6 ALTERNATIVES

6.1 INTRODUCTION

Section 15126.6(a) of the California Environmental Quality Act Guidelines (State CEQA Guidelines) requires environmental impact reports (EIRs) to describe:

> "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."

This section of the State CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states that the purpose of the alternatives analysis is as follows:

> "Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

The guidelines require that an EIR include information about each alternative that is sufficient to allow meaningful evaluation, analysis, and comparison with the project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (Section 15126.6[d]). The guidelines further require that a "no project" alternative be considered (Section 15126.6[e]).

6.2 PROJECT OVERVIEW

The UC Santa Cruz 2021 Long Range Development Plan (2021 LRDP) involves modifications to the campus land use plan, established as part of the 2005 LRDP, to support the academic mission of UC Santa Cruz and potential growth in enrollment through 2040. It would guide the physical development on two of the three UC Santa Cruz campus properties within or near the City of Santa Cruz: the approximately 2,000-acre main residential campus and the 18-acre Westside Research Park. It does not address planning or growth on the Coastal Science Campus, which is subject to its own coastal LRDP, or on other remote campuses (UC Monterey Bay Education Science and Technology Center [MBEST]; Scotts Valley; and Silicon Valley).

The 2005 LRDP accommodated 19,500 full-time equivalent (FTE) students. UC Santa Cruz anticipates that under the 2021 LRDP, the campus population (at both the main residential campus and the Westside Research park combined) could grow to include approximately 28,000 FTE students and 5,000 FTE faculty and staff by the 2040–2041 academic year. Additional on-campus housing (8,500 new student beds) would be developed to accommodate the increase in the number of students (above the 2005 LRDP), and to provide additional housing for UC Santa Cruz faculty and staff. To accommodate the increased population and respond to evolving higher education needs at UC Santa Cruz, the 2021 LRDP proposes development of approximately 3.1 million assignable square feet (asf) of academic and support building space.

In general, the 2021 LRDP embraces a compact academic core with housing around the periphery. Employee housing would be strategically located 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. Finally, the 2021 LRDP plans for the Westside Research Park to be developed with mixed-use academic, research, and housing on the west side of the City of Santa Cruz.

6.3 METHODOLOGY FOR SELECTION OF ALTERNATIVES

6.3.1 Potential Feasibility

An EIR must "consider a range of potentially feasible alternatives" (CEQA Guidelines section 15126.6(a)). CEQA Guidelines Section 15126.6(f) (1) explains "feasibility" (e.g., "… feasibly attain most of the basic objectives of the project …"), in part, as follows:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is definitively feasible or infeasible is made by the lead agency's decision-making body, here the University of California Board of Regents (Regents) (See PRC Sections 21081.5, 21081[a] [3].) As a result, the EIR only concludes whether an alternative is potentially feasible.

6.3.2 Attainment of Project Objectives

As described above, one factor that must be considered in selection of alternatives is the ability of a specific alternative to attain most of the basic objectives of the project (CEQA State Guidelines Section 15126[a]). 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: supporting the academic mission, guiding campus evolution and integrity, recognizing and connecting to the local and regional context, and establishing a framework of planning resilience and long-term sustainability. UC Santa Cruz has identified the following 2021 LRDP objectives to guide implementation of the 2021 LRDP:

- 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.
- 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.
- 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.
- 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.

- 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.
- 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.
- 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.
- Develop an improved, more efficient roadway network to support transit with peripheral parking and mobility hubs.
- Promote Transportation Demand Management (TDM) and provide infrastructure to optimize trip- and vehicle-miles-travelled-reduction benefits and efficiency of transit, bike, and pedestrian access to, from, and within the campus to reduce the use of single-occupancy vehicles.
- 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.
- Respect and reinforce the Physical Planning Principles and Guidelines to maintain the unique character of the UC Santa Cruz campus.

6.3.3 Potential to Avoid or Substantially Reduce a Significant Impact

Alternatives considered in an EIR must avoid or substantially lessen any of the significant effects of the proposed project (CEQA Guidelines Section 15126.6(a)). The Executive Summary presents a detailed summary of the potential environmental impacts of implementation of the 2021 LRDP. Please refer to Table ES-1 for a summary of impacts associated with development of the project. Overall, implementation of the 2021 LRDP would result in significant and unavoidable impacts with respect to air quality (operational criteria pollutant emissions), historic resources, noise (construction), population and housing, and utilities and service systems (water supply). All other impacts would either be less than significant or reduced to a less than significant level with mitigation.

6.4 ALTERNATIVES CONSIDERED BUT DISMISSED

The State CEQA Guidelines state that an EIR also should identify any alternatives that were considered by the lead agency but were rejected during the scoping process and briefly explain the reasons underlying the lead agency's determination (Section 15126.6[c]). This section addresses these alternatives.

6.4.1 Main Residential Campus Infill

Under this potential alternative, all of the new development to accommodate the projected enrollment and employment growth would be focused in the central and lower Campus areas of the main residential campus, and new development would not extend beyond the boundary of existing development in the north campus area of the main residential campus. Development of housing and academic space would be focused in and adjacent to areas of campus that have already been developed. Unlike under the 2021 LRDP, some of the meadows, as well as other sensitive habitat areas (e.g., for Ohlone tiger beetle and California red-legged frog) would need to be developed due to land constraints. Because of concerns regarding historic and other sensitive resources in these areas, as well as potential impacts to existing open space, this alternative would not fulfill most of the basic project objectives, including those related to preserving the existing character and diversity (including biological diversity) of the campus. By developing existing meadows, this alternative would also have significant impacts with regard to research, aesthetics and recreation. Thus, because this alternative would not meet most of the basic project objectives and

would not reduce or eliminate an environmental impact, relative to the proposed plan, this alternative is not feasible and is not considered in further detail.

6.4.2 High-Rise Development

This alternative would provide the same capacity as the 2021 LRDP, but would require development of less land because it would be more compact. Under this potential alternative, planned new academic, support, and housing would be constructed in the same development areas as proposed under the 2021 LRDP but would be provided in mid- to high-rise (6+ stories) buildings, whereas most proposed development within the main residential campus is currently 4 or fewer stories, although some 6- and 7-story buildings are present. It would increase the density of planned development and reduce the footprint of new development, and thereby reduce impacts on biological resources. However, significant impacts would still occur, and mitigation similar to the 2021 LRDP's mitigation would still be required. This alternative would expedite and exacerbate the need for additional firefighting equipment and capacity to address the taller buildings, resulting in a significant impact to public services. Further, construction under this alternative would exceed the height of existing structures and potentially surrounding trees, which could alter the overall visual character of the campus, as well as long-distance views of and from the main residential campus. It would be inconsistent with 2021 LRDP objectives related to the preservation of the campus' existing character, including development above the existing tree canopy. Thus, because this alternative would not meet most of the basic project objectives and would not substantially reduce or eliminate an environmental impact, relative to the proposed plan, this alternative is not feasible and is not considered in further detail.

6.4.3 Silicon Valley Campus Off-Site Alternative

Under this potential alternative, all of the planned additional enrollment, academic and support resources, and housing would be located at the Silicon Valley Campus, located at 3175 Bowers Avenue in Santa Clara, California, and no further development (other than some building modernization) would occur on the main residential campus or at the Westside Research Park. The Silicon Valley Campus currently consists of a 90,000-square-foot academic building and has been at its current location since 2016. The campus houses the UC Santa Cruz extension program, and some graduate and research programs associated with the Baskin School of Engineering. To accommodate additional academic programming and student enrollment, including undergraduates, additional property would need to be acquired for the development of the needed facilities; expansion of the existing building to meet the projected demand is not feasible due to the limited area of the existing campus.

The existing campus is surrounded on all sides by existing urban uses and would require the acquisition of approximately 100 acres of currently developed property to accommodate the projected academic, administrative, and housing needs of UC Santa Cruz. Based on the assessed value (2019) of the Silicon Valley Campus, a minimum of $150 million would be required to acquire adequate acreage, with additional costs associated with the design, planning, and the construction of new campus facilities (including removal of existing development). Land acquisition costs would not occur under the 2021 LRDP because UC Santa Cruz already owns the property upon which facilities would be built.

This alternative is considered potentially financially infeasible, and it would not fulfill most of the basic project objectives, including the objective of placing new facilities near existing facilities to enhance synergies between existing and new educational and research programs, facilitate use of shared resources, facilitate faculty-student interaction, and promote an environment conducive to learning. In addition, given the amount of demolition and construction required to demolish existing uses on 100 acres of property and construct entirely new buildings in a densely populated area, this alternative would likely result in additional significant and unavoidable impacts. Accordingly, because this alternative would not meet most of the basic project objectives and is not feasible, it is not considered in further detail.

6.4.4 Scotts Valley Center Off-Site Alternative

Under this potential alternative, all of the planned additional enrollment, academic and support resources, and housing would be located at the Scotts Valley Center, which serves as the professional offices for about 350 UC Santa Cruz staff (primarily Business and Administrative Services, Information Technology Services, and University Relations). Online course curricula would also be expanded under this alternative. No further development (other than some building modernization) would occur on the main residential campus or at Westside Research Park under this alternative. Under this alternative, the existing building could be redeveloped to realize additional usable space for academic/administrative uses. However, the existing property occupies 24 acres, and approximately 45 additional acres would be considered necessary to accommodate the academic programming needs and student enrollment anticipated under the 2021 LRDP. The Scotts Valley Center is located immediately east of State Route 17 and is bounded by residential with some commercial uses to the south, requiring future property acquisition to focus on undeveloped land located to the east or the existing uses to the south that could be redeveloped. Property acquisition would add to the cost of developing the facilities needed to accommodate the enrollment and employment increase at UC Santa Cruz. In addition, this alternative would not fulfill most of the basic project objectives, including the objective of placing new facilities near existing facilities to enhance synergies between existing and new educational and research programs, facilitate use of shared resources, facilitate faculty-student interaction, and promote an environment conducive to learning. Thus, because this alternative would not meet most of the basic project objectives, this alternative is not feasible and is not considered in further detail.

6.4.5 Coastal Science Campus Expansion Off-Site Alternative

Under this potential alternative, all of the planned additional enrollment, academic and support resources, and housing would be located at the Coastal Science Campus, which serves as the marine research and academic campus of UC Santa Cruz. Online course curricula would also be expanded under this alternative. While the Coastal Science Campus is supported by additional ocean research and education facilities and faculty/staff at the main residential campus, its mission since the 1960s has been to strengthen and promote marine science research and instruction. The Coastal Science Campus is also constrained by sensitive habitat and on-site laboratory operations. As a result, this site would not meet the long-term programming needs of the broader UC Santa Cruz academic program. It also would result in development of uses that are not coastal-dependent, within the coastal zone, which could conflict with the California Coastal Act. In addition, this alternative would not fulfill most of the basic project objectives, including the objective of placing new facilities near existing facilities to enhance synergies between existing and new educational and research programs, facilitate use of shared resources, facilitate faculty-student interaction, and promote an environment conducive to learning Thus, because this alternative would not meet most of the basic project objectives, this alternative is not feasible and is not considered in further detail.

6.4.6 Expanded UC Monterey Bay Education, Science, and Technology Center (UC MBEST) Off-Site Alternative

Under this alternative, all of the planned additional enrollment, academic and support resources, and housing would be located at UC MBEST located in the City of Marina in Monterey County. UC Santa Cruz received nearly 1,100 acres of the land from the U.S. Army at the former Fort Ord property as part of the Fort Ord Reuse Plan. Of this total, 500 acres are already planned by the UC potentially accommodate the projected growth of the proposed 2021 LRDP within approximately 100 acres. Limited academic/administrative facility growth (approximately 110,000 asf) would occur on the main residential campus under this alternative to provide additional university-facilities to accommodate 19,500 FTE students.

The Fort Ord area is known for biological sensitivity issues; therefore, future campus development at MBEST could result in similar biological impacts. In addition, potentially greater transportation impacts could also occur because of the need for students to travel to and MBEST to the main residential campus. While it would be intended to support the academic mission of UC Santa Cruz, development at MBEST under this alternative would function as an

autonomous campus. The development of a full university campus at MBEST and the addition of another UC campus to the UC system is not considered feasible at this time, given State fiscal constraints. Moreover, this type of shift would profoundly affect the economy of the city and county of Santa Cruz. This alternative would also not achieve any of the basic project objectives, including the objective of placing new facilities near existing facilities to enhance synergies between existing and new educational and research programs, facilitate use of shared resources, and facilitate faculty-student interaction. Thus, because this alternative would not meet most of the basic project objectives, this alternative is not feasible and is not considered in further detail. Note that Alternative 4, which is analyzed in detail, also involves the UC MBEST property but places only a portion of the planned enrollment and building program at that site.

