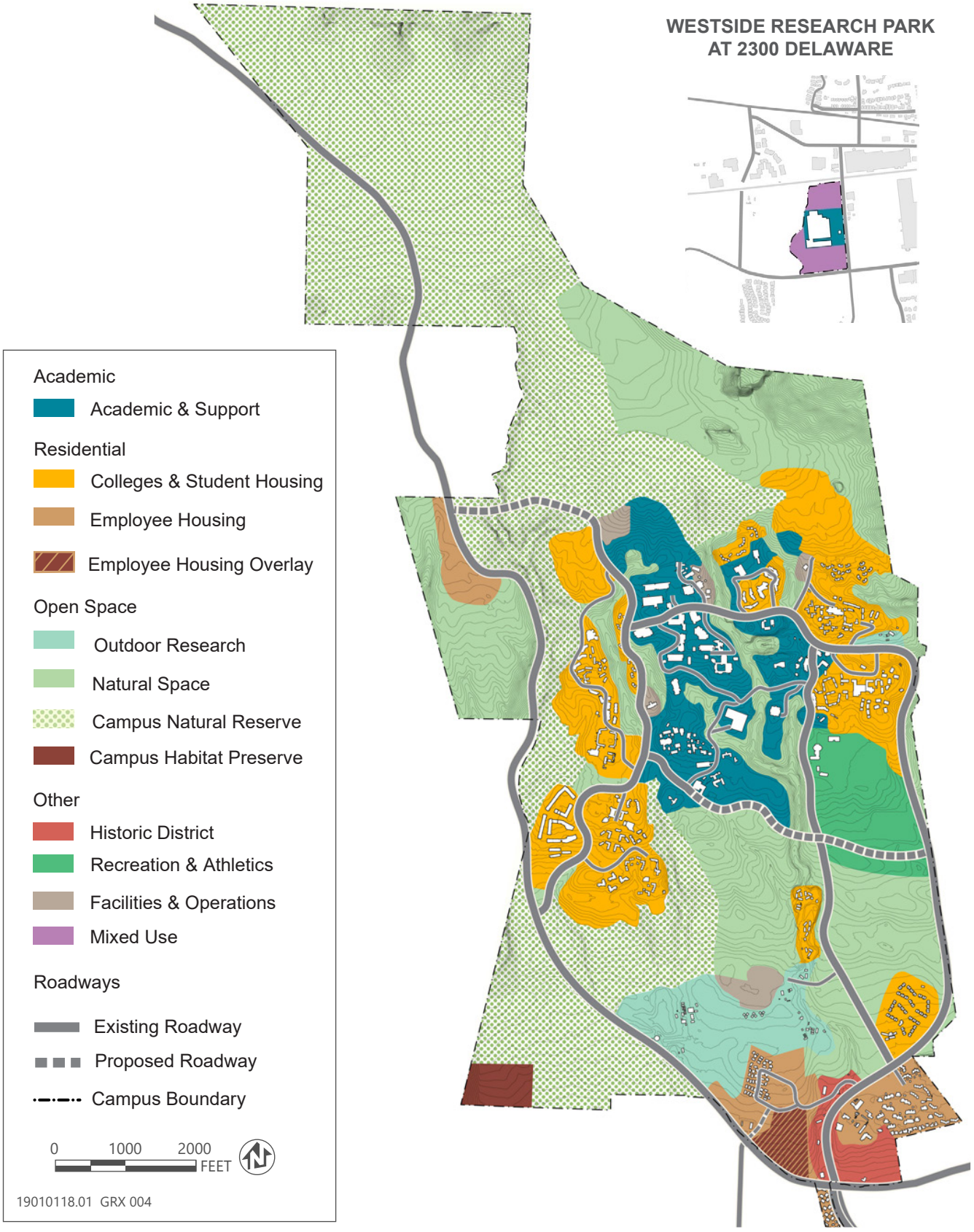
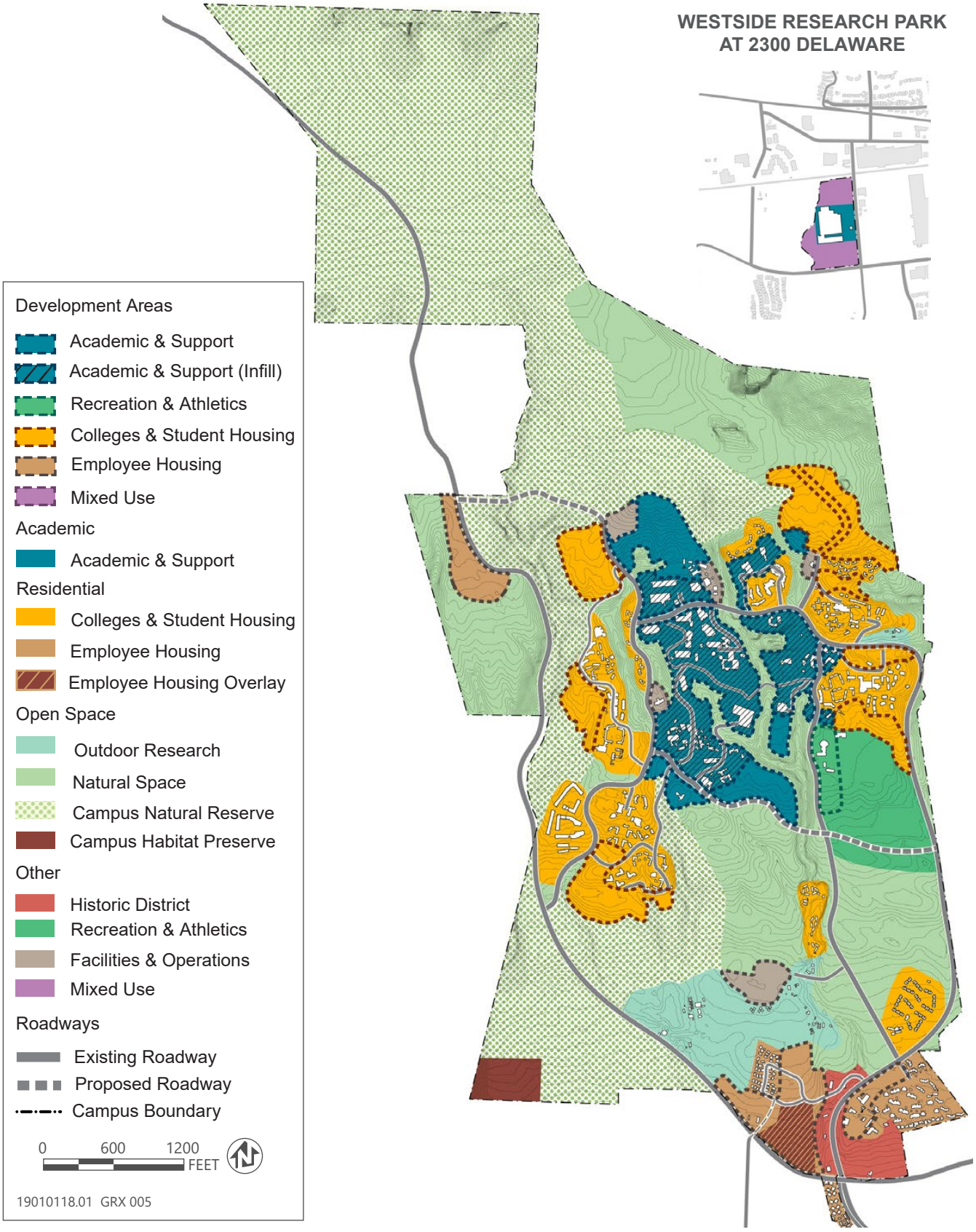


