6 Alternatives

6.1 Introduction

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this EIR section contains a comparative impact assessment of alternatives to the proposed 2021 LRDP. The primary purpose of an alternatives analysis under CEQA is to provide decision-makers and the public with a reasonable range of potentially feasible alternatives to a proposed project that could attain most of the basic project objectives, while avoiding or reducing any of the project's significant adverse environmental effects.

Specifically, CEQA requires an EIR to describe a reasonable range of alternatives to a project or to the location of a project that feasibly attains most of the project's basic objectives but avoids or substantially lessens any of the project's significant environmental impacts. CEQA also requires an EIR to evaluate the comparative merits of the alternatives. Section 15126.6(a), of the CEQA Guidelines requires 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 range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that 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 CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. CEQA Guidelines Section 15126.6(b) further states 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 CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6(d)). The CEQA Guidelines further require that the "no project" alternative be considered (CEQA Guidelines Section 15126.6(e)). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior

alternative, CEQA requires that the EIR "shall also identify an environmentally superior alternative among the other alternatives" (CEQA Guidelines Section 15126.6(e)(2)).

In defining "feasibility" (e.g., feasibly attain most of the basic objectives of the project), CEQA Guidelines Section 15126.6(f)(1) states, in part: 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. In determining what alternatives should be considered in the EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in CEQA Guidelines Section 15126.6(a).

Analysis of four alternatives to the proposed 2021 LRDP is provided to allow decision-makers to consider the proposed 2021 LRDP in light of hypothetical alternative development scenarios, thereby promoting CEQA's purpose as an information disclosure statute. This analysis is guided by the following overarching considerations set forth under CEQA Guidelines:

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

6.2 Summary of Significant and Unavoidable Impacts

As required under CEQA, the intent of this alternatives analysis is to consider options that could reduce the proposed 2021 LRDP's significant impacts. Please see the Executive Summary for a summary of the impact determination for all the environmental resource areas. As stated therein, implementation of the proposed 2021 LRDP was determined to result in the following significant and unavoidable impacts.

- **Aesthetics**
  - **Impact AES-1:** Development under the proposed 2021 LRDP could block or impede views of scenic vistas.
- **Agricultural Resources**
  - **Impact AG-1:** Implementation of the proposed 2021 LRDP would result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. The establishment of the Coachella Valley Agricultural Research Station (CVARS) as mitigation (from MM 4.1-1 in the 1990 LRDP EIR) for impacts to Farmland does not fully offset the net reduction in farmland in the region as no new farmlands were being created in the vicinity of the campus.

- **Air Quality**
  - **Impact AQ-2:** Construction under the proposed 2021 LRDP would generate ROG and NO_X in quantities that exceed SCAQMD significance thresholds. Operation would exceed SCAQMD thresholds for ROG, NOX, and PM_{10}.
- **Cultural Resources**
  - **Impact CUL-1:** The proposed 2021 LRDP would adversely affect historical resources through the full and partial demolition of historical resources, renovation/rehabilitation of historical resources, and new construction adjacent to historical resources.
- **Noise**
  - **Impact N-1:** Construction under the proposed 2021 LRDP would exceed applicable noise thresholds.
- **Transportation**
  - **Impact T-3:** Development under the proposed 2021 LRDP would be constructed in such a way that changes would remain consistent to surrounding geometric design features and any redesign or construction of on-campus circulation paths would be designed and constructed to meet the Campus Construction and Design Standards. However, the increase in campus population under Cumulative plus Project conditions would result in an impact related to AM Peak Hour queueing at the I-215/SR 60 Freeway Southbound Ramps at Martin Luther King Boulevard.

All other impacts addressed in the Draft EIR would either be less than significant or reduced to a less than significant level with mitigation, with the exception of land use and planning and mineral resources, which were found to have less than significant impacts or no impacts in the Initial Study (Appendix A).

6.3 Attainment of Project Objectives

In determining what alternatives should be considered in the EIR, the objectives of a project must be considered, as attainment of most of the basic objectives forms one of the tests of whether an alternative is feasible (see discussion above). UCR identified the following objectives, as previously described (see Section 2, *Project Description*):

1. Serve as good stewards of limited campus lands and natural resources as UCR continues to grow and accommodate enrollment projections of approximately 35,000 students.
2. Develop approximately 5.5 million gross square feet (gsf) of net new building space needed to accommodate student housing as well as academic and research facilities.
3. Maintain existing land-based research operations on West Campus, while supporting facility modernization, research support facilities growth, and strategic partnerships and initiatives.
4. Activate and enliven the East Campus through strategic mixed-use development, improved public spaces, expanded campus services, and additional on-campus housing to facilitate a living-learning campus environment.
5. Accommodate approximately 40 percent of eligible students with on-campus housing and replace aging low-density student housing units while considering demand, affordability, financial feasibility, and physical site constraints.

6. Locate future growth generally adjacent to and outside of the campus loop road, thereby maintaining the character of the Mid-Century Modern Core.
7. Incorporate efficient planning and design practices in support of minimizing the effects of climate change.

6.4 Alternatives Considered but Rejected

As described above, CEQA Guidelines Section 15126.6(c) provides that the range of potential alternatives for the project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR.

An EIR is also required to identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process, and briefly explain the reasons underlying the lead agency's determination. The following alternatives were considered by UCR but are not evaluated further in this EIR, for the reasons discussed:

- **Remote/Distance Learning:** Under this potential alternative, UCR 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. This alternative is not consistent with the university's current instruction model wherein remote learning is complementary to in-person learning. Further, this alternative would not fulfill most of the basic project objectives, including the objective of increasing on-campus housing opportunity for students, activating and enlivening East Campus through strategic mixed-use development to facilitate a living-learning campus environment, consolidating and densifying the center of campus, and incorporating efficient planning and design practices in support of minimizing the effects of climate change. 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.
- **Alternative Location:** Under this potential alternative, UCR would develop its Coachella Valley satellite campus located in Palm Desert, California to accommodate anticipated student population growth. This alternative would still allow for renovations and redevelopment of existing campus facilities but would eliminate the need to expand the Riverside campus. However, this alternative would require acquisition of adjacent properties to the Palm Desert campus. Additionally, this alternative would require substantial new development of primarily undeveloped properties in Palm Desert. It is reasonable to assume that this alternative would simply relocate the impacts of the proposed project to another location, result in its own significant impacts, particularly related to air quality, biological resources, cultural resources, public services, transportation, tribal cultural resources (TCR), and utilities and service systems. This alternative is not consistent with the university's current instruction model wherein remote learning is complementary to in-person learning. Further, this alternative would not fulfill most of the basic project objectives, including the objective of increasing on-campus housing opportunity for students on the UCR main campus, activating and enlivening East Campus through strategic mixed-use development to facilitate a living-learning campus environment, consolidating and densifying the center of campus, and incorporating efficient planning and

design practices in support of minimizing the effects of climate change. 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 Alternatives Selected for Analysis

CEQA Guidelines Section 15126.6, as amended, mandates that all EIRs include a comparative evaluation of the proposed plan with alternatives to the plan that can attain most of the plan's basic objectives but would avoid or substantially lessen any of the significant and unavoidable effects of the proposed 2021 LRDP. CEQA requires an evaluation of a "range of reasonable" alternatives, including the "no project" alternative. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed 2021 LRDP. The following provides descriptions of the four alternatives evaluated in this EIR.

- Alternative 1: No Project
- Alternative 2: Reduced Development Program
- Alternative 3: Increased Student Housing
- Alternative 4: No Agricultural Land Development

The environmental impacts of each alternative are analyzed in Sections 6.5.1 through 6.5.4 below. As explained above, the CEQA Guidelines allow for analysis of alternatives at a lesser level of detail. Consequently, the alternatives analyses below should be read in conjunction with the individual resource chapters in Sections 4, which provide a greater level of detail.

Alternative 1 - No Project. The CEQA-required No Project alternative would continue implementation of the 2005 LRDP per the CEQA Guidelines Section 15126.6(e)(3)(A). Planned development as expressed in the 2005 LRDP, primarily new academic/administrative space, would continue up to its planned capacity. This alternative would assume the same student enrollment growth (e.g., 10,000 new students) as projected in the proposed 2021 LRDP. Therefore, like with the proposed project, the 2035/2036 student body would still grow to approximately 35,000 students. This alternative would assume the same net new faculty and staff projections of approximately 2,800 new employees as projected in the proposed 2021 LRDP. Therefore, the 2035/2036 faculty and staff count would be approximately 7,545 employees. Under Alternative 1, the campus population in academic year 2035/2036 would be approximately 42,545. This alternative assumes a bed count of up to 12,500 beds.

Additionally, the assumed maximum development would remain at approximately 14.9 million gsf, as permitted under the 2005 LRDP. In academic year 2018/2019, UCR had approximately 6.8 million gsf of development. Therefore, Alternative 1 would allow for an increase of approximately 8 million gsf of additional academic buildings, student housing, and support space development by the year 2035/2036.

Alternative 2 - Reduced Development Program. The Reduced Development Program Alternative would reduce net new campus population and net new development by 50 percent. The net increase in development would be approximately 1.85 million asf (approximately 2.75 million gsf) of additional academic buildings and support facilities rather than 3.7 million asf and 5.5 million gsf, respectively. Therefore, under Alternative 2, there would be a maximum of approximately 6.65 million asf (approximately 9.75 million gsf) of total academic, research, student housing,

recreational facilities, and support space development by the year 2035/2036. It is reasonable to assume that less recreational facilities would be developed under this alternative since UCR would be limited in its development potential compared to the proposed 2021 LRDP.