6.4.7 Remote/Distance Learning Alternative

Under this potential alternative, UC Santa Cruz would serve all future enrollment through expanded online course curricula. This would reduce the need for on-campus facilities, although, certain academic programs (e.g., those that involve scientific laboratory coursework) and tenure track faculty would still require on-campus building space. Because on-campus students would not increase under this alternative, additional student housing would not be constructed. With respect to on-campus employment, up to 800 FTE faculty/staff, based on existing faculty ratios at the main residential campus and the lack of need for non-instructional staff under this alternative, would be needed to support a distance learning program. This alternative is not consistent with the current academic programming needs of the UC or UC Santa Cruz. Further, this alternative would not fulfill most of the basic project objectives, including the objective of placing new facilities near existing facilities to enhance synergies between existing and new educational and research programs, facilitate use of shared resources, facilitate faculty-student interaction, and promote an environment conducive to learning Thus, because this alternative would not meet most of the basic project objectives, relative to the proposed plan, this alternative is not feasible and is not considered in further detail.

6.5 COMPARISON AND ANALYSIS OF ALTERNATIVES

The following alternatives are considered in detail in the analysis below for this project:

- Alternative 1: No Project. This 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.
- Alternative 2: Reduced LRDP Enrollment. This alternative would involve a reduced development intensity and lower enrollment than proposed (26,400 FTE students) within the LRDP area identified in Figure 2-4, "Envisioned Development Areas" of Chapter 2, "Project Description."
- Alternative 3: Reduced Development Footprint. This alternative would lower enrollment (26,400 FTE students) and restrict future development to areas within the central and lower campus subareas, and exclude development of areas in the north campus.
- Alternative 4: Reduced Campus Growth and Use of UC MBEST Off-Site. This alternative would reallocate some of the projected growth under the 2021 LRDP to the UC MBEST site. In addition, this alternative involves an expanded on-line/remote learning component for UC Santa Cruz students. Total enrollment under this alternative would be 28,000 FTE students, similar to the 2021 LRDP, with enrollment increases of 6,300 FTE students within the LRDP area, up to 1,400 FTE students through expanded online/remote learning programs, and 1,800 FTE graduate students at the UC MBEST site.

6.5.1 Alternative 1: No Project (2005 LRDP)

DESCRIPTION OF ALTERNATIVE

State CEQA Guidelines Section 15126.6(e)(1) requires that the "no project" alternative be described and analyzed "to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project." The no-project analysis is required to discuss "the existing conditions at the time the notice of preparation is published…as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (Section 15126.6[e][2]). The guidelines further state (Section 15126[e][3][B]):

> If the project is…a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

As noted in Chapter 2, "Project Description," 2018/19 academic year enrollment is 18,518 students. 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 assignable square feet (asf) of administrative/academic space compared to baseline conditions, as approved under the 2005 LRDP. However, no enrollment growth would occur beyond the 19,500 FTE students, as enrollment growth is limited by the 2008 Comprehensive Settlement Agreement [CSA]) until a new LRDP is approved. Faculty and staff growth would be limited to be commensurate with student and campus growth.

ABILITY TO MEET PROJECT OBJECTIVES

The No Project Alternative would potentially meet some of project objectives (Project Objectives 2, 4, 5, and 7), but not all. With respect to Project Objectives 4 and 7, this alternative would achieve these objectives to a greater extent due to the lesser level of development that would further ensure the maintenance of existing open spaces and historic structures within the LRDP area. With respect to Project Objectives 2 and 5, this alternative would include some development that would expand campus facilities and provide additional social event space; however, this would not occur under this alternative to the extent that is planned in the 2021 LRDP.

The No Project Alternative would not meet any of the project objectives that relate to growth, housing, roadway network improvements, multi-modal efficiency improvement, and implementation of climate resiliency and adaptation strategies (Project Objectives 1, 3, 6, 8, 9, and 10). The transportation improvements described in Chapter 2, "Project Description," would not be implemented within the LRDP area, which would impede UC Santa Cruz from providing a close-knit intellectual and social environment and improving means of active and alternative transportation within the campus. Student enrollment would be limited to 19,500 FTE students approved under the 2005 LRDP, which would be considered counter to the overarching goal of the UC to provide a dynamic learning environment for residents of California. Additionally, because this alternative would provide a lesser amount of new academic/administrative space, it would limit the ability for UC Santa Cruz to continue to create a dynamic environment for learning and discovery through the provision of new academic programs and disciplines. Furthermore, because the 2005 LRDP does not reflect the current planning goals of UC Santa Cruz or the State of California's public education plans and policies, this alternative would not provide the best framework for growth and development within the LRDP area. Thus, the No Project Alternative would not meet most of the basic project objectives.

COMPARISON OF ENVIRONMENTAL IMPACTS

Aesthetics

Changes to existing visual conditions on the UC Santa Cruz campus would be largely limited to development of academic/administrative buildings and support space within the main residential campus. By comparison, the 2021 LRDP would involve greater development along the periphery of the main residential campus and at Westside Research Park. Under Alternative 1, changes in existing visual conditions would be much more limited than the 2021 LRDP and would be less than significant with mitigation set forth in the 2005 LRDP EIR. Under this alternative, no new development would occur proximate to Empire Grade, a designated scenic roadway in the County, such that no impacts to scenic resources/roadways would occur. Therefore, aesthetic impacts associated with Alternative 1 would be less than those associated with the proposed 2021 LRDP. *(Less Impact)*

Agriculture and Forestry Resources

Under Alternative 1, there would be no conversion of lands currently used for agricultural purposes to non-agricultural use. However, as noted in Section 3.2, "Agriculture and Forestry Resources," the two acres that are currently associated with the university farm and that would be converted are not considered a significant agricultural resource based on the LESA model evaluation. With respect to forestry resources, implementation of this alternative would involve less development and less conversion of forested land. However, some development, especially within the central campus portion of the main residential campus, would still occur. Similar to the proposed 2021 LRDP, this alternative would require the preparation of timber harvest plans (THPs) and acquisition of timber conversion permits (TCPs) from the California Department of Forestry and Fire Protection (CAL FIRE). Nonetheless, due to the reduced area of development under this alternative, impacts on forest resources would be less than under the proposed 2021 LRDP, and no impact would occur with respect to agriculture. *(Less Impact)*

Air Quality

Alternative 1 would result in less development than under the proposed 2021 LRDP, and thus, would generate less construction- and operations-related air emissions. This alternative would result in approximately 20 percent of the construction effort anticipated with implementation of the proposed 2021 LRDP, and therefore proportionally reduced total construction emissions. Implementation of Alternative 1 would also result in decreased operational emissions, due to decreased vehicle trips and activities within the LRDP area. Further, campus development under this alternative would be subject to 2005 LRDP EIR mitigation measures which would further reduce operational air emissions. This alternative would avoid the significant and unavoidable impact associated with operational emissions under the 2021 LRDP. Because of the limited amount of new development and campus growth anticipated under this alternative, air quality impacts pertaining to criteria pollutant and ozone precursor emissions would be reduced compared to the proposed 2021 LRDP and likely be less than significant. *(Less Impact)*

Archaeological, Historical, and Tribal Cultural Resources

As with the proposed 2021 LRDP, earth-moving activities within the UC Santa Cruz campus under Alternative 1 have the potential to disturb archaeological, tribal cultural, and/or historic resources or result in accidental discovery of human remains, and result in significant impacts to these resources. However, feasible mitigation measures and regulatory requirements/procedures would reduce these impacts to a less-than-significant level. Additionally, development within or near potentially historic structures on the main residential campus under both this alternative and the 2021 LRDP would result in potentially significant and unavoidable impacts. Because there would be lesser earth-moving activities under Alternative 1, there would be a lower potential to impact cultural resources. *(Less Impact)*

Biological Resources

As less new building space would be constructed under Alternative 1, this alternative would have substantially reduced impacts on sensitive biological resources on the main residential campus, compared to the proposed 2021 LRDP. To the extent development under this alternative is proposed in areas containing special-status species or habitats, mitigation measures from the 2005 LRDP EIR would be implemented to avoid, reduce and/or mitigate

significant impacts. Potential impacts related to the existing Ranch View Terrace Habitat Conservation Plan (HCP) would be avoided under this alternative. Overall, compared to the 2021 LRDP, Alternative 1 would result in reduced severity of impacts to biological resources. *(Less Impact)*

Energy

Under this alternative, less development would occur on the campus, including the development of fewer energy-efficient structures and facilities. Less construction activities would correspond to less fuel consumption during construction. Fewer students on campus would also result in less energy consumption. However, development under the proposed 2021 LRDP would be highly energy efficient, which is the primary basis of impact determination under CEQA, and there would be no significant impacts associated with the wasteful or inefficient use of energy. Both this alternative and the 2021 LRDP would require adherence with the UC Sustainably Practices Policy and the UC Santa Cruz Energy Efficiency Programs, both of which would ensure efficient use of energy in construction and operations. Based on this, impacts to energy would be similar. *(Similar Impact)*

Geology and Soils

Earth-moving activities associated with construction have the potential to affect geology and soils. The types of impacts that could occur from development on campus include: geotechnical issues, increased erosion, and exposure of buildings and people to seismic hazards. Existing regulations and permitting requirements, such as California Building Code (CBC) requirements, National Pollutant Discharge Elimination System (NPDES) permit conditions, UC Santa Cruz Post-Construction Stormwater Management Requirements, and best management practices (BMPs), would minimize potential impacts to a less-than-significant level. While both this alternative and the 2021 LRDP would result in less-than-significant impacts, Alternative 1 would have reduced geology and soils impacts compared to the proposed 2021 LRDP because there would be less new building development. *(Less Impact)*

Greenhouse Gas Emissions and Climate Change

Due to the lesser level of building development under this alternative, there would be less construction-related as well as operational greenhouse gas (GHG) emissions compared to the proposed 2021 LRDP. However, consistent with the UC Sustainable Practices Policy and actions outlined in the UC Santa Cruz Climate Action Plan (CAP), campus-related emissions would be required to be net zero for Scopes 1 and 2 in 2025 and net zero for Scopes 1, 2, and selected Scope 3 sources in 2050 under both this alternative and the 2021 LRDP. While implementation of the 2021 LRDP would involve the placement of new energy-efficient structures within available land and adjusting land use patterns to capture efficiencies related to alternative transportation (transit, bicycle, and pedestrian travel), Alternative 1 would emit lesser GHG emissions overall because it would result in less development. Therefore, the alternative would reduce the project's impact (less than significant with mitigation incorporated) related to GHG emissions. *(Less Impact)*

Hazards and Hazardous Materials

Under the 2021 LRDP, on-campus construction activities would entail the transport, use, and storage of hazardous materials, and potential for a release of hazardous materials from a site of previously known or unknown contamination. In addition, closure of area roadways during construction may hinder traffic flow and affect emergency response. However, feasible mitigation measures are available to reduce these impacts to a less-than-significant level. Due to compliance with applicable regulations and programs, campus operations would have less than significant impacts related to hazardous materials transport, use and storage. Similar types of impacts would occur under Alternative 1 although to a lesser degree as a result of the reduced construction effort. *(Less Impact)*

Hydrology and Water Quality

Earth-moving activities associated with construction under the 2021 LRDP have the potential to affect hydrology and water quality within UC Santa Cruz. The types of impacts that could occur from development under the 2021 LRDP include: adverse effects on water quality, reduced groundwater recharge, alterations to existing drainage systems, and effects on the 100-year floodplain. Existing regulations and permitting requirements, such as NPDES permit conditions, UC Santa Cruz Post-Construction Stormwater Management Requirements, a storm water pollution

prevention plan (SWPPP), and a Stormwater Quality Control Plan (SWQCP) would reduce potentially significant impacts to a less-than-significant level. In addition, development of additional academic/administrative space would be required to comply with existing regulations and to implement similar mitigation measures that would reduce impacts to a less-than-significant level. Because this alternative would require less development compared to the 2021 LRDP, the severity of impacts would be lesser when compared to the 2021 LRDP. *(Less Impact)*

Land Use and Planning

This alternative would result in substantially less new development compared to the 2021 LRDP, and furthermore, this alternative would not include the amendments to the 2005 LRDP land use designations that are proposed under the 2021 LRDP to address the organization of land uses, spacing, and interrelationship of land uses on-campus. As a result, this alternative would result in no additional changes to existing planning efforts, and as such would have no impact, which would be less than the 2021 LRDP's less-than-significant impact associated with conflict with land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and incompatibility with adjacent land uses. *(Less Impact)*

Noise

Earth-moving activities within campus (e.g., grading, excavation) under the 2021 LRDP would result in noise and vibration impacts. Feasible mitigation measures are available to reduce these impacts; however, construction noise could be substantial due to potential proximity to nearby housing (both on and off campus) and would still be considered significant and unavoidable under the 2021 LRDP. Compared to the 2021 LRDP, there would be less construction-generated noise or vibration under Alternative 1 due to less overall construction-related activities. *(Less Impact)*

Population and Housing

Under Alternative 1, up to 2,159 new student beds would be provided on campus once the planned-but-not-operational student housing (i.e., Kresge Housing and Student Housing West), which are part of the 2005 LRDP, is constructed. This additional approved housing would be greater than the enrollment increase under this alternative, and therefore, new students would not seek off-campus housing. Therefore, population and housing impacts associated with students would be less than the proposed 2021 LRDP which plans for a larger enrollment increase with 8,500 student beds on-campus. It is noted, however, that the project would provide an equal number of student beds as students above the 19,500 student enrollment cap considered in this alternative.