Figure 4 **Envisioned Development Areas on the Main Residential Campus and Westside Research Park**



DRAFT ENVIRONMENTAL IMPACT REPORT

Contents of the Draft EIR

The central topic of the Draft EIR is the analysis of the potential physical effects that the proposed LRDP may have on specific environmental resource areas, as well as the mitigation measures that could reduce those potentially significant or significant impacts. The analysis, which is presented in Chapter 3 of the Draft EIR, includes, for each resource area addressed, a description of the existing environmental setting and regulatory framework, a description of the approach used in the analysis, discussion of the impact findings, and discussion of the mitigation measures.

Several additional discussions in the Draft EIR are important to providing a full description of the 2021 LRDP and its potential effects:

Project Description: The Project description, presented in Chapter 2, describes the location of the project, the project background, existing conditions on the project site, and the nature and location of specific elements of the proposed project.

Environmental Setting, Impacts and Mitigation Measures: This section includes a topic-by-topic analysis of environmental impacts that would or could result from project implementation. The analysis is organized in 18 topical sections. Each section includes a discussion of the environmental and regulatory setting, an impact analysis, and a discussion of mitigation measures.

A project impact is less than significant when it does not exceed identified significance criteria and therefore would not cause a substantial change in the environment. No mitigation is required. A potentially significant impact is a potentially substantial adverse change in the environment. Additional information would be needed regarding whether an impact may occur and its extent. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact. Mitigation measures and/or project alternatives are identified to reduce potentially significant effects. A project impact is significant if it is a substantial adverse change in the physical environment. Significant impacts are identified by the evaluation of project effects in the context of specified significance criteria. Mitigation measures and/or project alternatives are identified to reduce significant effects.

RESOURCE AREAS

The Draft EIR includes an analysis of the LRDP's potential effects on the following environmental resource areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Archaeological, Historical, and Tribal Cultural Resources
- Biological Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions and Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems
- Wildfire

In addition, technical studies and modeling related to air quality, cultural resources, noise, transportation, water supply, and other topics have been conducted to help inform the EIR. The results of these studies and modeling efforts are included as appendices to the EIR.

Cumulative Impacts: Chapter 4 provides a discussion of the 2021 LRDP's contribution to cumulative impacts. Cumulatively significant impacts are LRDP impacts (large or small) that, when combined with the impacts of other closely related past, present, or reasonably foreseeable future projects, could contribute to a cumulatively significant impact.

Other CEQA Sections: Chapter 5 of the Draft EIR includes a discussion of:

- Significant and unavoidable adverse impacts, which are significant environmental effects that either cannot be mitigated or can be mitigated, but not to a less-than-significant level
- Significant irreversible environmental changes, which are primary or secondary impacts from the use of a resource that limit options for the future use of that resource
- Growth-inducing impacts, which are impacts that could foster economic or population growth or the construction of additional housing

Alternatives: Chapter 6 of the Draft EIR describes potentially feasible alternatives to the 2021 LRDP and compares their impacts to those of the 2021 LRDP. This chapter also summarizes the alternatives that were considered but dismissed from further analysis.

Numerous appendices, figures, and tables in the Draft EIR also help support the analysis.

Summary of Project Impacts and Mitigation Measures

The Draft EIR evaluates potential impacts to 18 environmental resources areas as required by CEQA. This section provides an overview of only the CEQA issue areas within which potentially significant impacts were identified and which received substantial comment during public review of the NOP. The following discussion is included in alphabetical and numerical order as presented in the Draft EIR.

AESTHETICS

Refer to Section 3.1 of the Draft EIR for more detail.

About: This section evaluates the potential of the 2021 LRDP to result in substantial adverse visual impacts. The visual impact analysis considers existing scenic resources and the potential for public views to be affected by the project.

Findings: The 2021 LRDP's impacts on aesthetics would be less than significant with mitigation.

Implementation of the 2021 LRDP would result in the construction and operation of additional facilities within the UC Santa Cruz main residential campus and Westside Research Park that could result in changes in visual character and alteration of scenic vantage and viewpoint locations, including views toward Monterey Bay. However, new development would be designed and constructed in a manner consistent with, and generally adjacent to, existing development which has already altered some long-distance views. In addition, any campus-related development would be required to comply with the UC Santa Cruz Design Review Process and the Campus Standards Handbook and be generally consistent with the Physical Design Framework and the Physical Planning Principles and Guidelines in the 2021 LRDP. In addition, due to the potential for 2021 LRDP-related development adjacent to the Cowell Lime Works Historic District on campus, mitigation would be required to retain visual continuity and the integrity of the district.

Implementation of the 2021 LRDP would also introduce new sources of light and glare associated with new buildings and facilities. Implementation of mitigation during design and construction would be required to ensure that such lighting would not contribute to adverse effects related to light and/or glare on adjacent land uses.