Net new student enrollment for academic year 2035/2036 would be planned for 5,000 new students rather than 10,000. Therefore, the 2035/2036 student body would be approximately 30,000 students. Net new faculty and staff projections for academic year 2035/2036 would be planned for approximately 1,400 new employees rather than 2,800. Therefore, the 2035/2036 faculty and staff count would be approximately 6,200 employees. Under Alternative 2, the campus population in academic year 2035/2036 would be approximately 36,200 rather than 42,545. However, reducing the UCR student population under Alternative 2 would not reduce overall demand for higher education, and would simply relocate students to other campuses.

Alternative 3 - Increased Student Housing. This alternative would not alter the components of the proposed 2021 LRDP, but rather would increase the student bed capacity to provide housing for 60 percent of the eligible student body capacity rather than 40 percent under the proposed 2021 LRDP. This would result in a doubling of the proposed new campus beds, which would represent a net increase of approximately 14,978 new campus beds, rather than 7,489 under the proposed 2021 LRDP. Under Alternative 3, the total campus bed count in academic year 2035/2036 would be approximately 21,500 rather than 14,000 under the proposed 2021 LRDP.

Under Alternative 3, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf). It is reasonable to assume that more of the developable square footage would be used for student housing under this alternative rather than student support, academic, or recreation space. The net new student enrollment for academic year 2035/2036 would be planned for 10,000 new students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545 total employees). Under Alternative 3, the campus population in academic year 2035/2036 would be approximately 42,545.

Alternative 4 - No Agricultural Land Development. This alternative would maintain prime agricultural lands for land-based research. Under the proposed 2021 LRDP, there are nearly 394 acres of prime agricultural lands (i.e., State-designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) located on West Campus in areas designated as Agricultural/Campus Research or Land-based Research. There are approximately 12.2 acres of prime agricultural land on East Campus concentrated near the eastern campus boundary at the USDA Salinity Laboratory. Under Alternative 4, all prime agricultural lands on West Campus and East Campus would be designated for land-based research opportunities with no secondary uses allowed or remain as open space. More specifically, the 2021 LRDP designations for Agricultural/Campus Research, Student Neighborhood, and the agricultural portions of the “Campus Support” would be designated with “Land-based Research” designations.

Under Alternative 4, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf), and the net new student enrollment for academic year 2035/2036 would be planned for 10,000 new students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545 total employees). Under Alternative 3, the campus population in academic year 2035/2036 would be approximately 42,545.

6.5.1 Alternative 1: No Project Alternative

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" (CEQA Guidelines Section 15126.6(e)(2)). "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" (CEQA Guidelines Section 15126(e)(3)(B)).

The No Project alternative would continue implementation of the 2005 LRDP per CEQA Guidelines Section 15126.6(e)(3)(A). Planned development as expressed in the 2005 LRDP, primarily new academic/administrative space, would continue up to its planned capacity. This alternative would assume the same student enrollment growth (e.g., 10,000 new students) as projected in the proposed 2021 LRDP. Therefore, like with the proposed project, the 2035/2036 student body would still grow to approximately 35,000 students. This alternative would assume the same net new faculty and staff projections of approximately 2,800 new employees as projected in the proposed 2021 LRDP. Therefore, the 2035/2036 faculty and staff count would be approximately 7,545 employees. Under Alternative 1, the campus population in academic year 2035/2036 would be approximately 42,545.The total campus bed count would be 12,500.

Additionally, the assumed maximum development would remain at approximately 14.9 million gsf, as permitted under the 2005 LRDP. In academic year 2018/2019, UCR had approximately 6.8 million gsf of development. Therefore, Alternative 1 would allow for an increase of approximately 8 million gsf of additional academic buildings, student housing, and support space development by the year 2035/2036.

The following analysis summarize the impact findings of the 2005 LRDP EIR and provides a comparison of those impacts in relation to the proposed 2021 LRDP impacts.

Aesthetics

The 2005 LRDP EIR found that implementation of the 2005 LRDP would not have a substantial adverse effect on a scenic vista and would not substantially degrade the visual character or quality of the campus and immediate surrounding area, and while the implementation of the 2005 LRDP could create new sources of light or glare, adherence to relevant 2005 LRDP Planning Strategies and Campus Programs and Practices would ensure impacts related to aesthetics remain less than significant without the need for mitigation. These findings would remain as such under the No Project Alternative.

The 2005 LRDP has not reached its buildout potential and could still develop up to approximately 8 million gsf of new building space. The No Project Alternative could result in more new academic space, student housing and support space, and athletic and recreational facilities than that proposed under the 2021 LRDP, which could develop up to 5.5 million gsf. In addition, the 2005 LRDP would allow for new buildings to be spread out around East and West Campus thereby impacting KVP 1 and KVP 2 on West Campus to a greater extent than the proposed 2021 LRDP, whereas development under the 2021 LRDP would be more centralized and densified in East Campus, but also taller as a result. The proposed 2021 LRDP would impact KVP 9 by allowing development of multi-story academic buildings where the parking and athletic and soccer fields are along Canyon Crest Drive where the 2005 LRDP has this area designated as parking, athletics and recreation. Thus, the proposed 2021 LRDP would impact the scenic views of the distant Box Springs Mountains compared to that of the No Project Alternative. The proposed 2021 LRDP found impacts to scenic vistas, specifically the Box Springs Mountains, to be significant with no sufficient mitigation to reduce impacts to less than significant.

All campus projects under the No Project Alternative and the proposed 2021 LRDP would be subject to the design review and approval processes described under the Physical Design Framework to ensure that the visual character and quality of the campus would be maintained or improved.

All campus projects under the No Project Alternative would incorporate design features to reduce light and glare based on the Campus Design Guidelines, Physical Design Framework, 2005 LRDP Planning Strategies and Campus Programs and Practices, and/or mitigation measures under the 2005 LRDP EIR for the No Project Alternative and based on the Campus Construction and Design Standards, Physical Design Framework, and/or mitigation measures under the proposed 2021 LRDP. Additionally, under both the No Project Alternative and the proposed 2021 LRDP, lighting plans would be reviewed and approved by UCR staff to ensure no light spillover onto adjacent properties.

Although the No Project Alternative could result in more development, it would be done in line with the 2005 LRDP and 2005 LRDP EIR, which found all impacts related to aesthetics to be less than significant, less than significant with adherence to relevant 2005 LRDP Planning Strategies and Campus Programs and Practices, or incorporation of mitigation. As such, overall aesthetic impacts under the No Project Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Agricultural Resources

The 2005 LRDP EIR found that implementation of the 2005 LRDP would not conflict with existing zoning for agricultural land or a Williamson Act contract nor would development under the 2005 LRDP involve other changes that could convert Farmland to nonagricultural uses with adherence to relevant 2005 LRDP Planning Strategies. However, the 2005 LRDP EIR found that implementation of the 2005 LRDP would result in the conversion of approximately 125 acres of Prime Farmland to nonagricultural uses and the impact would be significant and unavoidable. These findings would remain as such under the No Project Alternative.

The proposed 2021 LRDP reinforces the commitment to the densification of the existing Academic Center and existing urban environment on East Campus, limiting sprawl into existing open space and agricultural and land-based research areas on West Campus. Agricultural and land-based research is expected to continue to be a major component of UCR's research portfolio over the lifetime of the proposed 2021 LRDP. The proposed 2021 LRDP would impact fewer acres of Farmland than previous UCR LRDPs. However, implementation of the proposed 2021 LRDP would still reduce land available for agricultural research on Farmland in comparison to existing conditions. Consistent with past LRDP EIRs, the establishment of the CVARS as mitigation for impacts to Farmland does not fully

offset the net reduction in farmland in the region as no new farmlands were being created in the vicinity of the campus.

Since analysis and approval of the 2005 LRDP, UCR has only converted approximately 43 acres[1] of Farmland in the West Campus (which is less than the 125 acres assumed to be converted). However, the 2005 LRDP has not reached its buildout potential and could still develop up to approximately 8 million gsf of new building space, including new academic space, student housing and support space, and athletic and recreational facilities, including allowing for more intense development than that proposed by the 2021 LRDP on the remaining 82 acres on West Campus. Overall impacts to agricultural resources under the No Project Alternative would be **greater than** the proposed 2021 LRDP, though in both cases impacts remain significant and unavoidable. *(Greater impact)*

Air Quality

The 2005 LRDP EIR found that implementation of the 2005 LRDP would not conflict with or obstruct implementation of the AQMP for SCAB and the adherence to relevant 2005 LRDP Planning Strategies and Campus Programs and Practices would ensure impacts be less than significant (Impact AQ-1). The 2005 LRDP EIR found that construction and operational activities, both project-specific and cumulatively, would result in the generation of criteria pollutants (namely ROG, NO_x, and PM_{10}) which could contribute to an air quality violation, and therefore, impacts would be significant and unavoidable, even with the implementation of mitigation measures (Impact AQ-2). Exposures of sensitive receptors to substantial pollutant concentrations, campus-generated toxic air emissions, or odors were found to be less than significant (Impact AQ-3). These findings would remain as such under the No Project Alternative.

The proposed 2021 LRDP would also not conflict with or obstruct implementation of the AQMP for SCAB since the 2021 LRDP would not generate population, housing, or employment growth exceeding forecasts in the 2016 AQMP nor would the proposed 2021 LRDP expose sensitive receptors to odors or substantial pollutant concentrations from CO hotspots or toxic air contaminants. Similar to the No Project Alternative, the proposed 2021 LRDP would generate ROG and NO_X (during construction) and ROG, NO_X, and PM_{10} (during operation) that exceed SCAQMD thresholds, the exceedance of thresholds (in effect today) under the proposed 2021 LRDP would be greater than the exceedance of thresholds (in effect in 2005) under the 2005 LRDP. Impacts would remain significant even after the implementation of feasible mitigation measures.