Under this alternative, on-campus employment could incrementally increase by approximately 150 faculty/staff of which a small number would be housed in on-campus housing, compared to 2,200 new employees under the 2021 LRDP, of which 550 new employees would be housed on campus. Therefore, similar to the 2021 LRDP, Alternative 1 would increase the need for off-campus housing as a result of increased employment. In this case, however, the need for off-campus housing would likely be addressed by available housing stock in the region and less than significant. Therefore, impacts would be less under this alternative. *(Less Impact)*

Public Services

Alternative 1 would result in an incremental increase in demand for public services as a result of increased campus population, although not to the degree of the 2021 LRDP due to the substantially reduced amount of building development. Under the 2021 LRDP, impacts were determined to be less than significant with mitigation because, in large part, campus development under the 2021 LRDP would be adequately served by local public service providers. As noted in Section 3.14, "Public Services," a replacement fire station is anticipated as part of 2021 LRDP development, and mitigation measures provide requirements related to the timing of construction of the new fire station. Beyond the timing of the aforementioned fire station, the project related demand for service would not require new or modified facilities that would result in significant environmental impacts. Alternative 1 would also result in less-than-significant public service impacts similar to the 2021 LRDP, but to a lesser degree due to the lesser acreage of land to be developed and fewer FTE of students and staff under this alternative. *(Less Impact)*

Recreation

Alternative 1 would not substantially increase on-campus population such that additional recreational facilities would be necessary. As noted for the 2021 LRDP, adequate land area for the development of new recreational facilities would be provided, as necessary and as part of new on-campus housing development. As no new on-campus housing or enrollment beyond 19,500 FTE students would be accommodated on campus under this alternative, impacts would be less than significant under this alternative because existing recreational facilities (in addition to those included as part of Kresge Housing and Student Housing West) would adequately accommodate any incremental increase in demand associated with the campus population. Thus, recreation impacts under Alternative 1 would be similar to those discussed for the 2021 LRDP. (*Similar Impact*)

Transportation

Under the proposed 2021 LRDP, on-site housing would be provided sufficient to accommodate the increased enrollment (8,500 beds) above the No Project's 19,500 students, and 550 of the 2,200 new faculty and staff. Therefore, new vehicle trips and an increase in vehicle miles traveled (VMT) would occur due to the commuting of the approximately 1,650 new employees who would live off campus. Under Alternative 1, new on-campus housing (refer to the cumulative projects that are part of the 2005 LRDP within the LRDP area and identified in Chapter 4, "Cumulative Impacts") would exceed the projected increase in student population (approximately 1,000 new students), as well as a small number of the 150 new employees would live on campus. Therefore, the alternative would result in a much smaller increase in the number of daily vehicle trips and VMT compared to the proposed 2021 LRDP. Overall impacts related to transportation would be less under this alternative than the 2021 LRDP as a result of fewer vehicle trips. Of note, implementation of this alternative would not encourage alternative transportation nor improve inter-campus connections to the degree of the 2021 LRDP. *(Less Impact)*

Utilities and Service Systems

Under Alternative 1, there would be less additional demand on utilities or requirements to alter or expand infrastructure compared to the 2021 LRDP because campus population levels would be substantially lower. In general, impacts would be less under this alternative and would be less than significant with the exception of the impact related to water supply. Based on the supplemental analysis of water supply impacts of the 2005 LRDP, presented in the Student Housing West EIR, campus growth and development under the 2005 LRDP would result in a significant impact on water supply as it would contribute to the need for the development of new water supplies by the City. Additional development in the 2021 LRDP would further contribute to this need. *(Less Impact)*

Wildfire

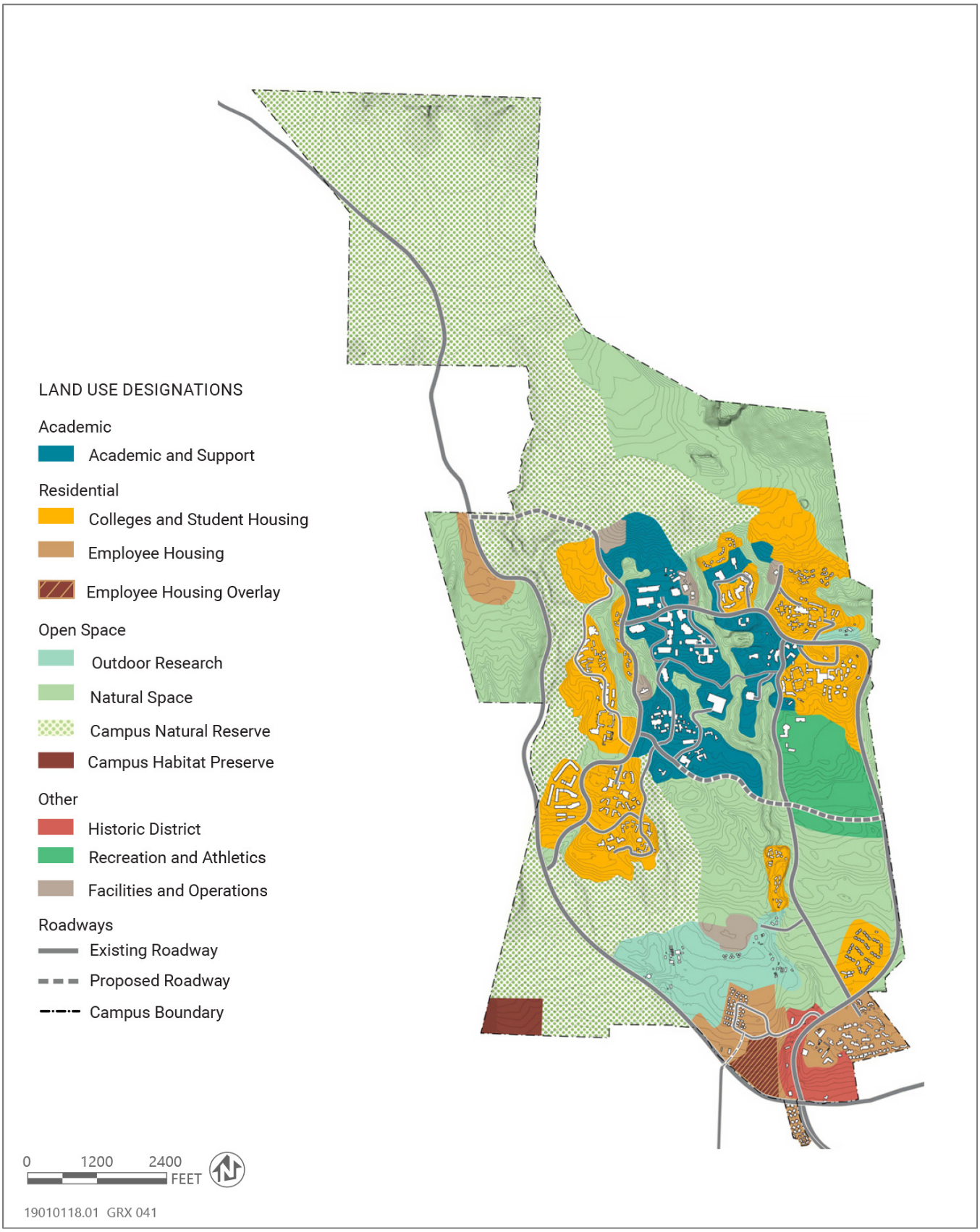
Under this alternative, there would be less overall development, however, the development areas would substantially the same as under the proposed 2021 LRDP. UC Santa Cruz would continue to manage wildfire risk and implement existing campus plans related to campus evacuation and wildfire prevention, similar to the 2021 LRDP. As a result, impacts would be similar to those under the 2021 LRDP and less than significant. *(Similar Impact)*

6.5.2 Alternative 2: Reduced LRDP Enrollment

This alternative is being considered to avoid environmental impacts associated with development on some areas of campus as well as those associated with the total increase in enrollment.

DESCRIPTION OF ALTERNATIVE

Under this alternative, UC Santa Cruz would implement a long-range development plan with a smaller increase in campus enrollment and associated development compared to the proposed 2021 LRDP. However, the land use plan would remain the same, as shown in Figure 6-1. Overall, this alternative would involve a 20 percent reduction in new students above the 2005 LRDP for a future total enrollment level that would be approximately 6 percent lower than the proposed 2021 LRDP, which would lower the number of students, faculty, and staff located on campus and travelling to and from the campus each day. Implementation of this alternative would result in a future on-campus



Source: UC Santa Cruz 2020

Figure 6-1 Alternative 2 (Reduced LRDP Enrollment) Conceptual Land Use Plan

enrollment of 26,400 FTE students in 2040 compared to 28,000 FTE students in 2040 under the proposed 2021 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. Accordingly, this alternative would not be able to accommodate sufficient academic/administrative space to support the projected growth in student enrollment through 2040. The proposed land use designations under the alternative would remain the same as under the proposed 2021 LRDP. Figure 6-1 includes the potential land use plan for this alternative.

ABILITY TO MEET PROJECT OBJECTIVES

Alternative 2 would increase on-campus housing opportunities to accommodate 100 percent of new student enrollment (above the 2005 LRDP cap of 19,500 students) and 25 percent of new faculty/staff. This alternative would also accommodate development of academic/administrative and support facilities to match the projected increased enrollment totals. For this reason, Alternative 2 would meet most of the 2021 LRDP objectives (Project Objectives 2 through 10). However, because this alternative would provide less academic/administrative space, it would limit the ability for UC Santa Cruz to continue to create a dynamic environment for learning and discovery through the provision of new academic programs and disciplines. In addition, this alternative would not provide the full additional capacity for 28,000 students, which is based on the state's 2040 college enrollment projections; therefore, Alternative 2 would only partially meet Project Objective 1 which involves the accommodation of projected increases in student enrollment through 2040 based on statewide public educational needs. The primary mission of the UC is to provide teaching, research, and public service for the higher education needs of California. 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.

COMPARISON OF ENVIRONMENTAL IMPACTS

Aesthetics

The changes from existing visual conditions that would occur within the LRDP area would be similar under this alternative to the 2021 LRDP, as development would be placed in the same areas that are planned for development under the proposed 2021 LRDP. While the degree of change would be less as the amount of development that would be constructed would be less, the same mitigation measures would be required to mitigate significant impacts. In general, the overall height and bulk of structures may be slightly reduced, however not to the extent that potential changes in visual character and views of and through the campus would be substantially different when compared to the 2021 LRDP. Land use changes under this alternative would involve the development of additional university-related uses within a university campus, such that the overall aesthetic condition of the campus would be similar to that of the 2021 LRDP and would be less than significant. *(Similar Impact)*

Agriculture and Forestry Resources

Under Alternative 2, the conversion of some agricultural lands to non-agricultural use would likely be necessary to accommodate additional employee housing under this alternative, similar to the 2021 LRDP. However, as noted in Section 3.2, "Agriculture and Forestry Resources," the two acres that are currently associated with the university farm and that would be converted are not considered a significant agricultural resource due to its limited acreage and water supply, as well as its relative isolation compared to other agricultural lands in the region. With respect to forestry resources, implementation of this alternative would involve lesser development but similar conversion of forested land due to similar land area to the 2021 LRDP that would be associated with development. Similar to the 2021 LRDP, this alternative would require the preparation of THPs and acquisition of TCPs from the CAL FIRE. As a result, impacts would be similar to the 2021 LRDP. *(Similar Impact)*

Air Quality

Alternative 2 would include less development (approximately 600,000 asf less) than the 2021 LRDP, and thus, would emit less overall air emissions during construction. Similarly, during operations, this alternative would result in less operational emissions due to the lesser level of development, compared to the 2021 LRDP. However, the decrease in overall emissions would not preclude the potential for construction emissions in a given year to exceed Monterey Bay Air Resources District thresholds. As such, mitigation of construction emissions (both criteria pollutant and toxic air contaminant [TAC]) would be still be necessary under this alternative. Operational emissions would be lower than under the proposed 2021 LRDP, and assuming a proportional reduction in vehicle emissions as a result of the reduction in new students, this alternative could, with implementation of similar mitigation to the 2021 LRDP, avoid the significant and unavoidable under the 2021 LRDP that is primarily associated with increased vehicle emissions and use of consumer products. Therefore, due to the lesser level of development and associated air quality impacts under this alternative, impacts would be less, but construction and operational phase impacts would still be significant and require mitigation. *(Less Impact)*