Mitigation Measures: Impacts on aesthetics from implementation of the 2021 LRDP would be reduced to less than significant by protecting the Cowell Lime Works Historic District (Mitigation Measure 3.4-a), requiring a setback distance from Empire Grade (Mitigation Measure 3.1-3a), implementing design measures for protection of views along Empire Grade (Mitigation Measure 3.1-3b), implementing design measures for protection of views within viewsheds (Mitigation Measure 3.1-3c), and minimizing light and glare resulting from new development (Mitigation Measure 3.1-4).

AIR QUALITY

Refer to Section 3.3 of the Draft EIR for more detail.

About: This section evaluates the potential for air pollutants and ozone precursors resulting from both development during the construction phase and operation of facilities to result in adverse impacts on air quality.

Findings: Most of the 2021 LRDP's impacts on air quality would be less than significant with mitigation; however, two air quality impacts would be significant and unavoidable.

The emission of air pollutants during construction of on-campus facilities under the proposed LRDP would not exceed Monterey Bay Air Resources District (MBARD) significance thresholds with mitigation.

Implementation of individual projects under the 2021 LRDP would also result in long-term project-generated emissions of respirable particulate matter (PM_{10}) that would exceed the MBARD threshold of significance. Thus, operational emissions would result in a cumulatively considerable net increase of ozone and ambient PM_{10} concentrations, for which the region is in nonattainment under the California ambient air quality standards. Implementation of mitigation would reduce ROG and PM_{10} emissions; however even with mitigation, PM_{10} emissions levels would exceed the MBARD threshold of significance. As a result and for this reason, the 2021 LRDP would also be considered inconsistent with applicable air quality plans (i.e., MBARD's Air Quality Management Plan). This impact would be significant and unavoidable.

LRDP-related emissions of carbon monoxide generated by additional traffic under the proposed LRDP would not violate an air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. In addition, the operation of new on-campus uses (e.g., laboratory-related equipment and generators) associated with 2021 LRDP implementation would not result in substantial health risks to on- and off-campus receptors. This impact would be less than significant.

The 2021 LRDP may introduce new odor sources into the area, such as new research facilities and diesel-related exhaust from delivery trucks. Because the new odor sources would be similar to existing sources that operate in and around the UC Santa Cruz campus, the impact would be less than significant.

Mitigation Measures: Most impacts on air quality from implementation of the 2021 LRDP would be reduced to less than significant by reducing construction-generated emissions of oxides of nitrogen (NO_x) (Mitigation Measure 3.3-1), implementing a transportation demand management program and monitoring (Mitigation Measure 3.16-1), and reducing operational emissions of reactive organic gases (ROG) and PM_{10} from all sources (Mitigation Measure 3.3-2).

ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Refer to Section 3.4 of the Draft EIR for more detail.

About: This section evaluates the potential impacts of the proposed LRDP on known and unknown cultural resources in the LRDP area. Cultural resources include historic districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include archaeological, historical, and tribal cultural resources.

Findings: Most of the 2021 LRDP's impacts on archaeological, human tribal cultural resources, and human remains would be less than significant with mitigation; however, potential impacts to historic resources would be significant and unavoidable.

Archaeological Resources. Future development associated with the 2021 LRDP could be located on properties that contain known or unknown archaeological resources, and ground-disturbing activities could result in discovery of or damage to yet undiscovered archaeological resources. Implementation of mitigation would be required in the event of an inadvertent discovery.

Tribal Cultural Resources. Future development associated with the 2021 LRDP would involve land development activities that could cause a substantial adverse change in the significance of a tribal cultural resource. Although no specific tribal cultural resources (as defined in Public Resources Code Section 21074) have been identified, ground-disturbing construction activities could unearth previously unrecorded resources and mitigation would be required in the event of an inadvertent discovery.

Human Remains. Although unlikely, construction and excavation activities associated with project development could unearth previously undiscovered or unrecorded human remains, if they are present. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and Public Resources Code Section 5097 would make this impact less than significant.

Historic Resources. The LRDP-proposed general types of campus development, including the renovation of buildings, could result in damage, destruction, or loss of integrity to a historic building, structure, or district, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5. Implementing mitigation would reduce potentially significant impacts on historic resources because actions would be taken to record, evaluate, avoid, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. However, if demolition or other substantial modifications occur, in some circumstances, documentation of a historical resource would not mitigate the effects to a less-than-significant level, because the historic resource would no longer exist or would lose its integrity. Because the potential for permanent loss of a historic resource or its integrity cannot be precluded, this impact would be significant and unavoidable.

Mitigation Measures: Most impacts on archaeological, historical, and tribal cultural resources from implementation of the 2021 LRDP would be reduced to less than significant by identifying and protecting unknown archaeological resources (Mitigation Measure 3.4-1), protecting tribal cultural resources (Mitigation Measure 3.4-2), protecting the Cowell Lime Works Historic District (Mitigation Measure 3.4-4a), protecting the potential Campus Core discontiguous historic district (Mitigation Measure 3.4-4b), and conducting project-specific surveys and implementing measures to protect previously unidentified historic resources (Mitigation Measure 3.4-4c).

BIOLOGICAL RESOURCES

Refer to Section 3.5 of the Draft EIR for more detail.

About: This section addresses biological resources known or with potential to occur in or near the LRDP area and describes potential effects expected to result from campus development under the proposed LRDP. Biological resources include vegetation and habitat types, special-status plant and animal species, and otherwise sensitive plant communities.

Findings: The 2021 LRDP's impacts on biological resources would be less than significant with mitigation.

Potential land use conversion and development as part of implementation of the 2021 LRDP could result in disturbance to or loss of several special-status plant species if not properly mitigated. Similarly, development under the 2021 LRDP could result in introduction or spread of invasive plants during vegetation removal or ground disturbance, which could result in exclusion of special-status plants. Implementation of mitigation identified in the Draft EIR (and summarized below) would reduce the impact on special-status species to less-than-significant levels by requiring reconnaissance-level surveys of individual project sites to confirm the presence/absence of special-status species during planning and design, implementation of avoidance measures (including species-specific buffers) and compensation for impacts on special-status species, as well as avoidance of the introduction or spread of invasive plants and plant pathogens, like Sudden Oak Death.