The 2005 LRDP would result in more development that the proposed 2021 LRDP and, therefore, would result in greater air quality impacts related to the generation of criteria pollutants (namely ROG, NO_x, and PM_{10}). In both cases impacts related to criteria pollutants would be significant and unavoidable. Overall, impacts related to air quality under the No Project Alternative would be **greater than** the proposed 2021 LRDP. *(Greater impact)*

Biological Resources

The 2005 LRDP EIR found that implementation of the 2005 LRDP could result in significant, adverse impacts to plant and wildlife species. Implementation of the 2005 LRDP could result in development within the designated critical habitat area of the California gnatcatcher or could result in the loss or modification of drainage channels that protect riparian habitat, which could result in substantial adverse effects to gnatcatchers and riparian habitats. In addition, there could be a substantial

[1] The approximate 43-acre total development and conversion of Farmland on West Campus since the 2005 LRDP efforts include the Solar Farm, the hammer throw area, and the CARB facility.

adverse effect on federally protected wetlands, and development could interfere with the movement of native resident or migratory wildlife species or corridors. However, implementation of the relevant 2005 LRDP Planning Strategies and Campus Programs and Practices, and mitigation measures, would reduce impacts to less than significant. Furthermore, the 2005 LRDP would be in conformance with local applicable policies protecting biological resources with the implementation of relevant 2005 LRDP Planning Strategies and no additional mitigation measures. Finally, implementation of the 2005 LRDP would not conflict with an adopted habitat conservation plan or natural community conservation plan. These findings would remain as such under the No Project Alternative.

Similar to the 2005 LRDP, the proposed 2021 LRDP would also result in the disturbance or loss of special status species, result in the degradation or loss of riparian habitats and other sensitive natural communities, and result in the degradation or loss of State or federally-protected wetlands. Adherence to 2021 LRDP objectives and policies and the implementation of mitigation measures would reduce impacts to less than significant. Under the proposed 2021 LRDP, development would not be located near MSHCP conservation areas with potential for wildlife movement or native nursery sites, and impacts would be less than significant with no additional mitigation measures. The proposed 2021 LRDP would also result in less that significant impacts to local polices and ordinances protecting biological resources and would not conflict with an adopted habitat conservation plan, in line with the 2005 LRDP EIR findings.

Impact under the No Project Alternative would be slightly greater than those for the proposed 2021 LRDP since the proposed 2021 LRDP would consolidate new development at the campus core and would increase open space areas in relation to the 2005 LRDP. In addition, there are currently no planned or foreseeable development within the Open Space Reserve areas. Thus, impacts under the No Project Alternative would be increased as compared to the proposed 2021 LRDP, even with continued adherence to relevant 2005 LRDP Planning Strategies and implementation of mitigation measures. Overall impacts to biological resources under the No Project Alternative would be **slightly greater than** the proposed 2021 LRDP. (*Slightly greater impact)*

Cultural Resources

The 2005 LRDP EIR found that implementation of the 2005 LRDP could result in the modification of structures that have been designated as eligible or potentially eligible to the NRHP or CRHR which would require mitigation measures to reduce impacts to less than significant. Furthermore, the 2005 LRDP could result in the demolition of historic or potentially historic structures, which would be significant, even with the implementation of feasible mitigation measures. Impacts to known or unknown archeological resources and human remains would be less than significant with implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices; no additional mitigation measures were necessary. These findings would remain as such under the No Project Alternative.

Similar to the 2005 LRDP, the proposed 2021 LRDP would also adversely affect historical resources through full or partial demolition, renovation or rehabilitation of eligible structures, and new construction adjacent to recognized resources. Impacts would be significant, even with the implementation of mitigation measures. Impacts to known or unknown archeological resources and cultural resources of potential Native American origin would be less than significant with implementation of mitigation measures, as appropriate. Impacts to human remains would be less than significant with adherence to existing regulations. Overall impacts to cultural resources under the No Project Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Energy

The 2005 LRDP EIR found that construction activities related to the 2005 LRDP would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including gasoline, fuel oil, and natural gas for automobiles and construction equipment). With respect to operational activities on campus, compliance with existing campus planning regulations would ensure that all natural resources are conserved to the maximum extent possible. Overall, the consumption of natural resources would increase at a lesser rate than the projected population increase due to the variety of energy conservation measures that the campus has and will continue to provide.

With the potential for greater square footage of development under the No Project Alternative compared to the proposed 2021 LRDP, construction-related non-renewable energy (i.e., fuel) consumption would increase compared to under the proposed 2021 LRDP. Furthermore, the 2005 LRDP assumes a total of 12,500 beds whereas the 2021 LRDP would assume a total of 14,000 beds. With an increase in students but not a planned corresponding or accommodating increase in on-campus housing, the No Project Alternative would result in more students needing to commute to campus compared to the proposed 2021 LRDP. As such the No Project Alternative would result in increased VMT and associated transportation-related non-renewable energy (i.e., fuel) consumption compared to the proposed 2021 LRDP. Furthermore, the 2005 LRDP does not include energy conservation mitigation measures, and development under the No Project Alternative would only rely on State legislation and the *UC Policy for Sustainable Practices* in future reduction of energy consumption, whereas the proposed 2021 LRDP includes mitigation to ensure that energy consumption is not wasteful. Therefore, construction and operational energy impacts associated with the No Project Alternative would be greater than under the proposed 2021 LRDP.

As described in Section 4.6, *Energy*, while planned new and renovated facilities would be designed with the goal of improved energy efficiency, the proposed 2021 LRDP would result in an increase in operational energy, including non-renewable energy, consumption due to provision of additional land uses, additional VMT, and accommodation of additional student enrollment and, thus, result in a less than significant with mitigation impact. While operation of the proposed 2021 LRDP would consume energy, the No Project Alternative would not eliminate or reduce energy consumption related to VMT. Because facilities already approved under the 2005 LRDP and not yet constructed would be developed under the No Project Alternative, which is a greater net increase than development under the proposed 2021 LRDP, and because facilities operation constitutes the largest consumption of energy on the UCR campus, the No Project Alternative would result in comparatively increased overall operational energy, including non-renewable energy, consumption compared to the proposed 2021 LRDP. Because the No Project Alternative would generate more overall energy consumption, energy impacts would be **greater than** under the proposed 2021 LRDP. *(Greater impact)*

Geology and Soils

The 2005 LRDP EIR found that implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices would ensure impacts related to geology and soils remain less than significant and no additional mitigation measures were required. The 2005 LRDP EIR also found that impacts to paleontological resources would be less than significant with the adherence to relevant 2005 LRDP Planning Strategies and Campus Programs and Practices, including a policy related to what steps are to be taken if a paleontological resource is uncovered during construction activities. These findings would remain as such under the No Project Alternative.

Similar to the 2005 LRDP, the proposed 2021 LRDP would be required to comply with CBC building requirements, as well as the UC Seismic Safety Policy and UC Facilities Manual Seismic Program Guidelines, which would reduce impacts related to geology and soils to less than significant levels. Section 4.7, *Geology and Soils*, also found impacts to paleontological resources to be less than significant with the implementation of mitigation measures related to paleontological resources monitoring and steps to be taken if a paleontological resource is uncovered during construction activities. Overall impacts related to geology and soils under the No Project Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Greenhouse Gas Emissions

With a greater net increase in the square footage of development under the No Project Alternative compared to the proposed 2021 LRDP, construction-related emissions would increase compared to those of the proposed 2021 LRDP. With the potential for greater square footage of development under the No Project Alternative compared to the proposed 2021 LRDP, construction-related emissions would increase compared to under the proposed 2021 LRDP. Furthermore, the 2005 LRDP assumes a total of 12,500 beds whereas the 2021 LRDP would assume a total of 14,000 beds. With an increase in students but not a planned corresponding or accommodating increase in on-campus housing, the No Project Alternative would result in more students needing to commute to campus compared to the proposed 2021 LRDP. As such, the No Project Alternative would result in increased VMT and associated transportation-related emissions compared to the proposed 2021 LRDP. Furthermore, the 2005 LRDP does not include GHG emissions reduction mitigation measures, and development under the No Project Alternative would only rely on State legislation and the *UC Policy for Sustainable Practices* in future reduction of emissions, whereas the proposed 2021 LRDP includes mitigation to ensure GHG emissions impacts are less than significant. Therefore, construction and operational GHG emissions impacts associated with the No Project Alternative would be **greater than** under the proposed 2021 LRDP. *(Greater impact)*

Hazards and Hazardous Materials

The 2005 LRDP EIR found that implementation of relevant LRDP Campus Programs and Practices and mitigation measures would reduce impacts of exposure of workers or campus occupants to contaminated soil or groundwater to less than significant levels. Implementation of relevant 2005 LRDP Campus Programs and Practices would ensure impacts remain less than significant, and no additional mitigation measures were required, for impacts related to exposure of campus occupants or the nearby public to routine transport, use, disposal or storage of hazards and hazardous materials; the exposure of construction workers and campus occupants to significant health or safety risks through the renovation or demolition of buildings, or relocation of underground utilities, that contain hazardous materials; exposure of people to potential health risks in the event of an accident or accidental release of hazardous materials; and handling of hazardous materials within one-quarter mile of a school. Although there is an approximately 3.25-acre site on the UCR campus at 1060 Martin Luther King Boulevard listed as a DTSC Certified Operations and Maintenance Land Use Restrictions site as of December 15, 2010, cleanup activities were conducted and 18 years of groundwater monitoring were performed where DTSC concluded that the monitoring can be terminated and that the soils is safe for current and future use and is not adversely affecting groundwater quality. A Covenant to Restrict Use of Property between The Regents and DTSC was recorded with Riverside County in May 2006 which prohibits the site from being used for residential, hospital for humans, indoor classroom for persons under 18 years of age, or as a daycare center for children. The covenant will remain in place unless additional evaluations are conducted to make

sure the site is suitable for such uses. Any projects under the No Project Alternative and the proposed 2021 LRDP would be required to comply with the covenant. Thus, impacts would be less than significant, and no additional mitigations would be required.