Archaeological, Historical, and Tribal Cultural Resources

Earth-moving activities within the LRDP area have the potential to disturb archaeological, tribal cultural, and/or historic resources or result in accidental discovery of human remains. Under the 2021 LRDP, ground-disturbing activities (e.g., grading, excavation) could result in the discovery of archaeological resources, tribal cultural resources, or human remains; however, feasible mitigation measures and regulatory requirements/procedures would reduce these impacts to a less-than-significant level. Additionally, on-campus development within or near potentially historic structures under the 2021 LRDP would result in potentially significant and unavoidable impacts. Although the areas of the campus affected by new development would be substantially the same as under the 2021 LRDP, the overall level of campus development and thereby the footprint of development would be less under this alternative. Therefore this alternative would result in similar to slightly reduced potential impacts to archaeological, historical, and tribal cultural resources. *(Similar Impact)*

Biological Resources

Under Alternative 2, the same areas of the campus would be developed in a manner similar to but with less overall development than under the 2021 LRDP, including within the central portion of the main residential campus adjacent to existing academic/administrative development. Due to the presence of habitat for special-status plant and animal species, as well as riparian habitat, within the areas of development, physical changes associated with implementation of this alternative could result in significant impacts; however, mitigation measures described for the 2021 LRDP would reduce these impacts to a less-than-significant level. Impacts of this alternative would be similar to or slightly reduced compared to those under the proposed 2021 LRDP. *(Similar Impact)*

Energy

Under this alternative, less development would occur on the campus, including the development of fewer energy-efficient structures and facilities. Less construction would correspond to less fuel consumption during construction. Fewer students on campus would also result in less energy consumption. However, development under the proposed 2021 LRDP would be highly energy efficient, which is the primary basis of impact determination under CEQA, and there would be no significant impacts associated with the wasteful or inefficient use of energy. Both this alternative and the 2021 LRDP would require adherence with the UC Sustainably Practices Policy and the UC Santa Cruz Energy Efficiency Programs, both of which would ensure efficient use of energy in construction and operations. Based on this, impacts to energy would be similar. *(Similar Impact)*

Geology and Soils

Earth-moving activities associated with construction have the potential to affect geology and soils. The types of impacts that could occur from development on campus include: geotechnical issues, increased erosion, and exposure of buildings and people to seismic hazards. Existing regulations and permitting requirements, such as CBC requirements, NPDES permit conditions, UC Santa Cruz Post-Construction Stormwater Management Requirements, and BMPs, would minimize potential impacts to a less-than-significant level. As with the proposed 2021 LRDP, this

alternative would result in less than significant impacts related to geology and soils. Even though this alternative involves a lesser overall level of development, the general areas where development would occur would be subject to similar geologic impacts. Thus, the impacts would be of similar type and magnitude. *(Similar Impact)*

Greenhouse Gas Emissions and Climate Change

Due to the lesser level of development on-campus under this alternative, GHG emissions associated with new development during construction would be lower than under the proposed 2021 LRDP. With respect to operation, this alternative, similar to the 2021 LRDP, involves the placement of new energy-efficient structures within available land and adjusting land use patterns to capture efficiencies related to alternative transportation. As a result, the 2021 LRDP represents a relatively small carbon footprint for a project of its size, with very low building energy use, particularly with respect to fossil fuels. Similarly, although to a lesser degree, this alternative would involve the operation of more efficient land uses to serve an increased campus population. Overall operational GHG emissions would be less under this alternative than the 2021 LRDP. However, consistent with the UC Sustainable Practices Policy and actions outlined in the UC Santa Cruz CAP, UC Santa Cruz emissions would be required to be net zero for Scopes 1 and 2 in 2025 and net zero for Scopes 1, 2, and Scope 3 from selected sources in 2050 under this alternative, similar to the 2021 LRDP. Further, to achieve any remaining GHG emissions reductions, the purchase of voluntary carbon offsets, consistent with Mitigation Measures MM3.8-1a and MM3.8-1b, would be necessary. Thus, this alternative would also result in impacts that would be less than significant with mitigation, similar to the 2021 LRDP, but impacts would be less due to the overall lesser level of emissions. *(Less Impact)*

Hazards and Hazardous Materials

Under the 2021 LRDP, on-campus construction activities would entail the transport, use, and storage of hazardous materials; and release of hazardous materials from a site of known or potential contamination. In addition, closure of area roadways during construction may hinder traffic flow and affect emergency response. However, feasible mitigation measures are available to reduce these impacts to a less-than-significant level. Due to compliance with applicable regulations and programs, campus operations would have less than significant impacts related to hazardous materials transport, use and storage. Similar types of hazards and hazardous materials impacts would occur with implementation of Alternative 2 although to a lesser degree as a result of the reduced construction effort. *(Less Impact)*

Hydrology and Water Quality

Earth-moving activities associated with construction under the 2021 LRDP have the potential to affect hydrology and water quality within UC Santa Cruz. The types of impacts that could occur from development under the 2021 LRDP include: adverse effects on water quality, reduced groundwater recharge, alterations to existing drainage systems, and effects on the 100-year floodplain. Existing regulations and permitting requirements, such as NPDES permit conditions, UC Santa Cruz Post-Construction Stormwater Management Requirements, a SWPPP, and the Regional Water Quality Control Plan, would reduce potentially significant impacts to a less-than-significant level. Similarly, under this alternative, development of additional on-campus structures and facilities would be required to comply with existing regulations and similar mitigation measures as to the 2021 LRDP would be available to reduce potentially significant impacts to a less-than-significant level. Impacts under this alternative would, therefore, be less than significant with mitigation and similar to the 2021 LRDP. *(Similar Impact)*

Land Use and Planning

This alternative would result in less new development compared to the 2021 LRDP, however, this alternative would include the amendments to the 2005 LRDP land use designations that are proposed under the 2021 LRDP to address the organization of land uses, spacing, and interrelationship of land uses on-campus. As a result, this alternative would result in a similar and less-than-significant impact associated with conflict with land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and incompatibility with adjacent land uses. (*Similar Impact*)

Noise

Earth-moving activities within campus (e.g., grading, excavation) under the 2021 LRDP would result in noise and vibration impacts. Feasible mitigation measures are available to reduce most of these impacts to a less-than-significant level, as described in Section 3.12, "Noise." However, construction noise could be substantial due to potential proximity to nearby housing (both on and off campus) and would still be considered significant and unavoidable under the 2021 LRDP. Compared to the 2021 LRDP, there would be less construction-generated noise or vibration under Alternative 2 due to less overall construction-related activities. Although the overall level of development would be less under this alternative, the land area required for plan implementation and development locations would likely be similar and result in similar impacts compared to the 2021 LRDP. *(Similar Impact)*

Population and Housing

Under Alternative 2, there would be 6,900 new student beds provided on-campus, which would provide a new student bed for each student above 19,500 FTE. This would accommodate this alternative's projected increase in student enrollment above them 2005 LRDP. Similar to the project, the new beds above the enrollment of 19,500 students would not address the demands for beds between 2018/2019 enrollment of 18,518 students and the 19,500 2005 LRDP enrollment cap (although this would be addressed by the Student Housing West and Kresge Housing projects, previously discussed). While Alternative 2 would provide less faculty/staff housing than the 2021 LRDP, it would also result in fewer new faculty/staff. Nonetheless and similar to the 2021 LRDP, additional demand for off-campus housing would occur under this alternative and due to the already tight housing market, worsened by the loss of houses from the CZU Lightning Complex fire, adequate housing opportunities may not be available in surrounding communities for new faculty/staff and students. Impacts would be less under this alternative due to a smaller increase in faculty/staff, but the difference would be relatively small. Impacts would remain significant and unavoidable. *(Similar Impact)*

Public Services

Alternative 2 would result in an increase in demand for public services similar to the 2021 LRDP. Under the 2021 LRDP, impacts were determined to be less than significant because campus development under the 2021 LRDP would be adequately served by local public service providers and the project-related demand for service would not require new or modified facilities (except a possible fire station on campus, which is included as part of the 2021 LRDP and addressed in this EIR), the development of which could result in significant environmental impacts. Alternative 2 would also result in less-than-significant public service impacts as this alternative would also not require new or modified public service facilities, the development of which could result in significant environmental effects. *(Similar Impact)*

Recreation

Alternative 2 would increase on-campus population and recreational needs but would, similar to the 2021 LRDP, provide additional on-site recreational opportunities proximate to new student and faculty/staff housing such that additional recreational facilities beyond those already intended as part of new housing would not be necessary. Because the campus would develop new recreational facilities as needed, impacts under Alternative 2 would be of similar type and magnitude as the 2021 LRDP. (*Similar Impact*)

Transportation

Under Alternative 2, development of new on-campus housing and academic/administrative space would increase the level of on-campus activity such that new vehicle commute trips would occur on a daily basis, similar to the 2021 LRDP. Under this alternative, overall campus VMT would be less than the proposed 2021 LRDP due to the lesser level of development and on-campus activities, however, the overall efficiency (i.e., VMT per capita) would be similar as all new students above the 19,500 2005 LRDP enrollment cap would be housed on campus, as well as 25 percent of new faculty/staff. *(Similar Impact)*

Utilities and Service Systems

Under Alternative 2, development of the LRDP area with additional housing, academic/administrative space, and supporting uses would occur, placing greater demand on utilities and service system than under existing conditions. The overall demand for utilities would be incrementally less than the 2021 LRDP's demand due to the smaller amount of development and on-campus population under this alternative. As with the proposed 2021 LRDP, with the exception of water supply, the existing utilities and service systems would generally be sufficient to meet the additional demands associated with this alternative. Although the demand for water under this alternative would be lower, the impact of this incremental water demand would still be significant as it would contribute to the need for the City to develop new water supplies. In general, impacts would be of similar type (i.e., significant and unavoidable related to water supplies) but reduced in magnitude under Alternative 2, compared to the 2021 LRDP. *(Less Impact)*

Wildfire

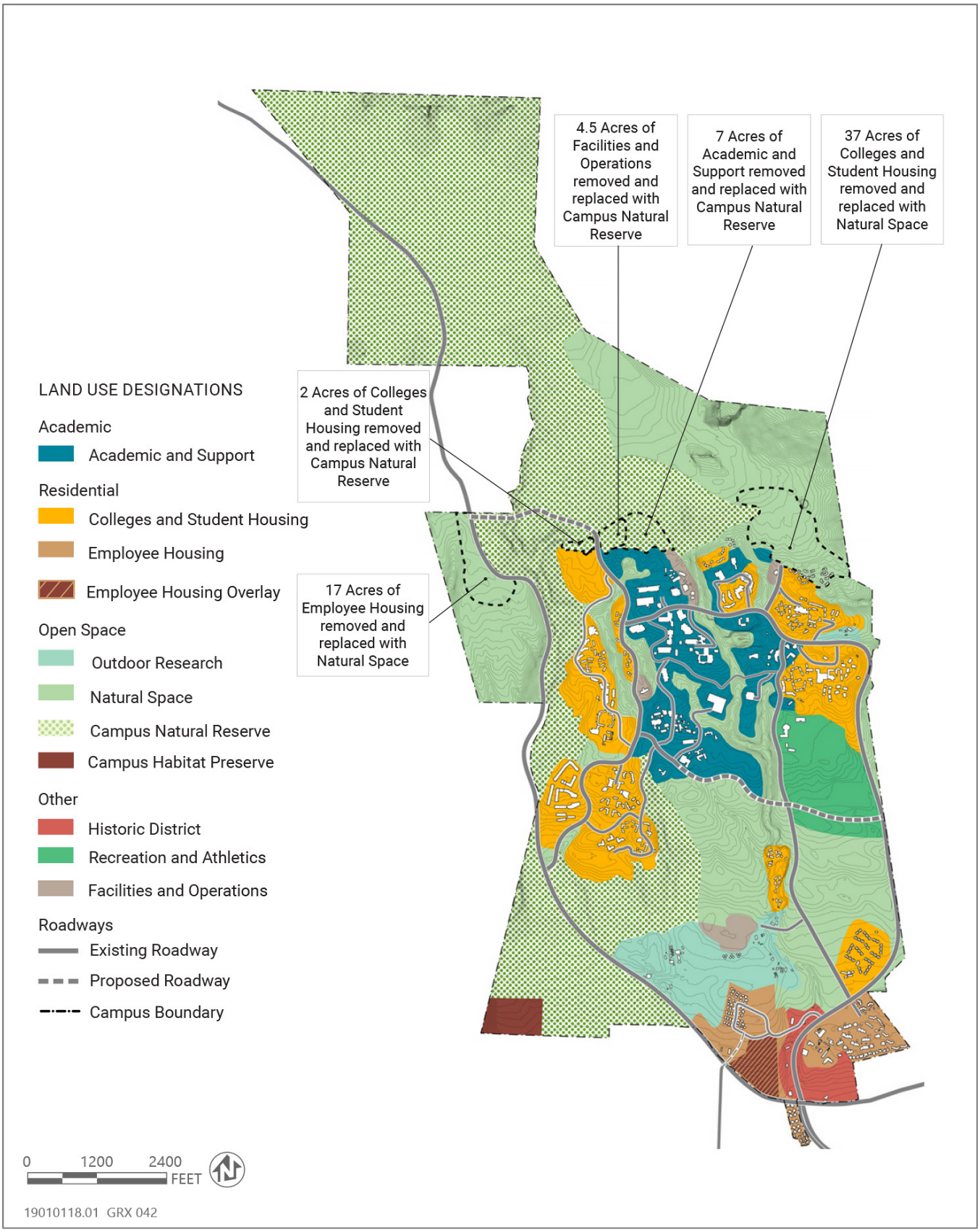
Under this alternative, there would be less overall development, however, the LRDP area (i.e., areas of potential development) would remain the same. UC Santa Cruz would continue to manage wildfire risk and implement existing campus plans related to campus evacuation and wildfire prevention, similar to the 2021 LRDP, and the mitigation measure identified for the 2021 LRDP and related to the need for a campus-wide vegetation management plan would still be required. As a result, impacts would be similar to the 2021 LRDP and less than significant with mitigation. *(Similar Impact)*

6.5.3 Alternative 3: Reduced **Development Footprint**

Similar to Alternative 2, this alternative is being considered to avoid environmental impacts associated with development on some areas of campus, as well as those associated with the total increase in enrollment. The primary difference is this alternative avoids development in the areas currently outside the City of Santa Cruz water service boundary (see Section 3.17, "Utilities and Service Systems").