Projects developed under the 2021 LRDP may require ground disturbance, vegetation removal, and land development that could result in degradation or loss of wetlands, riparian habitat, other sensitive natural communities, or Environmentally Sensitive Habitat Areas, or reduction in the function of these habitats. Implementation of mitigation measures would reduce the impact on sensitive habitat to less than significant by requiring project-level surveys of individual project sites to confirm the presence of such habitats, prevention measures for the spread of invasive plant species and Sudden Oak Death, protocol-level surveys for sensitive natural communities and riparian habitat if determined to be likely to occur, implementation of avoidance measures, and compensation for permanent loss of these habitats such that no net loss of sensitive habitat would occur.

Projects developed under the 2021 LRDP may require ground disturbance, vegetation removal, and land development that could result in adverse effects on resident or migratory wildlife corridors through habitat fragmentation, degradation of aquatic habitat, or blockage of important wildlife migration paths. These activities could also disturb wildlife nursery sites or degrade essential nursery habitat components. Implementation of mitigation would reduce the impact on wildlife movement corridors and native wildlife nursery sites to less than significant by requiring reconnaissance-level surveys of projects under the 2021 LRDP to confirm the presence/absence of wildlife nursery sites, wildlife-friendly building and fencing design to minimize impacts on wildlife as a result of bird strikes or entanglement, and identification and avoidance of important habitat for wildlife nursery sites.

The Ranch View Terrace Habitat Conservation Plan (HCP) area is located in the lower campus portion of the main residential campus and includes two preserves: Inclusion Area A and Inclusion Area D (IAD). Under the 2021 LRDP, UC Santa Cruz is considering development of new employee housing within IAD, which would result in a conflict with the provisions of the adopted HCP and incidental take permit granted by the U.S. Fish and Wildlife Service (USFWS). Implementation of mitigation would reduce this impact to less than significant by requiring consultation with USFWS; identification and protection of alternative preserves; or amendment of the existing HCP or preparation of a new, more comprehensive HCP, or prohibition of development in IAD if the HCP cannot be amended.

Mitigation Measures: Impacts on biological resources from implementation of the 2021 LRDP would be reduced to less than significant by:

- conducting project-level biological reconnaissance sensitive species and habitats survey (Mitigation Measure 3.5-1a);
- conducting special-status plant surveys and implementing avoidance measures and mitigation (Mitigation Measure 3.5-1b);
- implementing measures to avoid introduction or spread of invasive plant species and plant pathogens (Mitigation Measure 3.5-1c);
- conducting site-specific habitat suitability analysis for California red-legged frog, obtaining incidental take authorization through consultation with USFWS, and implementing minimization measures (Mitigation Measure 3.5-2a);
- conducting preconstruction surveys for special-status amphibians and implementing avoidance measures (Mitigation Measure 3.5-2b);
- implementing procedures for building on karst where groundwater is encountered and where pressure grouting is required (Mitigation Measure 3.10-5a);
- conducting preconstruction surveys for southwestern pond turtle, implementing avoidance measures, and relocating individuals (Mitigation Measure 3.5-2c);
- conducting preconstruction surveys for coast horned lizard, implementing avoidance measures, and relocating individuals (Mitigation Measure 3.5-2d);
- conducting protocol-level surveys for burrowing owl, implementing avoidance measures, and compensating for loss of occupied burrows (Mitigation Measure 3.5-2e);
- conducting focused surveys for special-status birds, nesting raptors, and other native nesting birds and implementing protective buffers (Mitigation Measure 3.5-2f);
- limiting human disturbance of cave ecosystems (Mitigation Measure 3.5-2g);
- conducting focused surveys for monarch overwintering colonies and implementing avoidance measures (Mitigation Measure 3.5-2h);
- conducting site-specific habitat suitability analysis for Ohlone tiger beetle, obtaining incidental take authorization through consultation with USFWS, and implementing minimization measures (Mitigation Measure 3.5-2i);
- conducting focused American badger surveys and establishing protective buffers (Mitigation Measure 3.5-2j);
- conducting focused noninvasive surveys for mountain lion dens and implementing avoidance measures (Mitigation Measure 3.5-2k);
- conducting focused surveys for ringtail (Mitigation Measure 3.5-2l);
- conducting focused surveys for San Francisco dusky-footed woodrat, implementing avoidance measures, or relocating nests (Mitigation Measure 3.5-2m);
- conducting focused bat surveys and implementing avoidance measures (Mitigation Measure 3.5-2n);
- conducting protocol-level surveys for sensitive natural communities and riparian habitat and implementing avoidance measures (Mitigation Measure 3.5-3a);
- compensating for unavoidable loss of sensitive natural communities (Mitigation Measure 3.5-3b);
- compensating for unavoidable loss of riparian habitat (Mitigation Measure 3.5-3c);
- identifying state or federally protected wetlands, implementing avoidance measures, and obtaining permits for unavoidable impacts on wetlands (Mitigation Measure 3.5-4);
- utilizing wildlife-friendly building and fencing designs (Mitigation Measures 3.5-5a);
- retaining wildlife nursery habitat and implementing buffers to avoid wildlife nursery sites (Mitigation Measure 3.5-5b); and
- establishing alternative preserves to replace IAD, and amending the Ranch View Terrace HCP with approval from USFWS (Mitigation Measure 3.5-7).

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Refer to Section 3.8 of the Draft EIR for more detail.

About: This section discusses greenhouse gas (GHG) emissions expected to result from campus development and growth under the proposed LRDP. GHGs are a type of gas, most commonly carbon dioxide but also including other gases, that trap heat in the Earth's atmosphere, leading to global climate change.

Findings: The 2021 LRDP's impacts related to GHG emissions and climate change would be less than significant with mitigation.

The increase in development, along with the implementation of design features, programs, and other measures, under the 2021 LRDP would result in annual emissions of 26,914 metric tons of carbon dioxide equivalent ($MTCO_2e$) in 2040, which is equivalent to 46 percent below the campus's 1990 levels and is not consistent with the target to reduce statewide GHG emissions by 60 percent below 1990 levels by 2040. Implementation of Mitigation Measures 3.8-1a and 3.8-1b would reduce annual GHG emissions generated by the UC Santa Cruz campus under the 2021 LRDP by 7,052 $MTCO_2e$, which is needed to reduce the campus's emissions to 60 percent below 1990 levels.