Similar to the 2005 LRDP, the proposed 2021 LRDP would be required to comply with federal and State regulations, as well as existing UCR policies, related to the routine transport, use, or disposal of hazardous materials and impacts would therefore be less than significant without mitigation requirements. Mandatory compliance with existing regulations pertaining to the identification, handling, and disposing of hazardous materials, along with the implementation of mitigation measures would ensure impacts from the accidental release of hazardous materials on or nearby campus, including within one-quarter mile of a school, would be less than significant.

Section 4.9.3, Impact HAZ-4, of this EIR found that the UCR campus includes several closed, but listed UST release sites, and is located adjacent to a site with a restricted land use covenant. As a result, soil, soil vapor, and/or groundwater disturbance during construction could create a significant hazard to the public or the environment. Given the opportunity for contaminated soils to occur on the project site, project construction would potentially create a significant hazard to the public or the environment. Mitigation measures would be required to reduce the impact to less than significant.

It is important to note that the identified listed UST release sites and the site with a restricted land use covenant, exist under current conditions, despite the 2005 LRDP EIR not identifying these sites as potential impacts under the 2005 LRDP. The potential impact from unknowingly disturbing these sites with continued implementation of the 2005 LRDP could be significant. Therefore, overall, impacts related to hazards and hazardous materials under the No Project Alternative would be **greater than** the proposed 2021 LRDP. *(Greater impact)*

Hydrology and Water Quality

The 2005 LRDP would result in a greater amount of development, including grading and excavation work, and would result in an increase in the amount of impermeable surfaces in comparison to the 2021 LRDP. The 2005 LRDP EIR found that implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices would ensure impacts related to hydrology and water quality remain less than significant and no additional mitigation measures were required. Further, the 2005 LRDP EIR found that impacts related to the construction of new or expanded stormwater drainage systems would be less than significant and that the 2005 LRDP would not otherwise substantially degrade water quality. With implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices and mitigation measures, the 2005 LRDP would not place structures within a 100-year flood hazard area and development would not impede or redirect flood flows. These findings would remain as such under the No Project Alternative.

The CEQA Guidelines Hydrology and Water Quality significance criteria have been updated since the 2005 LRDP EIR. Flood hazard areas are no longer analyzed, and the criteria require analysis of impacts to surface and groundwater quality as well as the impediment of sustainable groundwater management plans. Surface runoff and stormwater drainage systems are still assessed, as is the potential risk of pollutant release in flood hazard, tsunami, or seiche zones.

In line with the No Project Alternative, construction and operation of the proposed 2021 LRDP would occur in compliance with applicable water quality standards and waste discharge requirements. In accordance with regulations and policies, a SWPPP would be implemented during construction activities and a SWMP would be implemented during operations, to provide on-site

construction and post-construction prevention, capture, and treatment of stormwater runoff, such that potential water quality impacts would be less than significant. Potential impacts to groundwater supplies and recharge would be less than significant. Construction and operation of the proposed 2021 LRDP would not alter the course of a stream or river and would not alter regional stormwater drainage patterns. Compliance with applicable regulations and policies, including implementation of a SWPPP during construction and a SWMP during operation, would provide sufficient on-site construction and post-construction prevention, capture, and treatment of stormwater runoff, and would minimize or avoid potentially adverse impacts such that they would be less than significant. The proposed 2021 LRDP would implement water quality BMPs in accordance with applicable requirements, reducing potential downstream water quality impacts to ensure that the proposed 2021 LRDP would not conflict with or obstruct implementation of the Water Quality Control Plan or a sustainable groundwater management plan. This impact would be less than significant.

Overall impacts related to hydrology and water quality under the No Project Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Noise

The 2005 LRDP EIR found that implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices would ensure impacts related to exposure of new student residential uses to noise levels in excess of the State's 45 dBA CNEL interior noise standard remain less than significant and no additional mitigation measures were required. Construction-related vibration impacts would be reduced to less than significant levels with the implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices and mitigation related to the notification of area occupants and researchers. Construction and operation vibration impacts, for on- and off-campus receivers, would be less than significant. The 2005 LRDP EIR also found that traffic volumes would not increase to the extent that there would be a substantial, permanent increase in on- or off-campus roadway noise. Implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices would also ensure impacts from new stationary source noise would be less than significant with no additional mitigation measures. Noise from special events was also found to be less than significant. Construction noise would result in substantial temporary or periodic increases in ambient noise levels on- and off-campus and it was determined even with the implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices, impacts would remain significant and unavoidable as no feasible mitigation measures were identified. These findings would remain as such under the No Project Alternative.

Similar to the 2005 LRDP, construction equipment used during construction and mechanical equipment used during operation of the proposed 2021 LRDP would result in noise level increases that would exceed applicable noise thresholds, resulting in a significant impact. Mitigation measures would reduce construction noise levels to the extent feasible but impacts to sensitive receiver on- and off-campus would remain significant. Comparable to the implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices under the 2005 LRDP, mitigation measures for the 2021 LRDP would reduce operational noise levels to less than significant. Vibration from the proposed 2021 LRDP construction may also exceed applicable standards, but implementation of mitigation measures during construction would reduce impacts to less than significant.

Overall impacts related to Noise under the No Project Alternative would be **slightly greater than** the proposed 2021 LRDP. *(Slightly greater impact)*

Population and Housing

The 2005 LRDP EIR found that implementation of relevant 2005 LRDP Planning Strategies would ensure impacts related to population and housing would remain less than significant and no additional mitigation measures were required. While the 2005 LRDP would directly induce substantial population growth, it would not result in population or housing effects that would lead to a significant impact on the environment. Further, the increased demand for housing would be reduced to less than significant by increasing student housing options on-campus. The 2005 LRDP would not displace existing residents, nor would it necessitate the construction of replacement housing elsewhere. These findings would remain as such under the No Project Alternative.

The 2005 LRDP has not reached its buildout potential and planned development as expressed in the 2005 LRDP, primarily new academic/administrative space, would continue up to its planned capacity. However, this alternative would assume the same student enrollment growth as projected in the proposed 2021 LRDP and the relevant 2005 LRDP Planning Strategies would continue to apply and be implemented as they relate to student housing, which may result in the No Project Alternative developing additional student housing and support space in place of academic/administrative space, though it would not be guaranteed. The 2005 LRDP assumes a total of 12,500 beds whereas the 2021 LRDP would assume a total of 14,000 beds. With an increase in students but not a planned corresponding or accommodating increase in on-campus housing, the No Project Alternative would result in more students needing housing accommodations off-campus. As such, the No Project Alternative would result in greater impacts related to population growth than the proposed 2021 LRDP.

The proposed 2021 LRDP would accommodate the anticipated regional population forecasts. Furthermore, the proposed 2021 LRDP does not include installation or extension of significant roads or infrastructure that would result in further population growth or housing needs. Direct and indirect impacts related to unplanned population growth would be less than significant. The proposed 2021 LRDP would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing and impacts would be less than significant.

Neither the No Project Alternative nor the proposed 2021 LRDP would result in population or housing effects that would lead to a significant impact on the environment. The increased demand for housing would be reduced by increasing student housing options on-campus under both scenarios, but the No Project Alternative would provide 1,500 fewer beds than the proposed 2021 LRDP. Overall impacts related to Population and Housing under the No Project Alternative would be **greater than** the proposed 2021 LRDP. *(Greater impact)*

Public Services

The 2005 LRDP EIR found that implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices would ensure impacts related to public services, specifically fire, police, schools, and libraries, would remain less than significant and no additional mitigation measures were required. No new or altered fire or police protection facilities would be required to maintain acceptable response times, fire flows, or applicable service levels. The increase in the number of school-age children would not result in the need for new or altered school facilities. The increase in campus population would not result in the need for new or altered library facilities. These findings would remain as such under the No Project Alternative.

Similar to the 2005 LRDP, the proposed 2021 LRDP would not result in significant environmental impacts associated with the need for new or altered fire, police, school, or library facilities. The No

Project Alternative would assume the same campus population growth as projected in the proposed 2021 LRDP but under the No Project Alternative, an additional 2.2 million gsf of buildout development would occur compared to the proposed 2021 LRDP. Therefore, it is reasonable to assume that the impacts from the No Project Alternative would be **greater than** the proposed 2021 LRDP, although under both projects, impacts to Public Services would remain less than significant. *(Greater impact)*

Recreation

The 2005 LRDP EIR found that implementation of relevant 2005 LRDP Planning Strategies would ensure impacts related to the additional demand for recreational space and the conversion of recreational space to nonrecreational uses would remain less than significant and no additional mitigation measures were required. In addition, construction of new recreational facilities under the 2005 LRDP would result in less than significant impacts. The 2005 LRDP would provide for neighborhood parks and tot lots in family housing areas, thereby reducing the need for the campus population to utilize area parks. These findings would remain as such under the No Project Alternative.

Similar to the 2005 LRDP, the proposed 2021 LRDP would include most existing recreational facilities and parkland on the UCR campus and incrementally develop new recreational facilities and open spaces that would adequately serve the campus population. The proposed 2021 LRDP would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of those facilities would occur or be accelerated. Impacts related to increased use of parks and recreational facilities would be less than significant. The proposed 2021 LRDP would incrementally develop new on-campus recreational facilities and open spaces, the construction of which may have an adverse physical effect on the environment. The impact from construction and operation of these new recreational facilities have been analyzed as part of the proposed 2021 LRDP buildout through the Draft EIR, and there would be no additional impacts.