DESCRIPTION OF ALTERNATIVE

Under this alternative and similar to Alternative 2, UC Santa Cruz would propose a reduction in projected campus enrollment and associated development compared to the 2021 LRDP. However, under this alternative and as shown in Figure 6-2, 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 biological resources. With the exclusion of the northern and western development areas, some of the planned student housing and faculty housing would be eliminated, along with some academic and support space. 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 2021 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 2021 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 2021 LRDP. Figure 6-2 includes the potential land use plan for this alternative.



Source: UC Santa Cruz 2020

Figure 6-2 Alternative 3 (Reduced Development Footprint) Conceptual Land Use Plan

ABILITY TO MEET PROJECT OBJECTIVES

Alternative 3, similar to Alternative 2, would increase on-campus housing opportunities to accommodate 100 percent of new student enrollment above the 2005 LRDP cap and 25 percent of new faculty/staff. This alternative would also accommodate development of academic/administrative and support facilities to match the projected increased enrollment totals. In addition, this alternative would reduce the amount of development and help to minimize impacts to biological resources. For this reason, Alternative 3 would meet most of the 2021 LRDP objectives (Project Objectives 2, and 4 through 10). However, because this alternative would provide less academic/administrative space, it would limit the ability for UC Santa Cruz to continue to create a dynamic environment for learning and discovery through the provision of new academic programs and disciplines. In addition, this alternative would not provide additional capacity for 28,000 students, which is based on the state's 2040 college enrollment projections and is therefore necessary to meet the State of California's need for additional public university capacity. Therefore, Alternative 3 would only partially meet Project Objective 1 which requires UC Santa Cruz to accommodate projected increases in student enrollment through 2040 based on statewide public educational needs. In addition, Alternative 3 would only include one pair of colleges, not two as proposed under the 2021 LRDP; therefore, Project Objective 3 would not be met under this alternative. Thus, Alternative 3, which would provide less academic building space and student capacity, would not meet Project Objectives 1 and 3.

COMPARISON OF ENVIRONMENTAL IMPACTS

Aesthetics

The changes from existing visual conditions that would occur within the LRDP area under this alternative would be similar to those under the 2021 LRDP, but the degree of change would be greater. Alternative 3 would result in less overall development within the LRDP area, however development would be more intensive within visible areas of the main residential campus and Westside Research Park. Under Alternative 3, while some of campus growth that would otherwise have occurred within the north campus subarea would eliminated, some of it would be redistributed within the central and lower portions of campus. As existing development within the northern portions of campus is not visible from long distances, the visual effects of LRDP-related development in those areas is minimal. With the intensification of uses further south within the main residential campus, higher buildings and greater massing would occur, which would result in further visual changes compared to the 2021 LRDP. However, as noted in Section 3.1, "Aesthetics," views of the campus from off-campus locations are either too distant or are largely precluded by existing vegetation and topography. With the additional development, which may involve increase massing and the addition of a floor or two of development, especially with respect to housing, views of the potential development would also be largely precluded. Therefore, the impacts associated with this alternative would be similar to the LRDP. *(Similar Impact)*

Agriculture and Forestry Resources

Under Alternative 3, the conversion of some agricultural lands to non-agricultural use would occur to accommodate additional employee housing under this alternative, similar to the 2021 LRDP. However, as noted in Section 3.2, "Agriculture and Forestry Resources," the two acres that are currently associated with the university farm and that would be converted are not considered a significant agricultural resource due to its limited acreage and water supply, as well as its relative isolation compared to other agricultural lands in the region. With respect to forestry resources, implementation of this alternative would result in less conversion of forest land as a result of the lack of development within the northern portions of the main residential campus. However, some forest land would be removed within the central and lower portions of the main residential campus. For this reason and similar to the 2021 LRDP, this alternative would require the preparation of THPs and acquisition of TCPs from the CAL FIRE. Therefore, impacts would be less than the 2021 LRDP due to the lesser level of development within forest land, and would less than significant. *(Less Impact)*

Air Quality

Alternative 3 would include less development (approximately 600,000 asf less) than the 2021 LRDP, and thus, would emit less overall air emissions during construction. The decrease in overall emissions would not preclude the potential for construction emissions in a given year to exceed Monterey Bay Air Resources District thresholds. As such,

mitigation of construction emissions (both criteria pollutant and TAC emissions) would still be necessary under this alternative. With respect to operation, emissions would be lower than under the proposed 2021 LRDP, and assuming a proportional reduction in vehicle emissions as a result of the reduction in new students, this alternative could, with implementation of similar mitigation to the 2021 LRDP, avoid the significant and unavoidable under the 2021 LRDP that is primarily associated with increased vehicle emissions and use of consumer products. Therefore, due to the lesser level of development and associated air quality impacts under this alternative, impacts would be less, but construction and operational phase impacts would still be significant and require mitigation. *(Less Impact)*

Archaeological, Historical, and Tribal Cultural Resources

Earth-moving activities within the LRDP area have the potential to disturb archaeological, tribal cultural, and/or historic resources or result in accidental discovery of human remains. Under the 2021 LRDP, ground-disturbing activities (e.g., grading, excavation) could result in the discovery of archaeological resources, tribal cultural resources, or human remains; however, feasible mitigation measures and regulatory requirements/procedures would reduce these impacts to a less-than-significant level. Additionally, on-campus development within or near potentially historic structures under the 2021 LRDP would result in potentially significant and unavoidable impacts, especially within the main residential campus. Although this alternative would result in a lesser overall development area, which would reduce potential impacts to archaeological and tribal cultural resources, the increase in potential development intensity could result in greater potential for a significant impact to historic structures, especially within the central campus subarea (as shown in Figure 2-3 of Chapter 2, "Project Description.") Implementation of mitigation measures similar to those identified for the 2021 LRDP would be required, and potential impacts to historic structures would remain significant and unavoidable. *(Less Impact for archaeological and tribal cultural resources, Greater Impact for historic resources)*

Biological Resources

Under Alternative 3, the LRDP area would be developed in a manner similar to but with less overall development and in a smaller area than under the 2021 LRDP. As a result, the potential for impacts to sensitive species/habitat would be less due to the lesser land area affected by implementation of this alternative. Nonetheless, due to the presence of habitat for special-status plant and wildlife species, as well as riparian and other sensitive habitats, within certain portions of the LRDP area, physical changes associated with implementation of this alternative could result in significant impacts; however, mitigation measures, described for the 2021 LRDP would reduce these impacts to a less-than-significant level. Thus, due to the smaller development area associated with the envisioned development under this alternative, the potential for impacts to biological resources would be reduced, although the impacts would still be potentially significant and require the same mitigation. *(Less Impact)*

Energy

Under this alternative, less development would occur on the campus, including the development of fewer energy-efficient structures and facilities. Less construction would correspond to less fuel consumption during construction. Fewer students on campus would also result in less energy consumption. However, development under the proposed 2021 LRDP would be highly energy efficient, which is the primary basis of impact determination under CEQA, and there would be no significant impacts associated with the wasteful or inefficient use of energy. Both this alternative and the 2021 LRDP would require adherence with the UC Sustainable Practices Policy and the UC Santa Cruz Energy Efficiency Programs, both of which would ensure efficient use of energy in construction and operations. Based on this, impacts to energy would be similar. *(Similar Impact)*

Geology and Soils

Earth-moving activities associated with construction have the potential to affect geology and soils. The types of impacts that could occur from development on campus include: geotechnical issues, increased erosion, and exposure of buildings and people to seismic hazards. Existing regulations and permitting requirements, such as CBC requirements, NPDES permit conditions, UC Santa Cruz Post-Construction Stormwater Management Requirements, and BMPs, would minimize potential impacts to a less-than-significant level. As with the proposed 2021 LRDP, this alternative would result in less than significant impacts related to geology and soils. Although the general areas where

development would occur would be subject to similar geologic impacts, this alternative would involve a smaller area of development and for that reason, impacts would be less than under the proposed 2021 LRDP. *(Less Impact)*

Greenhouse Gas Emissions and Climate Change

Due to the lesser level of development on-campus under this alternative, there would be lower GHG emissions associated with new development during construction. With respect to operation, this alternative, similar to the 2021 LRDP, involves the placement of new energy-efficient structures within available land and adjusting land use patterns to capture efficiencies related to alternative transportation. As a result, the 2021 LRDP represents a relatively small carbon footprint for a project of its size, with very low building energy use, particularly with respect to fossil fuels. Similarly, although to a lesser degree, this alternative would involve the operation of more efficient land uses to serve an increased campus population. The operational GHG emissions would be less under this alternative than the 2021 LRDP. Consistent with the UC Sustainable Practices Policy and actions outlined in the UC Santa Cruz CAP, UC Santa Cruz emissions would be required to be net zero for Scopes 1 and 2 in 2025 and net zero for Scopes 1, 2, and from selected Scope 3 sources in 2050 under this alternative, similar to the 2021 LRDP. Further, to achieve any remaining GHG emissions reductions, the purchase of voluntary carbon offsets, consistent with Mitigation Measures MM3.8-1a and MM3.8-1b, would be necessary. Thus, this alternative would also result in impacts that would be less than significant with mitigation, similar to the 2021 LRDP. *(Less Impact)*

Hazards and Hazardous Materials

Under the 2021 LRDP, on-campus construction activities would entail the transport, use, and storage of hazardous materials; and release of hazardous materials from a site of known or potential contamination. In addition, closure of area roadways during construction may hinder traffic flow and affect emergency response. However, feasible mitigation measures are available to reduce these impacts to a less-than-significant level. Due to compliance with applicable regulations and programs, campus operations would have less than significant impacts related to hazardous materials transport, use and storage. Similar types of hazards and hazardous materials impacts would occur with implementation of Alternative 3 although to a lesser degree as a result of the reduced construction effort. *(Less Impact)*

Hydrology and Water Quality

Earth-moving activities associated with construction under the 2021 LRDP have the potential to affect hydrology and water quality within UC Santa Cruz. The types of impacts that could occur from development under the 2021 LRDP include: adverse effects on water quality, reduced groundwater recharge, alterations to existing drainage systems, and effects on the 100-year floodplain. Existing regulations and permitting requirements, such as NPDES permit conditions, UC Santa Cruz Post-Construction Stormwater Management Requirements, a SWPPP, and the Regional Water Quality Control Plan, would reduce potentially significant impacts to a less-than-significant level. Similarly, under this alternative, development of additional on-campus structures and facilities would be required to comply with existing regulations, and mitigation measures similar to the 2021 LRDP would be available to reduce potentially significant impacts to a less-than-significant level. However, due to the smaller land area and scale of development associated with this alternative, impacts would be less. *(Less Impact)*

Land Use and Planning

This alternative would result in less new development compared to the 2021 LRDP, however, this alternative would include the amendments to the 2005 LRDP land use designations that are proposed under the 2021 LRDP to address the organization of land uses, spacing, and interrelationship of land uses on-campus. As a result, this alternative would result in a similar and less-than-significant impact associated with conflict with land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and incompatibility with adjacent land uses. (*Similar Impact*)