Implementation of the 2021 LRDP would achieve targets established in the UC Sustainable Practices Policy through anticipated planning and policy actions. Therefore, the 2021 LRDP would not conflict with an applicable plan, policy, or regulations intended to reduce GHG emissions, and this impact would be less than significant.

Mitigation Measures: Impacts related to GHG emissions and climate change from implementation of the 2021 LRDP would be reduced to less than significant by reducing annual GHG emissions (Mitigation Measure 3.8-1).

POPULATION AND HOUSING

Refer to Section 3.13 of the Draft EIR for more detail.

About: This section estimates the growth in population (students, faculty, and staff) related to the potential population and housing impacts that could result from implementation of the 2021 LRDP.

Findings: Implementation of the 2021 LRDP may directly or indirectly induce housing demand in the region. The potential impact would be significant and unavoidable.

In response to increases in the on-campus population, the 2021 LRDP would provide additional housing on the main residential campus and potentially at the Westside Research Park. Existing data on vacancy rates, as well as planned development nearby, suggest that housing is generally available or planned to be available in the region to accommodate the increased campus population that would not be accommodated by the 2021 LRDP. However, other data, such as affordability, suggest a tighter housing market. Further, due to the recent (summer 2020) loss of homes associated with the CZU Lightning Complex fire, the availability of housing has tightened. Therefore, the total on-campus population increase accommodated by the 2021 LRDP may directly or indirectly induce housing demand in the region. No feasible mitigation measures are available to reduce the anticipated impact. This impact would be considered potentially significant and unavoidable.

Mitigation Measures: No feasible mitigation is available.

NOISE

Refer to Section 3.12 of the Draft EIR for more detail.

About: This section includes a description of ambient-noise conditions, and an analysis of potential short-term construction and long-term operational-source noise impacts from campus development under the 2021 LRDP.

Findings: Most of the 2021 LRDP's noise impacts would be less than significant with mitigation; however, potential impacts related to construction noise would be significant and unavoidable.

Implementation of the 2021 LRDP would result in construction activities associated with the development of on-campus facilities to accommodate future growth in support of the UC Santa Cruz's academic mission. Although construction activities would be intermittent and temporary, construction noise could reach high levels at nearby noise-sensitive land uses, resulting in human disturbance. Implementation of mitigation would substantially reduce noise levels by limiting the time periods during which construction activities in the vicinity of nearby noise-sensitive land uses would occur and by providing substantial reductions in levels of construction noise exposure at noise-sensitive receptors; however, this impact would be significant and unavoidable.

Implementation of the 2021 LRDP would include construction activities that may require the use of vibration-generating equipment. If pile driving would be required during construction of future projects, nearby sensitive receptors could be exposed to levels of ground vibration resulting in structural damage and/or human disturbance. Implementation of mitigation would reduce this impact to a less-than-significant level by requiring the contractor(s) to minimize vibration exposure at nearby receptors and by requiring preparation and implementation of a vibration control plan.

The new buildings and facilities constructed as part of the 2021 LRDP may result in increased noise levels as a result of new stationary noise sources and equipment and other new sources, such as gathering spaces, loading docks, corporation yards, and parking lots. Noise levels associated with new stationary noise sources could result in the exceedance of exterior noise limits at existing noise-sensitive land uses, resulting in disturbance to human activities during the daytime or sleep disruption at night. Implementation of mitigation would reduce this impact to less than significant by ensuring that both on- and off-campus residential land uses would not be exposed to noise generated by loading dock or corporation yard activity in excess of the daytime or nighttime noise standards of 70 and 65 decibels L_{max}, respectively.

Population growth and development associated with implementation of the 2021 LRDP would increase traffic within and outside the main residential campus and Westside Research Park, but project-generated traffic volumes would not be at levels high enough to cause substantial increases in traffic noise. This impact would be less than significant.

Mitigation Measures: Most of the noise impacts from implementation of the 2021 LRDP would be reduced to a less-than-significant level by implementing construction noise reduction measures (Mitigation Measure 3.12-1), implementing measures to reduce ground vibration (Mitigation Measure 3.12-2a), developing and implementing a vibration control plan (Mitigation Measure 3.12-2b), implementing noise reduction measures to reduce long-term noise impacts from loading dock activity (Mitigation Measure 3.12-3a), and implementing noise reduction measures to reduce long-term noise impacts from corporation yard activity (Mitigation Measure 3.12-3b).

TRANSPORTATION

Refer to Section 3.16 of the Draft EIR for more detail.

About: This section evaluates the potential for the 2021 LRDP to result in adverse impacts associated with bicycle, pedestrian, and transit facilities; the generation of vehicle miles traveled (VMT); transportation hazards; and emergency access as part of this analysis.

Findings: The 2021 LRDP's impacts related to transportation would be less than significant with mitigation.

The 2021 LRDP includes on-campus improvements to transit service and infrastructure, off-campus transit service, and the on-campus roadway, bicycle, and pedestrian network. These improvements are consistent with relevant non-university plans related to circulation. Therefore, the 2021 LRDP would not conflict with relevant programs, plans, ordinances, or policies, and impacts would be less than significant.

Implementation of the 2021 LRDP would reduce residential VMT per campus resident to below the significance threshold of 15 percent below baseline VMT per campus resident. However, total VMT per capita and commuter VMT per worker would not meet the significance threshold of 15 percent below baseline total VMT per capita and commuter VMT per worker.

Development associated with the 2021 LRDP, including future roadway modifications, would be subject to, and constructed in accordance with, the UC Facilities Manual and all applicable industry standard roadway design and safety guidelines, the 2021 LRDP would not substantially increase hazards related to a geometric design feature or incompatible uses. In addition, UC Santa Cruz would coordinate with other agencies to ensure the safe transition between UC Santa Cruz facilities and other infrastructure. This impact would be less than significant.

Mitigation Measures: Potential impacts associated with increases in total VMT per capita and commuter VMT per worker relative to baseline conditions would be reduced to less than significant by implementing a transportation demand management program and monitoring (Mitigation Measure 3.16-2).

UTILITIES AND SERVICE SYSTEMS

Refer to Section 3.17 of the Draft EIR for more detail.

About: This section evaluates the potential for construction and operations related to campus development and growth under the proposed LRDP to result in adverse impacts on utilities and service systems.