Overall impacts related to Recreation under the No Project Alternative would be **similar to** the proposed 2021 LRDP. *(Similar Impact)*

Transportation

The 2005 LRDP EIR found that implementation of the 2005 LRDP would result in additional construction and operational vehicular trips, which would increase traffic volumes and degrade intersection levels of service, as well impact conditions along roadway segments. Even with implementation of the relevant 2005 LRDP Planning Strategies and Campus Programs and Practices, and mitigation measures, impacts were determined to be significant and unavoidable. However, vehicular congestion is statutorily no longer considered a significant environmental impact under Senate Bill 743.

Furthermore, it was found that implementation of the 2005 LRDP would not result in hazards due to design features or land use incompatibilities. While construction may result in short-term vehicular hazards due to closure of traffic lanes or roadway segments, it would not substantially increase pedestrian hazards due to closure of sidewalks or paths. Implementation of the 2005 LRDP would not impair emergency access nor result in inadequate parking capacity. Implementation of the 2005 LRDP would not conflict with applicable policies, plans or programs supporting alternative transportation. With implementation of the relevant 2005 LRDP Planning Strategies and Campus

Programs and Practices, and mitigation measures, these impacts would be less than significant. These findings would remain as such under the No Project Alternative.

The CEQA Guidelines Transportation significance criteria have been updated since the 2005 LRDP EIR. Level of service impacts are no longer analyzed; rather, the criteria require analysis of impacts to vehicle miles traveled. Impacts to circulation system programs, plans, ordinances, and policies are still reviewed, as are potential hazardous design features and inadequate emergency access.

Implementation of the proposed 2021 LRDP would increase bicycle and pedestrian travel, but it would not physically disrupt an existing pedestrian or bicycle facility or interfere with implementation of a planned pedestrian or bicycle facility. Implementation of the proposed 2021 LRDP would not conflict with any existing programs, plans, ordinances, or policies that address the circulation systems. Furthermore, the proposed 2021 LRDP would result in additional vehicular travel associated with increased population on the campus, but VMT would continue to be below regional thresholds, even under cumulative conditions. Development under the proposed 2021 LRDP would not include major changes to existing access points or on-campus circulation paths that would result in inadequate emergency access. All projects under the proposed 2021 LRDP would adhere to the Campus Construction and Design Standards. They would undergo review and approval by the State Fire Marshal prior to implementation and use. Impacts related to these criteria would be less than significant and no mitigation measures are required.

Development under the proposed 2021 LRDP would be constructed in such a way that changes would remain consistent to surrounding geometric design features and any redesign or construction of on-campus circulation paths would be designed and constructed to meet the Campus Construction and Design Standards. However, the increase in campus population under Cumulative Plus Project conditions would result in an impact related to AM Peak Hour queueing at the I-215/SR 60 Freeway Southbound Ramps at Martin Luther King Boulevard. Even though a mitigation measure has been proposed to reduce impacts, implementation of the mitigation measure is uncertain at this time due to UCR having no jurisdictional control (under jurisdiction of Caltrans) over the identified intersection, impacts would be significant and unavoidable.

The No Project Alternative would result in the same projected campus population as under the proposed 2021 LRDP. However, the 2005 LRDP assumes a total of 12,500 beds for on-campus student housing whereas the 2021 LRDP would assume a total of 14,000 beds. With an increase in students but not a planned corresponding or accommodating increase in on-campus housing, the No Project Alternative would result in more students needing to commute to campus compared to the proposed 2021 LRDP. As such, the No Project Alternative would result in increased VMT compared to the proposed 2021 LRDP and, impacts related to VMT would be greater under this alternative. In addition, while the impacts related to the AM Peak Hour queueing at the I-215/SR 60 Freeway Southbound Ramps at Martin Luther King Boulevard were not analyzed under the 2005 LRDP EIR, the impact could still result from continued development under the No Project Alternative and impacts would be significant.

Therefore, impacts related to Transportation under the No Project Alternative would be **greater than** the proposed 2021 LRDP. *(Greater Impact)*

Tribal Cultural Resources

The 2005 LRDP EIR found that implementation of the 2005 LRDP could result in impacts to known or unknown archeological resources and human remains. Implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices would reduce impacts to less than

significant and no additional mitigation measures were necessary. These findings would remain as such under the No Project Alternative. However, the 2005 LRDP EIR was silent to the potential impacts to TCR since AB 52 had not yet been adopted.

Nonetheless, development under the 2005 LRDP and the proposed 2021 LRDP has the potential to impact cultural resources of potential Native American origin. Development under the 2021 LRDP would primarily be infill development or expansion of already developed areas on the north portions of East Campus. A new interpretive center is programmatically assumed in the UCR Botanic Gardens designation on East Campus, but no foreseeable facilities development is anticipated in the Open Space Reserve in East Campus (southeastern portion of campus). If development occurs in the southeastern quadrant of campus and in areas containing Val Verde Pluton geologic features considered highly sensitive to prehistoric archaeological resources, mitigation would be required for a qualified archaeologist and a Native American monitor to reduce impacts to potential archaeological and/or TCR to less than significant levels.

Given that the 2005 LRDP would result in a greater amount of development, including grading and excavation work, impacts to TCR under the No Project Alternative would be **slightly greater than** the proposed 2021 LRDP. *(Slightly greater impact)*

Utilities and Service Systems

Development under the 2005 LRDP would not require the construction of new or expanded water treatment facilities; would generate an additional demand for water, but would not require new or expanded water supply entitlements or result in the need for new or expanded entitlements; would not exceed wastewater treatment requirements of the SARWQCB; would not increase wastewater generation such that treatment facilities would be inadequate to serve the project and the provider's existing commitments; could increase the demand for electricity and natural gas, but would not require or result in the construction of new energy or gas production or transmission facilities, the construction of which would cause a significant environmental impact; and would generate solid waste, but not enough to require the expansion of the permitted capacity of a regional landfill; comply with all applicable federal, State, and local statues and regulations related to solid waste. With implementation of the relevant 2005 LRDP Planning Strategies and Campus Programs and Practices, these impacts would be less than significant. Development under the 2005 LRDP could require the construction of new or expanded wastewater conveyance and treatment systems. With implementation of the relevant 2005 LRDP Planning Strategies and mitigation measures, this impact would be less than significant. These findings would remain as such under the No Project Alternative.

Similar to the 2005 LRDP, the proposed 2021 LRDP may require the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, or telecommunications facilities localized on the UCR campus, but such relocation and construction would not result in significant environmental effects. The proposed 2021 LRDP would result in a net increase in water demand on the UCR campus and this increase is accounted for in the RPU's 2015 UWMP. There is sufficient water supply available under all drought scenarios. Wastewater generated by development under the proposed 2021 LRDP would be treated at the Riverside Water Quality Control Plant. The plant would have adequate capacity to serve the proposed 2021 LRDP's anticipated wastewater generation in addition to its existing wastewater treatment commitments. The proposed 2021 LRDP would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. The proposed 2021 LRDP would not impair the attainment of solid waste reduction goals and would comply with federal, State, and applicable local

statutes and regulations related to solid waste. Under the proposed 2021 LRDP, all impacts related to Utilities and Service Systems would be less than significant and no mitigation measures are required.

The 2005 LRDP has not reached its buildout potential and could still develop up to approximately 8 million gsf of new building space. The No Project Alternative could result in more new academic space, student housing and support space, and athletic and recreational facilities than that proposed under the 2021 LRDP, which could develop up to 5.5 million gsf. While impacts to Utilities and Service Systems under the 2005 LRDP would be greater than the proposed 2021 LRDP, impacts would still be less than significant with the implementation of relevant 2005 LRDP Planning Strategies and Campus Programs and Practices, and mitigation measures as appropriate. Impacts related to Utilities and Service Systems under the No Project Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Wildfire

Development of facilities in the southeastern portion of the campus (adjacent to the southeastern hills), under the 2005 LRDP, could expose people or structures to a risk of loss, injury, or death involving wildland fires. Implementation of relevant 2005 LRDP Planning Strategies and mitigation measures would reduce this impact to less than significant. Further, the 2005 LRDP could impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan. Implementation of relevant 2005 LRDP Planning Strategies and mitigation measures would reduce this impact to less than significant. These findings would remain as such under the No Project Alternative.

Development under the 2021 LRDP would primarily be infill development or expansion of already developed areas on the north portions of East Campus. A new interpretive center is programmatically assumed in the UCR Botanic Gardens designation on East Campus, but no foreseeable facilities development is anticipated in the Open Space Reserve in East Campus (southeastern portion of campus).

Similar to the 2005 LRDP, implementation of the proposed 2021 LRDP could result in temporary lane or roadway closures on the edges of campus and within the campus circulation system during construction activities. With inclusion of a construction management plan as a standard condition of approval, construction impacts related to transportation concerns would be less than significant. In support of these standard practices, UCR has proposed Continuing Best Practices as conditions of individual project approval that would ensure, to the extent feasible, that at least one unobstructed lane in both directions on campus roadways are maintained specifically in the event of a wildfire emergency and that the Campus Fire Marshal discloses roadway closures to the City of Riverside Fire Department and identify alternative travel routes, if necessary. As such, evacuation routes, if present within the specific roadway segment that would require temporary closure as noted above, would be similarly rerouted.

Operation of new facilities would not substantially impair an adopted emergency response or evacuation plan. Implementation of the proposed 2021 LRDP would increase the density of development on campus, with new buildings and infrastructure constructed according to the latest fire code and safety standards. New construction would be in areas within 2 miles of Very High FHSZs. People living, working, and attending class in these areas could be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. New or updated infrastructure would be concentrated in previously developed portions of campus, and any new

utilities would be installed in compliance with existing regulations and would not contribute to increased fire risk.