Noise

Earth-moving activities within campus (e.g., grading, excavation) under the 2021 LRDP would result in noise and vibration impacts. Feasible mitigation measures are available to reduce most of these impacts to a less-than-significant level, as described in Section 3.12, "Noise." However, potential construction noise associated with this

alternative would occur over a smaller area with this alternative, including potential construction noise impacts to nearby existing residences (both on and off campus). Nonetheless, due to the location of construction activities in locations proximate to sensitive uses, this alternative would also result in significant and unavoidable noise impacts during construction. Further, as development would be more intensive within certain areas of the campus, potential construction noise levels at certain existing receptors may incrementally increase in terms of periodic noise and the general time period (i.e., months of construction) over which noise levels would be perceptible. Similar to the 2021 LRDP, noise levels would potentially exceed standards and, even with mitigation, and construction-related noise impacts would remain significant and unavoidable. Operational noise impacts would be similar to that under the proposed 2021 LRDP although incrementally less due to the lesser roadway volumes attributable to lower enrollment. Because this alternative would not construction noise impacts to sensitive receptors, impacts are considered to be similar to the 2021 LRDP. *(Similar Impact)*

Population and Housing

Under Alternative 3 and similar to Alternative 2, there would be 6,900 new student beds provided on-campus, which would provide a new student bed for each student above 19,500 FTE. This would accommodate this alternative's projected increase in student enrollment above the 2005 LRDP. Similar to the project, the new beds above the enrollment of 19,500 students would not address the demands for beds between 2018/2019 enrollment of 18,518 students and the 19,500 2005 LRDP enrollment cap (although this would be addressed by Student Housing West/Kresge Housing projects, previously discussed). While Alternative 3 would provide less faculty/staff housing than the 2021 LRDP, it would also result in fewer new faculty/staff. Nonetheless and similar to the 2021 LRDP, additional demand for off-campus housing would occur under this alternative and due to the already tight housing market, worsened by the loss of houses from the CZU Lightning Complex fire, adequate housing opportunities may not be available in surrounding communities for new faculty/staff and students. Impacts would be less under this alternative due to a smaller increase in faculty/staff, but the difference would be relatively small. Impacts would remain significant and unavoidable. *(Similar Impact)*

Public Services

Alternative 3 would result in an increase in demand for public services similar to the 2021 LRDP. Under the 2021 LRDP, impacts were determined to be less than significant because campus development under the 2021 LRDP would be adequately served by local public service providers and the project-related demand for service would not require new or modified facilities (except a possible fire station on campus, which is included as part of the 2021 LRDP and addressed in this EIR). Alternative 3 would also result in less-than-significant public service impacts as it would also not require the construction of new or modified public service facilities, the development of which would result in significant environmental impacts. *(Similar Impact)*

Recreation

Alternative 3 would increase on-campus population and recreational needs but would, similar to the 2021 LRDP, provide additional on-site recreational opportunities proximate to new student and faculty/staff housing such that additional recreational facilities beyond those already intended as part of new housing would not be necessary. Because the campus would develop new recreational facilities as needed and as part of new housing development, impacts under Alternative 3 would be of similar type and magnitude as the 2021 LRDP. (*Similar Impact*)

Transportation

Under Alternative 3, both enrollment and employment on the campus would increase compared to existing conditions but both increases would be less than those under the proposed 2021 LRDP. As with the proposed 2021 LRDP, under this alternative all of the new students would be housed on campus and would not live off campus, and of the new faculty and staff, 25 percent would be housed on campus and the rest would live off campus in surrounding communities. Therefore, as with the 2021 LRDP, under Alternative 3, the increase in commute trips over existing conditions would be associated only with the new employees who would live off campus. As the number of these off-campus employees would be smaller than that under the 2021 LRDP, this alternative would result in fewer new daily vehicle trips to the campus. Consequently, the increase in total VMT under this alternative would be

smaller. However, when the total VMT is divided by the service population, the resulting VMT per capita service population be comparable to the proposed 2021 LRDP. Similarly, both the VMT per resident and the VMT per worker would be comparable to the corresponding results for the proposed 2021 LRDP. As a result, impacts would be less than significant with mitigation and similar to the 2021 LRDP under this alternative. *(Similar Impact)*

Utilities and Service Systems

Under Alternative 3, development of additional housing, academic/administrative space, and supporting uses within the LRDP area would still occur, placing greater demand on utilities and service systems than under existing conditions. The overall demand for utilities would be incrementally less than the 2021 LRDP's demand due to the smaller amount of development and on-campus population under this alternative. As with the proposed 2021 LRDP, with the exception of water supply, the existing utilities and service systems would generally be sufficient to meet the additional demands associated with this alternative. Although the demand for water under this alternative would be lower, the impact of this incremental water demand would still be significant as it would contribute to the need for the City to develop new water supplies. In general, utility impacts would be of similar type but reduced in magnitude under Alternative 3 as the 2021 LRDP. Accordingly, the impact conclusion related to water supply would be the same (significant and unavoidable) as under Alternative 2. *(Less Impact)*

Wildfire

Under this alternative, the area of development would be less than under the 2021 LRDP as new development on the north campus and to the west of Empire Grade would not occur. However, wildfire risk would still be a concern with respect to new development on the central and lower campus. UC Santa Cruz would continue to manage wildfire risk and implement existing campus plans related to campus evacuation and wildfire prevention, similar to the 2021 LRDP, and the mitigation measure identified for the 2021 LRDP and related to the need for a campus-wide vegetation management plan would still be required. As a result, impacts under Alternative 3 would be less when compared to the 2021 LRDP would remain less than significant. *(Less Impact)*

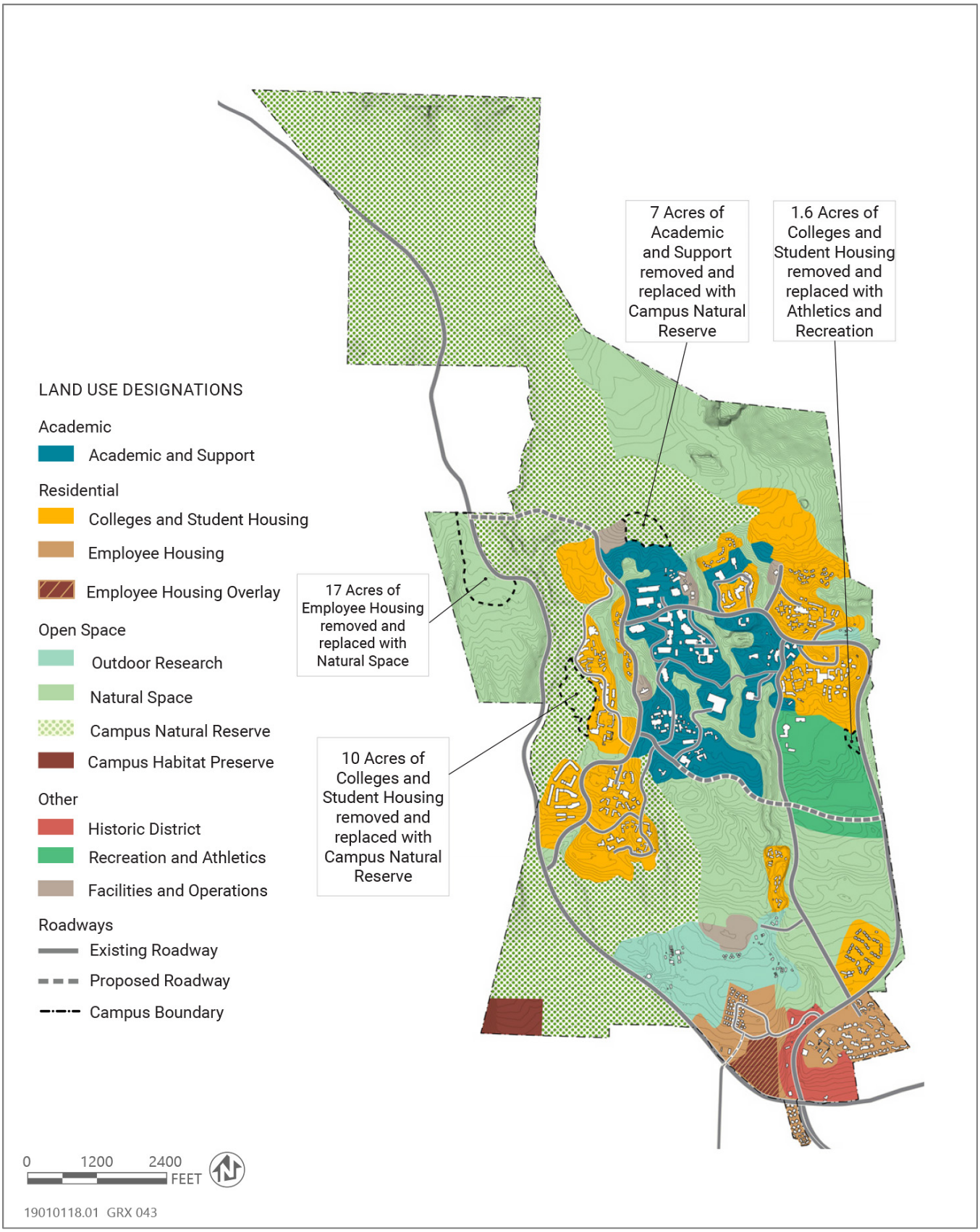
6.5.4 Alternative 4: Reduced Campus Growth and Use of UC MBEST Off-site

This alternative is being considered to avoid environmental impacts associated with development of some areas of campus, as well as those associated with the total increase in enrollment in Santa Cruz, while still meeting the enrollment objections of the 2021 LRDP.

DESCRIPTION OF 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 2021 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 and as shown in Figure 6-3, 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 (~6,300 FTE) and 280 new faculty/staff housing units would be provided under this alternative.



Source: UC Santa Cruz 2020

Figure 6-3 Alternative 4 (Reduced Campus Growth and Use of UC MBEST Off-Site) Conceptual Land Plan

A portion of the enrollment growth projected under the proposed 2021 LRDP would also be allocated to UC MBEST. As noted earlier in this chapter, UC Santa Cruz received nearly 1,100 acres of the land in the northern portion of the former Fort Ord (Monterey County) from the U.S. Army. Of this total, 500 acres are planned for development, and 600 acres are identified as a habitat reserve for the UC Natural Reserve System. For the purposes of this assessment, it is assumed that out of the 500 acres planned for development, a portion of the "Central North" campus, which is approximately 70 acres in size, could be used to develop facilities that would accommodate the enrollment growth allocated to UC MBEST. It is assumed that the remainder of the developable lands at UC MBEST would continue to be designated for light industrial uses, but primarily research and development.

Under this alternative, the focus of development at MBEST would be on graduate research across all divisions, including Physical and Biological Sciences, School of Engineering, Arts, Humanities and Social Sciences. Potential programs could include innovative research partnerships highlighting interdisciplinary possibilities and entrepreneurial collaborations with regional partners. 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. Due to siting constraints, it is anticipated that no student housing would be provided, at least initially, at UC MBEST. Based on a 2011 visioning study conducted for UC MBEST, the site is considered to be best suited for a "university-related research park" (UC Santa Cruz 2011). Figure 6-3 identifies the potential land plan at UC MBEST for this alternative.

In summary, this alternative provides for the same increase in enrollment as the proposed 2021 LRDP, although the increase at the main campus would be smaller and the balance of the enrollment increase would be accommodated via expanded online learning programs and at UC MBEST. The alternative provides on-campus housing for all new enrolled students on the main residential campus and Westside Research Park but not for those enrolled at the UC MBEST. Similarly, this alternative provides on-campus housing for about 25 percent of the new employees on the main residential campus and Westside Research Park, but not for employees at UC MBEST.

The impact analysis below is focused on the environmental impacts of these levels of population growth and development at the main residential campus (including the Westside Research Park) and at UC MBEST. With regard to the impacts associated with the expanded online/remote learning programs, those are expected to be limited to the environmental impacts from the development of the academic and administrative space on the main residential campus necessary for the administration of the online classes, and are analyzed below.

ABILITY TO MEET THE PROJECT OBJECTIVES

Alternative 4 would provide campus facilities and infrastructure to accommodate projected increases in student enrollment up to a projected 28,000 FTE, consistent with the University of California's forecasted need for additional public university capacity. Development on the main residential campus would be reduced compared to the proposed 2021 LRDP which would maintain existing open space within the LRDP area. Similar to the 2021 LRDP, this alternative would also maintain existing historic structures, and support a more efficient roadway network. Therefore, this alternative would meet some of the project objectives (Project Objectives 4, 5, 7, and 8). However, under this alternative on-campus student housing would only be provided for students enrolled on the main residential campus and Westside Research Park, but not for employees at UC MBEST. Similarly, the alternative provides on-campus housing for about 25 percent of the new students on the main residential campus and Westside Research Park, but not for employees at UC MBEST. The reduction in on-campus housing opportunities would contribute to off-campus housing demands, although these demands would likely be closer to the UC MBEST campus, but would not fully meet the UC Santa Cruz objective of accommodating 100 percent new student enrollment above 19,500 and up to 25 percent of new faculty/staff (Project Objectives 1 and 6).