Findings: Most of the 2021 LRDP's impacts on utilities and service systems would be less than significant before mitigation. However, potential impacts related to water supply would be significant and unavoidable.

Implementing the 2021 LRDP would generate an additional demand for water. Although there would be adequate water supply from the City's existing water sources in normal water years, during single and multiple dry water year conditions, there would be a substantial gap between demand and available supplies, which would require the City to secure a new water source. Implementation of Mitigation Measures 3.17-1a and 3.17-1b would potentially reduce the level of impact, but the additional on-site water recycling and water demand reduction measures would be subject to technological demands and funding and therefore cannot be assumed to sufficiently reduce the significant impact on water supply. This impact would be significant and unavoidable.

Implementing the 2021 LRDP could require new water connections or expanded water conveyance systems, which are considered part of the programmatic development and have been comprehensively analyzed in this EIR. This impact would be less than significant.

Implementation of the 2021 LRDP would not exceed the available capacity of existing wastewater infrastructure, nor would it require the construction or expansion of wastewater treatment facilities or conveyance systems that could cause significant environmental effects. This impact would be less than significant.

Implementation the 2021 LRDP would increase solid waste generation at the main residential campus and Westside Research Park. However, adequate landfill capacity is available to accommodate additional solid waste generated by the project. Compliance with the UC Sustainable Practices Policy would continue to reduce landfill disposal of solid waste. This impact would be less than significant.

The impact associated with new energy infrastructure is evaluated as part of the overall LRDP development. New facilities would be constructed to serve proposed development, and any relocated facilities would be coordinated with Pacific Gas and Electric Company to ensure that service is not interrupted. Energy facilities would meet the 2021 LRDP's energy needs, and no additional infrastructure beyond what is contemplated as part of the 2021 LRDP would be necessary. This impact would be less than significant.

Mitigation Measures: Potential impacts related to water supply that could result from implementation of the 2021 LRDP would be reduced by requiring implementation of measures consistent with City drought measures (Mitigation Measure 3.17-1a) and evaluating and implementing additional water conservation measures (Mitigation Measure 3.17-1b). However, the impact would remain significant and unavoidable.

CUMULATIVE IMPACTS

Refer to Chapter 4 of the Draft EIR for more detail.

CEQA requires that an EIR discuss the cumulative impacts of a project, which consists of a physical environmental impact which is created as a result of the combination of the project evaluated in the EIR together with other projects (past, present, and future) causing related impacts. In terms of cumulative impacts, significant and unavoidable cumulative impacts would occur with respect to:

- Air quality,
- Historical resources,
- Noise,
- Population and housing, and
- Water supply

Project Alternatives

The EIR is required to examine a range of alternatives to the proposed project that would attain most of the basic project objectives but that could avoid or substantially lessen the significant adverse impacts. The following alternatives are analyzed in the 2021 LRDP EIR.

ALTERNATIVE 1: NO PROJECT ALTERNATIVE

The No Project Alternative involves the continued implementation of the 2005 LRDP. Planned growth as expressed in the 2005 LRDP would continue up to its planned capacity, primarily associated with new academic and administrative space. Based on existing data and forecasts in the 2005 LRDP, implementation of this alternative could result in up to an additional approximately 1,150 people (up to approximately 1,000 students and 150 faculty) and 1,322,000 asf of administrative/academic space compared to baseline conditions, but no enrollment growth would occur beyond the 19,500 FTE students approved under the 2005 LRDP and the corresponding faculty and staff growth, because a new LRDP would not be adopted. The No Project Alternative would not meet most of the basic project objectives.

ALTERNATIVE 2: REDUCED LRDP ENROLLMENT ALTERNATIVE

Under Alternative 2, UC Santa Cruz would implement a long range development plan with a smaller increase in campus enrollment and associated development compared to the proposed LRDP. Implementation of this alternative would result in a future on-campus enrollment of 26,400 FTE students in 2040 compared to 28,000 FTE students in 2040 under the proposed LRDP, and increase 6,900 students (compared to 8,500 under the 2021 LRDP) over the 2005 LRDP totals. This alternative would also result in a commensurate reduction in new faculty/staff to 1,190, compared to 2,200 new faculty/staff under the 2021 LRDP. Up to 6,900 new student beds, 300 new faculty/staff housing units, and 2,467,000 asf of new academic/administrative space would be provided under this alternative. Overall, this alternative would lower the number of students, faculty, and staff located on campus and travelling to and from the campus each day. Alternative 2, which would provide less academic building space and student capacity, would impair the ability of the UC to achieve this mission and would conflict with Project Objective 1.

ALTERNATIVE 3: REDUCED DEVELOPMENT FOOTPRINT ALTERNATIVE

Under Alternative 3, UC Santa Cruz would restrict future development to areas within the central and lower campus subareas, exclude development of areas in the north campus and to the west of Empire Grade. The revised land use map would reduce the amount of development proposed in critical habitat areas in an effort to reduce potential impacts on biological resources. The land use plan under this alternative would only include one pair of colleges, not two as proposed under the 2021 LRDP. Both of these changes would reduce the ability for the campus to enroll the number of students that are planned under the proposed LRDP, which is required to meet projected state-wide demand for public university capacity in 2040. Therefore, this alternative would involve a future campus enrollment level of 26,400 FTE students by 2040 (which is approximately 1,600 FTE students fewer than under the proposed LRDP). This alternative would also result in a commensurate reduction in additional faculty/staff; there would be up to 1,190 new faculty/staff under this alternative, compared to 2,200 new faculty/staff under the 2021 LRDP. Up to 6,900 new student beds, 300 new faculty/staff housing units, and 2,467,000 asf of new academic/administrative space would be provided under this alternative. The alternative would also include densification of uses on the central and lower campus, compared to the proposed LRDP. Alternative 3, which would provide less academic building space and student capacity, would not meet Project Objectives 1 and 3.

ALTERNATIVE 4: REDUCED CAMPUS GROWTH AND USE OF UC MBEST OFF-SITE ALTERNATIVE

Under Alternative 4, the academic support and instruction would occur within the LRDP area and at UC MBEST in Monterey County. Online/remote learning programs would also be expanded under this alternative. Similar to the proposed LRDP, this alternative would provide for 28,000 FTE students to be enrolled by 2040.