Impacts related to Wildfire under the No Project Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Summary of Alternative 1 (No Project)

This alternative would result in similar impacts to aesthetics, cultural resources, geology and soils, hydrology and water quality, recreation, utilities and service systems, and wildfire compared to the proposed 2021 LRDP. However, this alternative would result in slightly greater/greater impacts to multiple environmental areas of concern, including agricultural resources, air quality, biological resources, energy consumption, GHG emissions, hazards and hazardous materials, noise, population and housing, public services, transportation, and TCR compared to the proposed 2021 LRDP.

This alternative would not consolidate or densify new development generally adjacent to and outside of the campus loop road, nor would it definitively incorporate efficient planning and design practices in support of minimizing the effects of climate change.

6.5.2 Alternative 2: Reduced Development Program

The Reduced Development Program Alternative would reduce net new campus population and net new development by 50 percent. The net increase in development would be approximately 1.85 million asf (approximately 2.75 million gsf) of additional academic buildings and support facilities rather than 3.7 million asf and 5.5 million gsf, respectively. Therefore, under Alternative 2, there would be a maximum of approximately 6.65 million asf (approximately 9.75 million gsf) of total academic, research, student housing, recreational facilities, and support space development by the year 2035/2036.

Net new student enrollment for academic year 2035/2036 would be planned for 5,000 new students rather than 10,000. Therefore, the 2035/2036 student body would be approximately 30,000 students. Net new faculty and staff projections for academic year 2035/2036 would be planned for approximately 1,400 new employees rather than 2,800. Therefore, the 2035/2036 faculty and staff count would be approximately 6,200 employees. Under Alternative 2, the campus population in academic year 2035/2036 would be approximately 36,200 rather than 42,545. However, reducing the UCR student population under Alternative 2 would not reduce overall demand for higher education, and would simply relocate students to other campuses.

Aesthetics

The Reduced Development Program Alternative would reduce net new campus population and net new development by 50 percent compared to the proposed 2021 LRDP. As discussed in Section 4.1, *Aesthetics*, the proposed 2021 LRDP would have a significant and unavoidable impact to scenic vistas, specifically related to the Box Springs Mountains. All other impacts related to aesthetics would be less than significant or less than significant with mitigation incorporated. Implementation of the Reduced Development Program Alternative would result in half as much net new building square footage. However, since the potential locations, height, and massing of new buildings under the Reduced Development Program Alternative would be **similar to** those permitted under the proposed 2021 LRDP, impacts to scenic vistas would remain significant and avoidable. *(Similar impact)*

Agricultural Resources

The Reduced Development Program Alternative would reduce net new development by 50 percent compared to the proposed 2021 LRDP. As discussed in Section 4.2, *Agricultural Resources*, the proposed 2021 LRDP would have a significant and unavoidable impact to Prime Farmland. Conceivably, implementation of the Reduced Development Program Alternative could result in a reduced impact to agricultural resources as development in West Campus and parts of East Campus may not be developed as much as under the proposed 2021 RLDP. However, this is not guaranteed and, consistent with past LRDP EIRs, the establishment of the CVARS as mitigation for impacts to Farmland does not fully offset the net reduction in farmland in the region as no new farmlands were being created in the vicinity of the campus. Therefore, impacts to agricultural resources under the Reduced Development Program Alternative would be **similar to** those under the proposed 2021 LRDP, and impacts to agricultural resources would remain significant and avoidable. *(Similar impact)*

Air Quality

The reduction of net new campus population and building square footage under the Reduced Development Program Alternative would result in fewer emissions of the criteria pollutants associated with short-term construction and long-term operation compared to the proposed 2021 LRDP, but impacts would still be significant and unavoidable. Because this alternative would result in less campus population growth as compared to the proposed 2021 LRDP, overall traffic and localized VMT would be reduced and would be less than significant. However, as noted above, reduced UCR student population would simply relocate the demand for higher education to alternative campuses thereby relocating construction and operational emissions to another location. Therefore, impacts related to air quality under the Reduced Development Program Alternative would be **similar to** those under the proposed 2021 LRDP, although impacts related to criteria pollutants would remain significant and avoidable. *(Similar impact)*

Biological Resources

Impact under the Reduced Development Program Alternative would be less than those for the proposed 2021 LRDP since this alternative would reduce net new building space by 50 percent. Under this alternative, UCR could have more flexibility in where new buildings would be located, thus potentially allowing for avoidance of biological resources to a greater extent than under the proposed 2021 LRDP. In addition, there are currently no planned or foreseeable development within the Open Space Reserve areas and that would still be the case under the Reduced Development Program Alternative. Thus, overall impacts to biological resources under the Reduced Development Program Alternative would be **slightly less than** the proposed 2021 LRDP. *(Slightly less impact)*

Cultural Resources

As discussed in Section 4.5, *Cultural Resources*, there are 38 qualifying historical resources on UCR's campus. Among these 38 resources is one eligible historic district (the Mid-Century Modern Core Historic District, with 15 contributing buildings and associated site plan features, circulation corridors, and landscapes), and one cultural landscape (the Citrus Variety Collection Cultural Landscape, with 11 contributing buildings and ancillary structures and associated agricultural fields). Appendix E includes the complete evaluations of each eligible historical resource. Impacts to historic resources would be comparable under the Reduced Development Program Alternative, as the reduction in square footage would not reduce the potential for alterations to historic buildings

compared to the proposed 2021 LRDP, and impacts would therefore remain significant and unavoidable.

With respect to archaeological resources, the reduced intensity and scale of development anticipated under the Reduced Development Program Alternative would reduce the degree of ground disturbance, but the potential to encounter previously unknown resources would still exist. Impacts would be less than significant with mitigation, which would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Energy

With the reduction in the square footage of development under the Reduced Development Program Alternative compared to the proposed 2021 LRDP, construction-related non-renewable energy (i.e., fuel) localized consumption would decrease compared to under the proposed 2021 LRDP. Because this alternative would result in less campus population growth as compared to the proposed 2021 LRDP, localized VMT would be reduced as well, resulting in less localized transportation-related non-renewable energy (i.e., fuel) consumption compared to the proposed 2021 LRDP. However, as noted above, reduced UCR student population would simply relocate the demand for higher education to alternative campuses thereby relocating vehicle trips to other locations. Therefore, construction and operational energy impacts associated with the Reduced Development Program Alternative would be **less than** under the proposed 2021 LRDP for localized impacts but would be **similar to** the proposed 2021 LRDP when accounting for displaced students. *(Less impact (locally)/Similar impact (regionally))*

Geology and Soils

The Reduced Development Program Alternative would result in a reduction of proposed net new building square footage compared to the proposed 2021 LRDP. Both the Reduced Development Program Alternative and the proposed 2021 LRDP would be required to comply with CBC building requirements, as well as the UC Seismic Safety Policy and UC Facilities Manual Seismic Program Guidelines, which would reduce impacts related to geology and soils to less than significant levels. Section 4.7, *Geology and Soils*, also found impacts to paleontological resources to be less than significant with the implementation of mitigation measures related to paleontological resources monitoring and steps to be taken if a paleontological resource is uncovered during construction activities. These measures would apply to development under the Reduced Development Program Alternative as well. Overall impacts related to geology and soils under the Reduced Development Program Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Greenhouse Gas Emissions

With the reduction in the square footage of development under the Reduced Development Program Alternative compared to the proposed 2021 LRDP, construction-related emissions would decrease compared to those of the proposed 2021 LRDP. In addition, with a comparatively decreased student enrollment, the Reduced Development Program Alternative would result in less students needing to commute to the UCR campus compared to the proposed 2021 LRDP. However, as noted above, reduced UCR student population would simply relocate the demand for higher education to alternative campuses thereby relocating construction activities, operational activities, and vehicle trips to other locations. As such, the Reduced Development Program Alternative would result in decreased localized GHG emissions, including VMT and associated transportation-related (i.e., Scope 3) GHG emissions compared to the proposed 2021 LRDP. Therefore, construction and

operational localized GHG emissions impacts associated with the Reduced Development Program Alternative would be **less than** under the proposed 2021 LRDP, but would be **similar to** the proposed 2021 LRDP when accounting for displaced students. *(Less impact (locally)/Similar impact (regionally))*

Hazards and Hazardous Materials

The Reduced Development Program Alternative would result in 50 percent less net new building space compared to the proposed 2021 LRDP. This alternative, similar to the proposed 2021 LRDP, would be required to comply with federal and State regulations, as well as existing UCR policies, related to the routine transport, use, or disposal of hazardous materials and impacts would therefore be less than significant without mitigation requirements. Mandatory compliance with existing regulations pertaining to the identification, handling, and disposing of hazardous materials, along with the implementation of mitigation measures would ensure impacts from the accidental release of hazardous materials on or nearby campus, including within one-quarter mile of a school, would be less than significant. Section 4.9.3, Impact HAZ-4, of this EIR found that the UCR campus includes several closed, but listed UST release sites, and is located adjacent to a site with a restricted land use covenant. As a result, soil, soil vapor, and/or groundwater disturbance during construction could create a significant hazard to the public or the environment. Given the opportunity for contaminated soils to occur on the project site, project construction would potentially create a significant hazard to the public or the environment. Mitigation measures would be required to reduce the impact to less than significant for both the Reduced Development Program Alternative and the proposed 2021 LRDP. Therefore, overall, impacts related to hazards and hazardous materials under the Reduced Development Program Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Hydrology and Water Quality