This alternative would also require students and employees to travel to an off-site location to for academic support and instruction which conflicts with the land use goal of supporting compact and clustered development, and convenient access (Project Objective 2). Due to the increase travel demand between the LRDP area and UC MBEST, this alternative would increase commuter trips and conflict with the UC Santa Cruz objective to optimize trip- and

vehicle-miles-travelled-reduction benefits and efficiency of transit, bike, and pedestrian access to, from, and within the campus to reduce the use of single-occupancy vehicles (Objective 9). The increased in commuter trips would also conflict with UC Santa Cruz's objective to foster climate adaptation strategies and sustainable design (Project Objective 10). Therefore, Alternative 4, would not meet or would only partially meet a number of proposed 2021 LRDP objectives.

COMPARISON OF ENVIRONMENTAL IMPACTS

Aesthetics

The changes from existing visual conditions that would occur within the LRDP area would be similar under this alternative to the 2021 LRDP, but the degree of change would likely be less. This alternative would result in less development within the LRDP area (approximately one-third of the total development under the 2021 LRDP). Due to the lesser level of development throughout the LRDP area, changes in visual character and the visibility of new structures on campus would be reduced, when compared to the proposed 2021 LRDP.

At UC MBEST, development within the Central North campus would replace largely undeveloped lands and low-lying vegetation. In addition, Monterey County has designated the area as having visual sensitivity and Reservation Road is a proposed scenic route (Monterey County 2006). As a result, development under this alternative would be more visible and would likely be considered to result in more substantial changes in visual character and scenic vistas than the 2021 LRDP. Similar to the 2021 LRDP, compliance with UC Santa Cruz Design Review Process and Campus Standards Handbook, and mitigation would be required. Therefore, while this alternative would result in lesser impacts within the LRDP area, it would result in greater impacts at the UC MBEST site. Further, because the impact is spread over two locations, it would be greater overall than the 2021 LRDP. (*Greater Impact*)

Agriculture and Forestry Resources

Under this alternative, the conversion of some agricultural lands to non-agricultural use would not occur within the LRDP area. However, as noted in Section 3.2, "Agriculture and Forestry Resources," the two acres that are currently associated with the university farm and that would be converted are not considered a significant agricultural resource due to its limited acreage and water supply, as well as its relative isolation compared to other agricultural lands in the region. At UC MBEST, none of the Central North campus is considered Important Farmland. As a result, no impact would occur and impacts would be less under this alternative with respect to agriculture.

With respect to forestry resources, implementation of this alternative would result in the conversion of forest land, although it would be reduced compared to the proposed 2021 LRDP as less development would occur on the main residential campus. As with the 2021 LRDP, this alternative would still require the preparation of THPs and acquisition of TCPs from CAL FIRE. At UC MBEST, none of the Central North campus would be considered forest land, and as a result no impact to forest land would occur. Therefore, Alternative 4 would result in no impact to agriculture and a less-than-significant impact to forestry resources. In addition, impacts under this alternative would be less than those under the 2021 LRDP. *(Less Impact)*

Air Quality

Overall, Alternative 4 would involve less total development than the 2021 LRDP and would spread that development over two sites within different counties. Due to the lesser level of development and on-campus learning, this alternative would emit less overall air emissions during operation, in general. However, due to the limited academic program at UC MBEST, UC Santa Cruz students enrolled at UC MBEST would likely need to take classes at the main residential campus, in addition to classes at MBEST. By contrast under the 2021 LRDP, the majority of students would live on campus and walk to academic and support spaces. Accordingly, this alternative would result in substantial additional mobile source criteria pollutant emissions. This would be offset somewhat by reductions in mobile source operational emissions as a result of the online/remote learning component of this alternative; however due to the distance between UC MBEST and the LRDP area, it is expected that overall operational air emissions would likely be greater than the 2021 LRDP.

Construction emissions would be lower compared to the proposed 2021 LRDP as less total building space would be constructed. However, the decrease in overall construction emissions would not preclude the potential for construction emissions in a given year to exceed Monterey Bay Air Resources District thresholds. As such, mitigation of construction emissions (both criteria pollutant and TAC emissions) would still be necessary under this alternative. Therefore, although the overall level of development and associated air quality impacts would be less, air quality impacts would be significant and potentially unavoidable under this alternative. *(Less Impact during construction; Greater Impact during operation)*

Archaeological, Historical, and Tribal Cultural Resources

As with the 2021 LRDP, under this alternative, ground-disturbing activities (e.g., grading, excavation) within the LRDP area could result in the discovery of archaeological resources, tribal cultural resources, or human remains; however, feasible mitigation measures and regulatory requirements/procedures would reduce these impacts to a less-than-significant level.

Archaeological surveys conducted on the UC MBEST property found cultural resources indicated human occupation dating back 10,000 years (Fort Ord Reuse Authority 2001). Therefore, the potential exists for the discovery of subsurface cultural and tribal cultural resources at UC MBEST, and impacts would be considered similar. Additionally, development within or near potentially historic structures at the main residential campus under both this alternative and the 2021 LRDP would result in potentially significant and unavoidable impacts. With respect to UC MBEST, no historic structures are located within the Central North campus. Due to the lack of historic structures at UC MBEST and the smaller area of development at the main residential campus under this alternative, the potential cultural resource impacts of this alternative would be less than those under the 2021 LRDP. *(Similar Impact to cultural and tribal cultural resources; Less Impact to historic resources)*

Biological Resources

Under Alternative 4, the LRDP area would be developed in a manner similar to but with less overall development and potentially a smaller area than under the 2021 LRDP. Due to the presence of habitat for special-status plant and wildlife species, as well as riparian habitat and other sensitive habitats within certain portions of the LRDP area, physical changes associated with implementation of this alternative could result in significant impacts; however, mitigation measures, described for the 2021 LRDP would reduce these impacts to a less-than-significant level.

With respect to UC MBEST, the North Central Campus and surrounding areas, including the Fort Ord Natural Reserve that is located south of the North Central campus, provide habitat for numerous listed plant species and numerous listed wildlife species that also occur on the anticipated development area. As a result, and due to the greater number of biological species that could be affected by the development at UC MBEST, the impacts of this alternative are considered greater than the 2021 LRDP. Of note, a multi-species habitat conservation plan (MSHCP) is currently under consideration by the Fort Ord Reuse Authority and the U.S. Fish and Wildlife Service for the former Fort Ord area, including the North Central campus. Should the MSHCP be developed and adopted, any development of the North Central campus would be subject to the MSHCP. (*Greater Impact*)

Energy

Under this alternative, less overall development would occur than under the 2021 LRDP, including the additional off-site development at MBEST. Less construction activities would correspond to less fuel consumption during construction. Fewer students on campus would also result in less associated energy consumption. Development under the proposed 2021 LRDP would be highly energy efficient, which is the primary basis of impact determination under CEQA, and there would be no significant impacts associated with the wasteful or inefficient use of energy.

Due to the increase travel demand between the LRDP area and UC MBEST, this alternative would increase commuter trips and would increase energy usage. It could reasonably be argued that this increased need for commuting is a wasteful use of energy. However, with the operational emissions that would be avoided as a result of the online/remote learning component of this alternative, operational energy consumption would likely be similar to the 2021 LRDP, albeit slightly greater due to the level of increase in UC MBEST student travel (see below). Both this alternative and the 2021 LRDP would require adherence with the UC Sustainably Practices Policy and the UC Santa

Cruz Energy Efficiency Programs, both of which would ensure efficient use of energy in construction and operations. Based on this, impacts to energy would be similar. *(Similar Impact)*

Geology and Soils

Earth-moving activities associated with construction have the potential to affect geology and soils. The types of impacts that could occur from development within the LRDP area and at UC MBEST include: geotechnical issues, increased erosion, and exposure of buildings and people to seismic hazards. Existing regulations and permitting requirements, such as CBC requirements, NPDES permit conditions, and BMPs, would minimize potential impacts to a less-than-significant level. Similarly, this alternative would result in less than significant impacts. Although the general areas where development would occur involve a smaller area of development, development would be subject to similar geologic impacts, and for that reason, impacts would be similar to the 2021 LRDP. *(Similar Impact)*

Greenhouse Gas Emissions and Climate Change

Due to the lesser level of campus development under this alternative, there would be lower GHG emissions associated with new development during construction. With respect to operational emissions, this alternative, similar to the 2021 LRDP, involves the placement of new energy-efficient structures within available land, including at UC MBEST, and adjusting land use patterns within the main residential campus to capture efficiencies related to alternative transportation. As a result, the 2021 LRDP represents a relatively small carbon footprint for a project of its size, with very low building energy use, particularly with respect to fossil fuels. Similarly, although to a lesser degree, this alternative would involve the operation of efficient land uses to serve an increased campus population, compared to existing conditions. Due to the increased travel between the LRDP area and UC MBEST, this alternative would increase commuter trips and would result in a significant increase in mobile source GHG emissions. However, with overall operational emissions would be offset to some extent by the online/remote learning component of this alternative. However, emissions would be greater than the 2021 LRDP under this alternative due to the level of increase in per capita VMT associated with student travel at MBEST (see below). Consistent with the UC Sustainable Practices Policy and actions outlined in the UC Santa Cruz CAP, UC Santa Cruz emissions would be required to be net zero for Scopes 1 and 2 in 2025 and net zero for Scopes 1, 2, and Scope 3 from selected sources in 2050 under this alternative, similar to the 2021 LRDP. Further, to achieve any remaining GHG emissions reductions, the purchase of voluntary carbon offsets, consistent with Mitigation Measures MM3.8-1a and MM3.8-1b, would be necessary. Thus, this alternative would also result in impacts that would be less than significant with mitigation, similar to the 2021 LRDP. *(Greater Impact)*

Hazards and Hazardous Materials

Under Alternative 4 and the 2021 LRDP, university-related construction activities would entail the transport, use, and storage of hazardous materials; and release of hazardous materials from a site of known or potential contamination. In addition, closure of area roadways during construction may hinder traffic flow and affect emergency response. As noted above, UC MBEST is located within the former Fort Ord area, and on-site soils have the potential to contain unexploded ordnance items including pyrotechnics and explosives, a potential hazard that would not occur with implementation of the 2021 LRDP (U.S. Army Corps of Engineers 2002). In 1998, the Army began a comprehensive evaluation of past investigations and removal actions to develop remedial actions that will support long-term reuse of Fort Ord (Fort Ord Cleanup 2020). However, the types of hazards and hazardous materials impacts of Alternative 4 would generally be of greater type and magnitude compared to the 2021 LRDP due to the potential impact associated with the presence of unexploded ordnance at UC MBEST. Therefore, impacts would be considered greater. *(Greater Impact)*

Hydrology and Water Quality

Earth-moving activities associated with construction under this alternative have the potential to affect hydrology and water quality within the LRDP area and at UC MBEST. The types of impacts that could occur from new development include adverse effects on water quality, reduced groundwater recharge, alterations to existing drainage systems, and effects on the 100-year floodplain.

As noted above, there is a potential for on-site soils at UC MBEST to contain unexploded ordnance. As noted above for hazards and hazardous materials, construction-related ground disturbing activities have the potential to unearth

contaminated soils which could lead to additional water quality impacts. However, compliance with existing regulations and permitting requirements, such as NPDES permit conditions, a SWPPP, and the Regional Water Quality Control Plan, would reduce potentially significant impacts. Similarly, under this alternative, development of additional university-related structures and facilities would be required to comply with existing regulations, and mitigation measures at both locations would be available to reduce potentially significant impacts to a less-than-significant level. Therefore, impacts under this alternative would be similar. *(Similar Impact)*

Land Use and Planning

Under Alternative 4, there would be changes to the existing campus land use pattern, similar to the 2021 LRDP, and substantive changes to the land use plan at UC MBEST. Additional academic/administrative space would be developed within both the main residential campus and the Central North campus portion of UC MBEST. Within the LRDP area, this alternative would replace the 2005 LRDP land use designations insofar as necessary to address the organization of land uses, spacing, and interrelationship of land uses on-campus, and as a result, similar less-than-significant impacts would occur within the LRDP area. At UC MBEST, any development would be required to comply with applicable plans, policies, and regulations intended to reduce environmental impacts, including the MSHCP for the area that is currently under consideration. As a result, the potential for conflicts with plans, programs, and policies intended to reduce significant environmental effects would be similar to the 2021 LRDP and less than significant. (*Similar Impact*)

Noise

Earth-moving activities within the LRDP area (e.g., grading, excavation) under this alternative would result in noise and vibration impacts. Feasible mitigation measures are available to reduce most of these impacts to a less-than-significant level, as described in Section 3.12, "Noise." However, potential construction noise would occur over a smaller area overall with this alternative as less academic building space would be constructed, compared to the 2021 LRDP. Nonetheless, due to the location of construction activities in proximity of sensitive uses, this alternative would also result in significant and unavoidable noise impacts during construction at UC Santa Cruz.