Within the LRDP area, enrollment would increase by approximately 6,300 FTE students to about 25,800 FTE students at the main residential campus and Westside Research Park. In addition, up to 1,400 FTE new students would be accommodated through expanded online/remote learning programs. Faculty/staff are projected to increase by approximately 1,100 employees for on-campus teaching and research programs at the main residential campus and 250 for remote learning programs (some of whom would be located at UC Santa Cruz's main residential campus). To accommodate the academic programming needs of both the remote and on-campus teaching programs, an additional 1,000,000 asf of academic/administrative and support space would be developed at the main residential campus and Westside Research Park. Further, all new students enrolled at the main residential campus, above the 2005 LRDP enrollment cap of 19,500 students, would be housed in on-campus housing (approximately 6,300 FTE) and 280 new faculty/staff housing units would be provided under this alternative.

A portion of the enrollment growth projected under the proposed LRDP would also be allocated to UC MBEST. Under this alternative, approximately 1,800 FTE graduate students would be enrolled at UC MBEST, with an associated faculty and staff of approximately 320 employees (based on the projected faculty/staff-to-student ratio for UC Santa Cruz under the 2021 LRDP). Approximately 250,000 asf of academic/administrative space would be constructed at UC MBEST under this alternative. Alternative 4, would not meet or would only partially meet a number of proposed LRDP objectives (Project Objectives 1, 2, 3, 6, 9, 10, and 11).

PUBLIC REVIEW PROCESS

How to Participate

The public can participate in the Draft EIR review process in a variety of ways:

1. Attend the online public sessions and submit a written or oral comment:

   ▸ Wednesday, February 3, 2021 | 5–7 p.m.

   ▸ Thursday, February 4, 2021 | 5–7 p.m.

   Information about how to participate in the meeting can be found here: **lrdp.ucsc.edu**.

2. Mail written comments during the 60-day Draft EIR review period to:

   Erika Carpenter
   Senior Environmental Planner
   Physical Planning, Development, and Operations
   University of California, Santa Cruz
   1156 High Street
   Santa Cruz, CA 95064
   eircomment@ucsc.edu

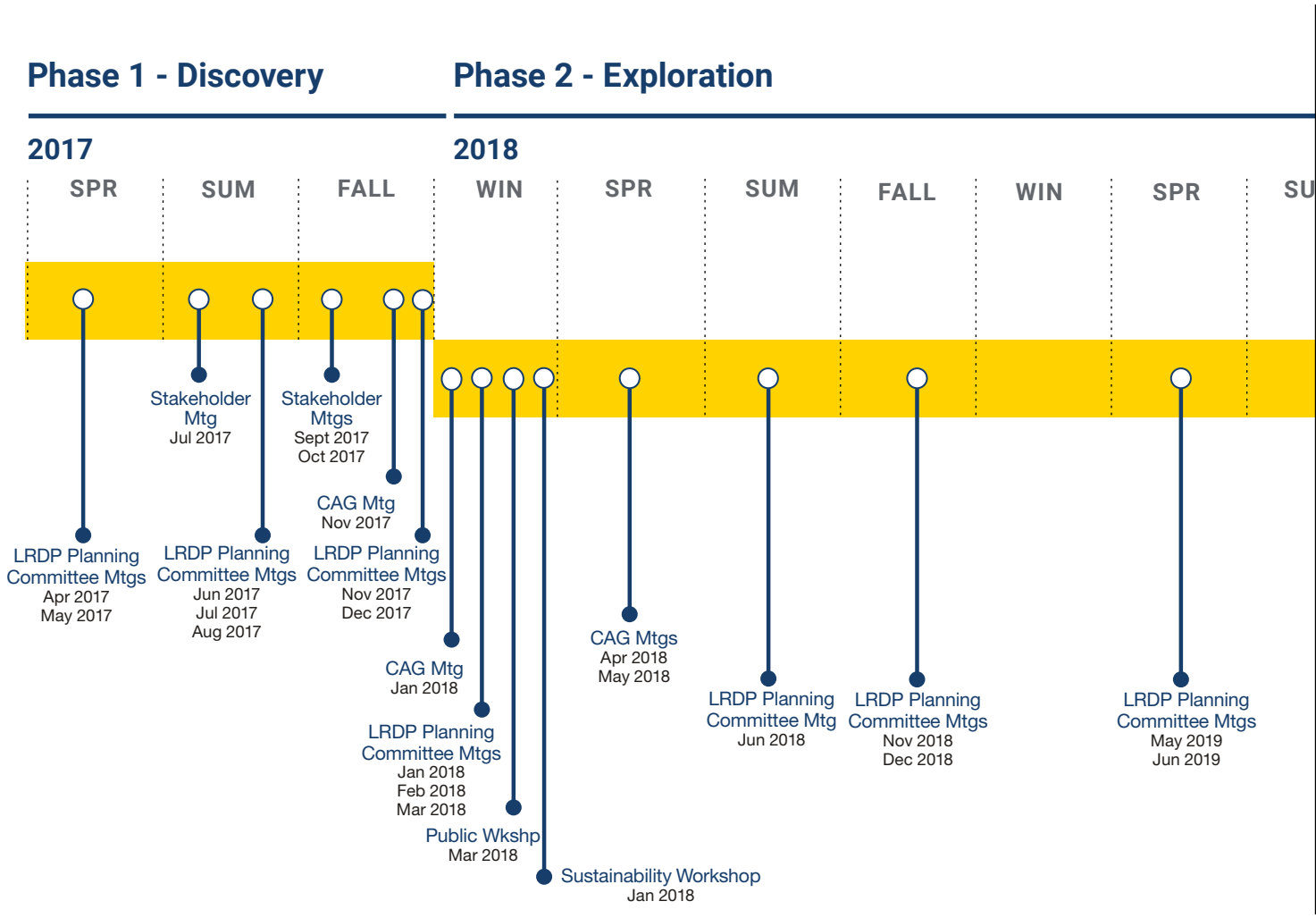
All comments must be postmarked or received via email by Monday, March 8, 2021, at 5 p.m. for consideration in the Final EIR. Please state "LRDP EIR Comments" in the subject line.