Under the Reduced Development Program Alternative there would be a reduced amount of development, including grading and excavation work, and would likely result in a reduction of impermeable surfaces in comparison to the 2021 LRDP. Under the Reduced Development Program Alternative, construction and operation would occur in compliance with applicable water quality standards and waste discharge requirements. In accordance with regulations and policies, a SWPPP would be implemented during construction activities and a SWMP would be implemented during operations, to provide on-site construction and post-construction prevention, capture, and treatment of stormwater runoff, such that potential water quality impacts would be less than significant. Potential impacts to groundwater supplies and recharge would be less than significant. Development under this alternative would not alter the course of a stream or river and would not alter regional stormwater drainage patterns. Compliance with applicable regulations and policies, including implementation of a SWPPP during construction and a SWMP during operation, would provide sufficient on-site construction and post-construction prevention, capture, and treatment of stormwater runoff, and would minimize or avoid potentially adverse impacts such that they would be less than significant. Development under the Reduced Development Program Alternative would implement water quality BMPs in accordance with applicable requirements, reducing potential downstream water quality impacts to ensure no conflict with or obstruction of the implementation of the Water Quality Control Plan or a sustainable groundwater management plan. While there would be 50 percent less development as compared to the proposed 2021 LRDP, the same standard regulations would apply. Overall impacts related to hydrology and water quality under the Reduced Development Program Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Noise

The reduction in building square footage and reduced campus population and associated VMT under the Reduced Development Program Alternative, would decrease construction and operational (mechanical and vehicular) noise generation compared to the proposed 2021 LRDP. However, construction noise would still occur in proximity to sensitive receptors but the frequency of noise over time would be reduced compared to the proposed 2021 LRDP but would still be significant and unavoidable. Overall impacts related to Noise under the Reduced Development Program Alternative would be **less than** the proposed 2021 LRDP. *(Less impact)*

Population and Housing

The Reduced Development Program Alternative would result in a net increase in campus population that is 50 percent less than that proposed under the 2021 LRDP. The proposed 2021 LRDP would accommodate the anticipated regional population forecasts. Furthermore, the proposed 2021 LRDP does not include installation or extension of significant roads or infrastructure that would result in further population growth or housing needs. Direct and indirect impacts related to unplanned population growth would be less than significant. The proposed 2021 LRDP would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing and impacts would be less than significant. No mitigation measures are required. The Reduced Development Program Alternative would result in less localized development and fewer new people on the UCR campus compared to the proposed 2021 LRDP, but at an even ratio (50 percent less building square footage and 50 percent fewer net new campus population). Therefore, overall impacts related to Population and Housing under the Reduced Development Program Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Public Services

The proposed 2021 LRDP was determined not to result in significant environmental impacts associated with the need for the new or altered fire, police, school, or library facilities. As the Reduced Development Program Alternative represents a reduction in campus population by 50 percent, it is reasonable to assume that the localized demand for public services would be reduced under the Reduced Development Program Alternative. However, neither the proposed 2021 LRDP nor the Reduced Development Program Alternative would induce construction of new facilities which would result in significant environmental impacts and would therefore be **similar to** the proposed 2021 LRDP. Under both projects, impacts to Public Services would remain less than significant and no mitigation would be required. *(Similar impact)*

Recreation

Similar to the proposed 2021 LRDP, the Reduced Development Program Alternative would include most existing recreational facilities and parkland on the UCR campus and incrementally develop new recreational facilities and open spaces that would adequately serve the campus population. However, it is reasonable to assume that less recreational facilities would be developed under this alternative since UCR would be limited in its development potential compared to the proposed 2021 LRDP.

The Reduced Development Program Alternative would not likely increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of those facilities would occur or be accelerated, but increased use of area parks and

recreational facilities off-campus may be necessary if the development under this alternative is allocated to other UCR needs (i.e., academic space or student housing). Impacts related to increased use of parks and recreational facilities would still be less than significant, but possibly still present a greater impact than under the proposed 2021 LRDP. Under this alternative, less incremental new on-campus recreational facilities and open spaces would be developed, but the construction of new facilities may have an adverse physical effect on the environment similar to the proposed 2021 LRDP. Overall impacts related to Recreation under the Reduced Development Program Alternative would be **similar to or greater than** the proposed 2021 LRDP. *(Similar impact (locally)/Greater impact (regionally))*

Transportation

The Reduced Development Program Alternative would result in a net increase in campus population that is 50 percent less than that proposed under the 2021 LRDP. This would result in reduced localized VMT compared to the proposed 2021 LRDP, due to the reduction in localized commuter trips. However, as noted above, reduced UCR student population would simply relocate the demand for higher education to alternative campuses thereby relocating vehicle trips to other locations. Therefore, while localized transportation and traffic impacts would be less than significant for both this alternative and the 2021 LRDP, it would be similar to the proposed 2021 LRDP when accounting for displaced students.

Buildout of the campus under this alternative, including the designs of internal circulation, would comply with ADA and National Association of City Transportation Officials standards, as well as the Campus Construction and Design Standards, including those applicable to roads, parking facilities, and walkways or bicycle facilities and would not result in hazards due to geometric design features. Further, emergency access would not be adversely affected under this alternative. The Reduced Development Program Alternative would reduce the AM Peak Hour queueing at the I-215/SR 60 Freeway Southbound Ramps under Cumulative Plus Project conditions to less than significant levels. Overall, impacts related to transportation under the Reduced Development Program Alternative would be **less than** for localized transportation and traffic impacts but **similar to** the proposed 2021 LRDP when accounting for displaced students. (*Less impact (locally)/Similar impact (regionally)*)

Tribal Cultural Resources

As discussed in Section 4.16, *Tribal Cultural Resources*, the proposed 2021 LRDP has the potential to impact cultural resources of potential Native American origin. Where development occurs in the southeastern quadrant of campus and in areas containing Val Verde Pluton geologic features considered highly sensitive to prehistoric archaeological resources, mitigation would be required for a qualified archaeologist and a Native American monitor to reduce impacts to potential archaeological and/or TCR to less than significant levels. No significant amount of facilities development is currently proposed in the TCR sensitive regions in the southeastern portions of the UCR campus under the proposed 2021 LRDP or the Reduced Development Program Alternative. Nevertheless, the potential to encounter previously unknown resources would still exist. Impacts to TCR would be less than significant with mitigation, which would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Utilities and Service Systems

The proposed 2021 LRDP was determined not to result in significant environmental impacts associated with utilities and service systems with adherence to existing regulations, UCR policies,

and BMPs; no mitigation measures would be required. As the Reduced Development Program Alternative represents a reduction in campus population by 50 percent, it is reasonable to assume that the impacts from the Reduced Development Program Alternative would be **less than** the proposed 2021 LRDP, although under both projects, impacts to Utilities and Service Systems would remain less than significant and no mitigation would be required. *(Less Impact)*

Wildfire

Similar to the proposed 2021 LRDP, implementation of the Reduced Development Program Alternative could result in temporary lane or roadway closures on the edges of campus and within the campus circulation system during construction activities. With inclusion of a construction management plan as a standard condition of approval, construction impacts related to transportation concerns would be less than significant. In support of these standard practices, UCR has proposed Continuing Best Practices as conditions of individual project approval that would ensure, to the extent feasible, that at least one unobstructed lane in both directions on campus roadways are maintained specifically in the event of a wildfire emergency and that the Campus Fire Marshal discloses roadway closures to the City of Riverside Fire Department and identify alternative travel routes, if necessary. As such, evacuation routes, if present within the specific roadway segment that would require temporary closure as noted above, would be similarly rerouted.

Operation of new facilities would not substantially impair an adopted emergency response or evacuation plan. This alternative would still increase the density of development on campus, albeit to a lesser extent, and new buildings and infrastructure would be constructed according to the latest fire code and safety standards. New construction could be in areas within 2 miles of Very High FHSZs under this alternative, similar to the proposed 2021 LRDP. Although the campus population would increase by fewer people compared to the proposed 2021 LRDP, people living, working, and attending class in these areas could be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. New or updated infrastructure would be concentrated in previously developed portions of campus, and any new utilities would be installed in compliance with existing regulations and would not contribute to increased fire risk. Impacts related to Wildfire under the Reduced Development Program Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Summary of Alternative 2 (Reduced Development Program)

The Reduced Development Program Alternative would limit future enrollment growth on the campus as well as developed academic square footage, compared to the proposed 2021 LRDP. For this reason, it would only partially achieve the underlying purpose of the proposed 2021 LRDP to support a projected enrollment growth based on current student enrollment, regional growth trends, and agreements between the UC and the State regarding resident student and transfer student enrollment objectives.

This alternative would result in slightly less/less impacts to multiple environmental areas of concern, including biological resources, energy consumption, GHG emissions, noise, transportation, and utilities and service systems compared to the proposed 2021 LRDP. Impacts to aesthetics, agricultural resources, air quality, cultural resources, energy consumption, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, population and housing, public services, recreation, transportation, TCR, and wildfire would be similar compared to the proposed LRDP. Impacts to recreation could be slightly greater than compared to the proposed 2021 LRDP.

This alternative would not develop the net new building space needed to accommodate projected student housing or academic and research facilities needs projections based on current student enrollment, regional growth trends, and agreements between the UC and the State of California regarding resident student and transfer student enrollment objectives. Furthermore, it is logical to assume the restriction of student and facility growth at UCR would result in required growth at other UC and university/college campuses throughout California, which could result in regional or localized impacts at those campuses.

6.5.3 Alternative 3: Increased Student Housing

This alternative would not alter the components of the proposed 2021 LRDP, but rather would increase the student bed capacity to provide housing for 60 percent of the eligible student body capacity rather than 40 percent under the proposed 2021 LRDP. This would result in a doubling of the proposed new campus beds, which would represent a net increase of approximately 14,978 new campus beds, rather than 7,489 under the proposed 2021 LRDP. Under Alternative 3, the total campus bed count in academic year 2035/2036 would be approximately 21,500 rather than 14,000.