With respect to potential development at UC MBEST, no sensitive receptors are located within approximately 2,000 feet of the North Central campus, and noise and vibration impacts associated with construction would be less than significant. As a result, and due to the allocation of some of the planned growth and development to UC MBEST under this alternative, construction noise impacts would be less than those under the 2021 LRDP. The less than significant operational noise impacts of the 2021 LRDP would also be reduced under this alternative because some of the planned growth would be assigned to UC MBEST and there are no sensitive receptors on or near UC BEST that could be affected by operational noise, including traffic noise. In addition, traffic noise would be reduced due to the expanded online learning programs included in this alternative. *(Less Impact)*

Population and Housing

Under Alternative 4, approximately 6,300 new student beds would be provided within the LRDP area, which would provide a new student bed for each student above 19,500 FTE that would be enrolled at the main residential campus. As with the 2021 LRDP, this alternative would provide on-campus housing for 25 percent of the new 1,100 employees at the main residential campus, and approximately 800 new employees would seek housing off campus. As this number is lower than the number under the 2021 LRDP, the impact on off-campus housing in Santa Cruz area would be reduced under this alternative.

However, this alternative would not provide student or employee housing at UC MBEST, which would increase the overall proportion of students and employees living off-campus and would result in approximately 2,100 students and faculty/staff seeking housing in the Monterey area. Based on housing vacancy rates published by the California Department of Finance (DOF), this is equal to the number of vacant housing units in the cities of Marina, Seaside, and Monterey (DOF 2019) and would be considered substantial. For that reason, sufficient housing is likely not available in surrounding communities near MBEST for the potential housing demand associated with this alternative. Impacts on housing would be greater under this alternative and would be significant and unavoidable. *(Greater Impact)*

Public Services

Alternative 4 would result in an increase in demand for public services similar to the 2021 LRDP. Under the 2021 LRDP, impacts were determined to be less than significant because campus development under the 2021 LRDP would be adequately served by local public service providers and the project-related demand for service would not require new or modified facilities, the development of which would result in significant environmental impacts.

Under Alternative 4, development at UC MBEST would be served by the City of Marina Public Safety Department which provides both police and fire services. UC MEST is located within the City of Marina service boundary and development under Alternative 4 would continue to be served by public service providers. The increase in on-site population may require the service provide to hire new personnel but would not require the construction of new or modified public service facilities in Santa Cruz or in the UC MBEST area, the development of which would result in significant environmental impacts. *(Similar Impact)*

Recreation

Alternative 4 would increase campus-related population and recreational needs similar to the proposed 2021 LRDP; however, a portion of the need would be shifted to UC MBEST. With respect to impacts within the LRDP area, UC Santa Cruz would provide additional on-campus recreational opportunities proximate to new student and faculty/staff housing and elsewhere on the campus as needed.

However, with respect to the proposed development on UC MBEST, no on-campus housing or recreational facilities would be provided, and the new students and employees at UC MBEST under this alternative would place a demand on regional recreational facilities. Given the vast recreational resources in the Monterey Bay area coupled with continued maintenance of existing facilities, it is unlikely that the recreational demand associated with these new students and employees would be substantial enough to require new or modified recreational facilities or cause the physical deterioration of existing recreational facilities in the area. Monterey County provides is expected to provide more than 12,000 acres of parkland (based on current estimates of available parkland within the county) for approximately 500,000 residents in 2040 (Monterey County 2008; AMBAG 2018), which exceeds the typically acceptable ratio of 3 acres of parkland per 1,000 residents. For this reason, although the impacts on recreational facilities under Alternative 4 would be considered greater compared to the 2021 LRDP, the impacts would not be significant. (*Greater Impact*)

Transportation

Under Alternative 4, development of new on-campus housing and academic/administrative space within the LRDP area would increase the level of on-campus activity and vehicle commute trips, similar to the 2021 LRDP. Under this alternative, overall campus VMT would be less than the proposed 2021 LRDP due to a smaller on-campus population.

With respect to UC MBEST, additional vehicle trips and VMT would be associated with the development and operation of additional academic/administrative and support spaces, as well as the lack of on-campus housing at that site. This would be expected to result in a higher total VMT at UC MBEST and higher VMT per capita. Even with the inclusion of expanded online/remote learning as part of this alternative, the total VMT associated with UC MBEST when combined with the total VMT of the main residential campus (including the Westside Research Park) under this alternative would exceed the anticipated VMT per capita calculated for the 2021 LRDP. This conclusion is based on the assumption that graduate students would travel to the LRDP area from UC MBEST once per week, on average. Based on the driving distance between UC MBEST and the main residential campus, which is approximately 37 miles, UC MBEST graduate students would travel 74 miles per week for this single commute. Assuming these students would travel on other days no more than 10.4 miles per day, the same as the residential per capita VMT for Santa Cruz County, UC MBEST graduate students would achieve 19.6 VMT per capita. If remote/online students generate no project-related VMT per capita, the average VMT of UC MBEST and remote/online students would be 11 VMT per capita, which would exceed the average VMT per capita of the 2021 LRDP by 1 VMT per capita (see Table 3.16-6 of Section 3.16, "Transportation.")

Therefore, total VMT per capita (based on total VMT and the total service population) would likely exceed that estimated for the 2021 LRDP and would increase existing VMT per capita associated with UC Santa Cruz operations. Similarly, VMT per resident, which is based on the travel behavior of students and employees who live on- and off-campus, would exceed that estimated for the 2021 LRDP. With regard to VMT per employee, employment VMT per

capita is anticipated to be greater under this alternative compared to the 2021 LRDP due to the lack of campus housing for new employees compared to the 2021 LRDP (approximately 270 fewer residential units.) As a result, the significant impact related to VMT would be greater under this alternative. *(Greater Impact)*

Utilities and Service Systems

Under Alternative 4, development of the LRDP area with additional housing, academic/administrative space, and supporting uses would occur, placing greater demand on utilities and service system than under existing conditions. The overall demand for utilities at the main residential campus and the Westside Research Park would be incrementally less than the 2021 LRDP's demand due to the smaller amount of development and on-campus population under this alternative. As with the proposed 2021 LRDP, with the exception of water supply, the existing utilities and service systems in Santa Cruz would generally be sufficient to meet the additional demands associated with this alternative.

Although the demand for water under this alternative would be lower, the impact of this incremental water demand would still be significant as it would contribute to the need for the City to develop new water supplies. In addition, water supplies at UC MBEST are similarly constrained (MCWD n.d.), and additional water-supply-related impacts may occur at that location under this alternative. Therefore, impacts on utilities under this alternative would be considered greater than that under the 2021 LRDP. *(Greater Impact)*

Wildfire

Under this alternative, the area of development within the main residential campus would be less than the 2021 LRDP although it is likely that development would still occur in the same areas of the campus (i.e., primarily the central campus subarea) that would be developed under the 2021 LRDP. UC Santa Cruz would continue to manage wildfire risk and implement existing campus plans and mitigation related to campus evacuation and wildfire prevention, similar to the 2021 LRDP, throughout the LRDP area. With respect to UC MBEST, the North Central Campus is not located within a high or very high fire hazard zone. As a result, overall less new development would be located within or near areas of high or very high fire hazard under this alternative, however, due to considerations related to wildfire hazards and in light of the recent CZU Lightning Complex fire, mitigation would be required for future development within the LRDP area, consistent with the 2021 LRDP. Therefore, with mitigation, impacts would be less than significant. *(Similar Impact)*

6.6 COMPARISON OF ALTERNATIVES

6.6.1 Comparison of Ability to Meet Project Objectives

A textual description of how each alternative would achieve the project objectives is provided above as part of the discussion of each alternative. For ease of comparison, Table 6-1 summarizes the degree to which the project objectives are met by each 2021 LRDP alternative.

Table 6-1 Comparison of Ability to Meet Project Objectives

2021 LRDP Project Objectives	Alternative 1: No Project	Alternative 2: Reduced LRDP Enrollment	Alternative 3: Reduced Development Footprint	Alternative 4: Reduced Campus Growth and Use of UC MBEST Off-Site Alternative
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.	No	Partial	Partial	No
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.	Partial	Yes	Yes	No
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.	No	Yes	No	No
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.	Yes	Yes	Yes	Yes
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.	Partial	Yes	Yes	Yes
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.	No	Yes	Yes	No
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.	Yes	Yes	Yes	Yes
8. Develop an improved, more efficient roadway network to support transit with peripheral parking and mobility hubs.	No	Yes	Yes	Yes
9. Promote Transportation Demand Management (TDM) and provide infrastructure to optimize trip- and vehicle-miles-travelled-reduction benefits and efficiency of transit, bike, and pedestrian access to, from, and within the campus to reduce the use of single-occupancy vehicles.	No	Yes	Yes	No
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.	No	Yes	Yes	No
11. Respect and reinforce the Physical Planning Principles and Guidelines to maintain the unique character of the UC Santa Cruz campus.	No	Yes	Yes	No

6.6.2 Comparison of Environmental Impacts

Table 6-2 summarizes the environmental analyses provided above for the 2021 LRDP alternatives.

Table 6-2 Comparison of the Environmental Impacts of the Alternatives in Relation to the Proposed 2021 LRDP

Environmental Topic	2021 LRDP	Alternative 1: No Project	Alternative 2: Reduced LRDP Enrollment	Alternative 3: Reduced Development Footprint	Alternative 4: Reduced Campus Growth and Use of UC MBEST Off-Site Alternative
Aesthetics	LTS/M	<	=	=	>
Agriculture and Forestry Resources	LTS	<	=	<	<
Air Quality	S&U	<	<	<	< (Construction); > (Operation)
Archaeological, Historical, and Tribal Cultural Resources	S&U	<	=	< (Archaeological and Tribal); > (Historic)	= (Archaeological and Tribal); < (Historic)
Biological Resources	LTS/M	<	=	<	>
Energy	LTS	=	=	=	=
Geology and Soils	LTS/M	<	=	<	=
Greenhouse Gas Emissions and Climate Change	LTS/M	<	<	<	>
Hazards and Hazardous Materials	LTS/M	<	<	<	>
Hydrology and Water Quality	LTS/M	<	=	<	=
Land Use and Planning	LTS	<	=	=	=
Noise	S&U	<	=	=	<
Population and Housing	S&U	<	=	=	>
Public Services	LTS	<	=	=	=
Recreation	LTS	=	=	=	>
Transportation	LTS/M	<	=	=	>
Utilities and Service Systems	S&U	<	<	<	>
Wildfire	LTS/M	=	=	<	=

Impact Status:
LTS = less-than-significant impact.
LTS/M = LTS with mitigation.
S&U = significant and unavoidable.
= - Impacts would be similar to those of the project.
< - Impacts would be less than those of the project.
> - Impacts would be greater than those of the project.
Source: Data compiled by Ascent Environmental in 2020

6.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines Section 15126.6 states that an EIR should identify the "environmentally superior" alternative. "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." As shown in the Executive Summary Chapter of this EIR, there would be significant and unavoidable impacts associated with the proposed 2021 LRDP. These impacts are related to air quality, historic resources, noise, population and housing, and utilities. Each of the evaluated alternatives would result in lesser environmental impacts than the 2021 LRDP to some environmental resources and greater impacts to others with the exception of the No Project Alternative (Alternative 1) and the Reduced LRDP Enrollment Alternative (Alternative 2).

When considering objectives, the 2021 LRDP would best meet the purpose and need. In contrast, Alternative 1 would not provide additional housing (the two planned-but-not-operational projects identified above, Student Housing West and Kresge Housing are part of the 2005 LRDP) to accommodate any growth in student enrollment, and Alternatives 2 and 3 would fall short of meeting projected enrollment needs based on current UC forecasts through 2040 (i.e., up to 28,000 FTE students). While Alternative 4 would achieve a lesser level of development within the main residential campus than the 2021 LRDP, it would likely increase certain off-site impacts at UC MBEST and would not be consistent with the project objective related to compact and clustered development, as well as those objectives related to GHG and VMT efficiency. Alternative 1 (No Project), which would represent the least amount of overall development compared to existing conditions and thus, least potential physical environmental impacts, would be considered the environmentally superior alternative.

As required by State CEQA Guidelines (California Code of Regulations Section 15126.6 [e][2]), because the environmentally superior alternative was identified as the No Project Alternative, another environmentally superior alternative must be identified among the other alternatives considered. Alternative 2 would result in lesser impacts compared to the 2021 LRDP, especially with respect to the overall level of development, but it would not altogether avoid the significant and unavoidable impacts associated with historic resources, noise, population and housing, and water supply that were identified for the 2021 LRDP. Similarly, Alternative 3 would result in generally lesser environmental effect than the 2021 LRDP, however, Alternative 3 would have potentially greater historic resources impacts related to denser and potentially larger/higher structures within the central campus subarea. Thus, when the impact reductions afforded by Alternative 2 are compared to those provided by Alternative 3, Alternative 2 would result in greater impact reductions and is thus considered superior to Alternative 3.