HOW TO GET A COPY OF THE DRAFT EIR

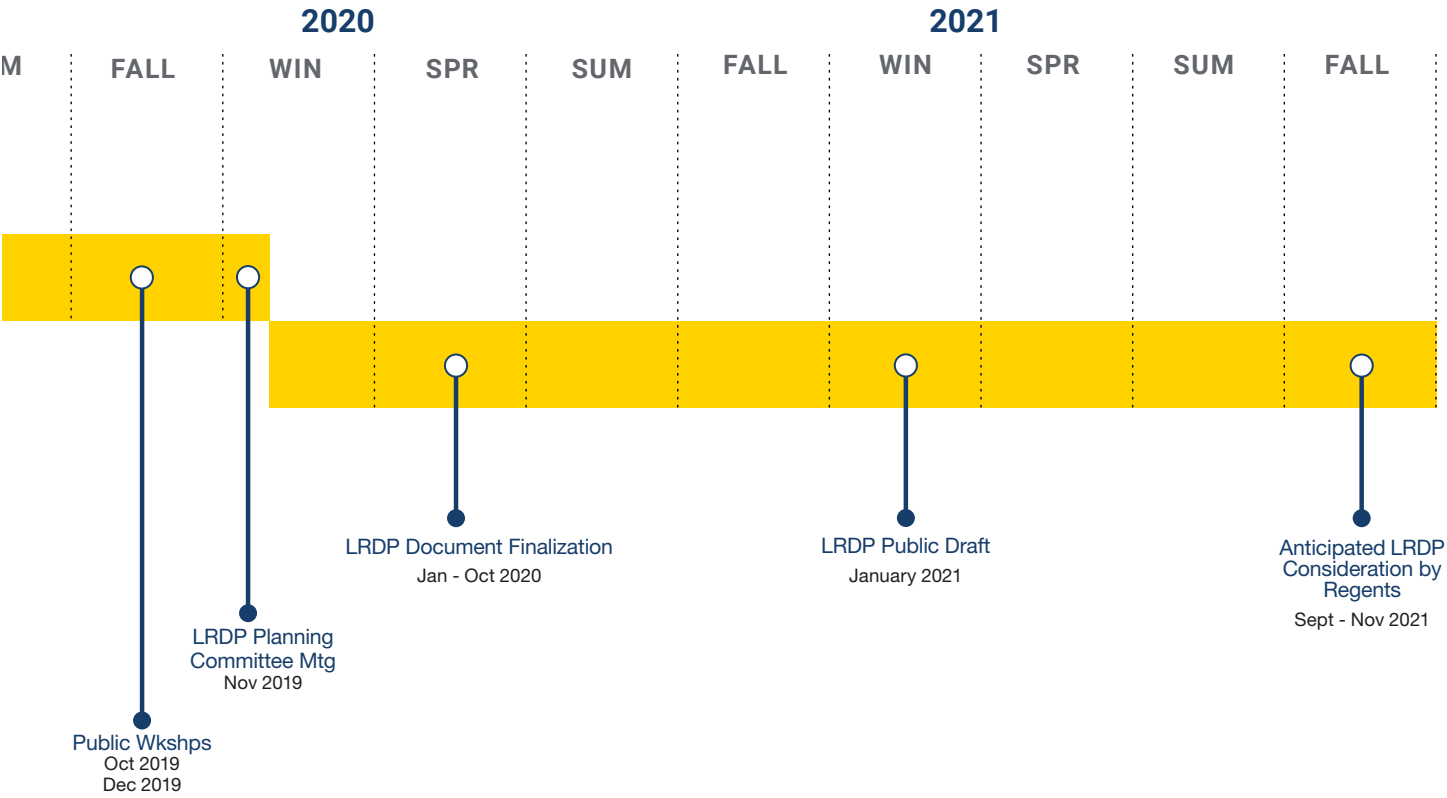
Download a copy of the Draft EIR from **lrdp.ucsc.edu**.

Contact Erika Carpenter at **escarpen@ucsc.edu** if you would like to receive a USB/flash drive of the Draft EIR.

PROJECT TIMELINE



Phase 3 - Synthesis



GLOSSARY

Cumulative Impact: As defined in Section 15355 of the State CEQA Guidelines, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."

An FTE student is (1) an undergraduate student who enrolls for 45 credit hours per academic year, (2) a graduate student (master's level or doctoral student not yet advanced to candidacy) enrolled in 36 hours per year, or (3) a graduate doctoral student who has been advanced to candidacy.

Less-than-Significant Impact: A project impact is less than significant when it does not exceed the significance criteria and therefore would not cause a substantial change in the environment. No mitigation is required.

Potentially Significant Impact: A potentially significant impact is a potentially substantial adverse change in the environment. There may be uncertainty as to whether an adverse change will occur because, for instance, the exact location of buildings may not be known at this time because of the current stage of planning. Additional information would be needed regarding whether an impact may occur and its extent. In these instances, if a substantial adverse change is reasonably foreseeable, the impact is determined to be potentially significant. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact. Mitigation measures and/or project alternatives are identified to reduce potentially significant effects on the environment where feasible.

Significant Impact: A project impact is significant if it is a substantial adverse change in the physical environment. Significant impacts are identified by the evaluation of project effects in the context of specified significance criteria. Mitigation measures and/or project alternatives are identified to reduce significant effects on the environment where feasible.

Significant and Unavoidable Impact: A project impact is significant and unavoidable if it is a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level. If a lead agency proposes to approve a project with significant and unavoidable impacts, it must adopt a statement of overriding considerations to explain its actions (State CEQA Guidelines Section 15093[b]).

LIST OF ABBREVIATIONS

asf: assignable square feet

CEQA: California Environmental Quality Act

EIR: environmental impact report

FTE: full-time equivalent

GHG: greenhouse gas

gsf: gross square feet

HCP: habitat conservation plan

IAD: Inclusion Area D

LRDP: Long Range Development Plan

MBARD: Monterey Bay Air Resources District

$MTCO_2e$: metric tons of carbon dioxide equivalent

NOP: notice of preparation

NO_x: oxides of nitrogen

PM_{10}: respirable particulate matter

ROG: reactive organic gases

UC: University of California

UC MBEST: University of California, Monterey Bay Education, Science, and Technology Center

UC Santa Cruz: University of California, Santa Cruz

USFWS: U.S. Fish and Wildlife Service

VMT: vehicle miles traveled