Under Alternative 3, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf). It is reasonable to assume that more of the developable square footage would be used for student housing under this alternative rather than student support, academic, or recreation space. The net new student enrollment for academic year 2035/2036 would be planned for 10,000 new students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545 total employees). Under Alternative 3, the campus population in academic year 2035/2036 would be approximately 42,545.

Aesthetics

The Increased Student Housing Alternative would increase the student bed capacity to provide housing for 60 percent of the eligible student body capacity rather than 40 percent compared to the proposed 2021 LRDP. Net new square footage under this alternative would still total up to 5.5 million gsf, as it does under the proposed 2021 LRDP. As discussed in Section 4.1, *Aesthetics*, the proposed 2021 LRDP would have a significant and unavoidable impact to scenic vistas, specifically related to the Box Springs Mountains. All other impacts related to aesthetics would be less than significant or less than significant with mitigation incorporated. Therefore, the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP and impacts to scenic vistas would remain significant and avoidable. *(Similar impact)*

Agricultural Resources

The Increased Student Housing Alternative would increase the allocation of total projected building square footage to student housing facilities rather than other land uses compared to the proposed 2021 LRDP. As discussed in Section 4.2, *Agricultural Resources*, the proposed 2021 LRDP would have a significant and unavoidable impact to Prime Farmland. Implementation of the Increased Student Housing Alternative could result in a reduced impact to agricultural resources as West Campus would be primarily reserved for land-based research and student housing would be focused on the northern portions of East Campus, similar to that under the proposed 2021 LRDP. However, consistent with past LRDP EIRs, the establishment of the CVARS as mitigation for impacts to Farmland does not fully offset the net reduction in farmland in the region as no new farmlands were being created in the vicinity of the campus. Therefore, impacts to agricultural resources under the

Increased Student Housing Alternative would be **similar to** those under the proposed 2021 LRDP, and impacts to agricultural resources would remain significant and avoidable. *(Similar impact)*

Air Quality

Net new campus population and total building square footage under the Increased Student Housing Alternative would result in similar emissions of the criteria pollutants associated with short-term construction and long-term operation compared to proposed 2021 LRDP, and impacts would still be significant and unavoidable. Because this alternative would result in more on-campus housing opportunities as compared to the proposed 2021 LRDP, overall traffic and VMT would be reduced. Therefore, impacts related to air quality under the Increased Student Housing Alternative would be generally **less than** those under the proposed 2021 LRDP, although impacts related to criteria pollutants would remain significant and avoidable. *(Less impact)*

Biological Resources

Impact under the Increased Student Housing Alternative would be similar to those for the proposed 2021 LRDP since this alternative would maintain the same net new building space. Under this alternative, the land use designations would remain, including clustering of student housing, and impacts would be similar to that under the proposed 2021 LRDP. In addition, there would be no planned or foreseeable development within the Open Space Reserve areas under the Increased Student Housing Alternative. Thus, impacts under the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Cultural Resources

As discussed in Section 4.5, *Cultural Resources*, there are 38 qualifying historical resources on UCR's campus. Among these 38 resources is one eligible historic district (the Mid-Century Modern Core Historic District, with 15 contributing buildings and associated site plan features, circulation corridors, and landscapes), and one cultural landscape (the Citrus Variety Collection Cultural Landscape, with 11 contributing buildings and ancillary structures and associated agricultural fields). Appendix E includes the complete evaluations of each eligible historical resource. Impacts to historic resources would be comparable under the Increased Student Housing Alternative, as the net new square footage would not reduce the potential for impacts to historic buildings compared to the proposed 2021 LRDP, and impacts would therefore remain significant and unavoidable.

With respect to archaeological resources, development anticipated under the Increased Student Housing Alternative would be similar to the proposed 2021 LRDP and the potential to encounter previously unknown resources would still exist. Impacts would be less than significant with mitigation, which would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Energy

With no change in the square footage of development under the Increased Student Housing Alternative compared to the proposed 2021 LRDP, construction-related non-renewable energy consumption (i.e., fuel) would be similar compared to those of the proposed 2021 LRDP. However, with an increase in student housing to accommodate a greater percentage of students in on-campus housing, the Increased Student Housing Alternative would result in less students needing to commute to campus compared to the proposed 2021 LRDP. As such, the Increased Student Housing Alternative would result in decreased VMT and associated transportation-related energy (i.e., fuel) consumption compared to the proposed 2021 LRDP. Therefore, construction energy impacts

associated with the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP, and operational energy impacts (reduced VMT) associated with the Increased Student Housing Alternative would be **less than** under the proposed 2021 LRDP.

As described in Section 4.6, Energy, the proposed 2021 LRDP would result in an increase in operational energy, including non-renewable energy consumption due to provision of additional land uses, additional VMT, and accommodation of additional student enrollment. The Increased Student Housing alternative would include similar facilities as that of the proposed 2021 LRDP and because facilities operation constitutes the largest consumption of energy, including non-renewable energy, at the UCR campus, the Increased Student Housing Alternative would result in similar overall operational energy consumption compared to the proposed 2021 LRDP. Impacts would be **similar to** the proposed 2021 LRDP. *(Less impact (fuel consumption)/Similar impact (other energy consumption))*

Geology and Soils

The Increased Student Housing Alternative would result in the same net new building square footage compared to the proposed 2021 LRDP. Both the Increased Student Housing Alternative and the proposed 2021 LRDP would be required to comply with CBC building requirements, as well as the UC Seismic Safety Policy and UC Facilities Manual Seismic Program Guidelines, which would reduce impacts related to geology and soils to less than significant levels. Section 4.7, *Geology and Soils*, also found impacts to paleontological resources to be less than significant with the implementation of mitigation measures related to paleontological resources monitoring and steps to be taken if a paleontological resource is uncovered during construction activities. These measures would apply to development under the Increased Student Housing Alternative as well. Overall impacts related to geology and soils under the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Greenhouse Gas Emissions

With no change in the square footage of development under the Increased Student Housing Alternative compared to the proposed 2021 LRDP, construction-related emissions would be similar compared to those of the proposed 2021 LRDP. However, with an increase in student housing to accommodate a greater percentage of students in on-campus housing, the Increased Student Housing Alternative would result in less students needing to commute to campus compared to the proposed 2021 LRDP. As such the Increased Student Housing Alternative would result in decreased VMT and associated transportation-related (i.e., Scope 3) GHG emissions compared to the proposed 2021 LRDP. Therefore, construction GHG emissions impacts associated with the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP, and operational GHG emissions impacts (reduced VMT) associated with the Increased Student Housing Alternative would be **less than** under the proposed 2021 LRDP.

As described in Section 4.8, *Greenhouse Gas Emissions*, the proposed 2021 LRDP would result in an increase in operational GHG emissions due to provision of additional land uses, VMT, and accommodation of additional student enrollment. The Increased Student Housing Alternative would not eliminate GHG emissions and a similar amount of facilities would be developed under the Increased Student Housing Alternative. Since facilities energy-related (i.e., Scope 2) GHG emission are the largest contributor of UCR GHG Emissions, the Increased Student Housing Alternative would result in similar overall operational GHG emissions compared to the proposed 2021 LRDP. Because the Increased Student Housing Alternative would generate similar overall operational GHG

emissions, impacts would be **similar to** the proposed 2021 LRDP. *(Less impact (Scope 3)/Similar impact (Scopes 1 and 2))*

Hazards and Hazardous Materials

The Increased Student Housing Alternative would result in the same net new building space and campus population compared to the proposed 2021 LRDP. This alternative, similar to the proposed 2021 LRDP, would be required to comply with federal and State regulations, as well as existing UCR policies, related to the routine transport, use, or disposal of hazardous materials and impacts would therefore be less than significant without mitigation requirements. Mandatory compliance with existing regulations pertaining to the identification, handling, and disposing of hazardous materials, along with the implementation of mitigation measures would ensure impacts from the accidental release of hazardous materials on or nearby campus, including within one-quarter mile of a school, would be less than significant. Section 4.9.3, Impact HAZ-4, of this EIR found that the UCR campus includes several closed, but listed UST release sites, and is located adjacent to a site with a restricted land use covenant. As a result, soil, soil vapor, and/or groundwater disturbance during construction could create a significant hazard to the public or the environment. Given the opportunity for contaminated soils to occur on the project site, project construction would potentially create a significant hazard to the public or the environment. Mitigation measures would be required to reduce the impact to less than significant for both the Increased Student Housing Alternative and the proposed 2021 LRDP. Therefore, overall, impacts related to hazards and hazardous materials under the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Hydrology and Water Quality

Under the Increased Student Housing Alternative, construction and operation would occur in compliance with applicable water quality standards and waste discharge requirements. In accordance with regulations and policies, a SWPPP would be implemented during construction activities and a SWMP would be implemented during operations, to provide on-site construction and post-construction prevention, capture, and treatment of stormwater runoff, such that potential water quality impacts would be less than significant. Potential impacts to groundwater supplies and recharge would be less than significant. Similar to the proposed 2021 LRDP, development under this alternative would not alter the course of a stream or river and would not alter regional stormwater drainage patterns. Compliance with applicable regulations and policies, including implementation of a SWPPP during construction and a SWMP during operation, would provide sufficient on-site construction and post-construction prevention, capture, and treatment of stormwater runoff, and would minimize or avoid potentially adverse impacts such that they would be less than significant. Development under the Increased Student Housing Alternative would implement water quality BMPs in accordance with applicable requirements, reducing potential downstream water quality impacts to ensure no conflict with or obstruction of the implementation of the Water Quality Control Plan or a sustainable groundwater management plan. The same standard regulations would apply to this alternative compared to the proposed 2021 LRDP. Overall impacts related to hydrology and water quality under the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Noise

The net new building square footage and campus population would be the same compared to the proposed 2021 LRDP. However, the Increased Student Housing Alternative would result in a reduction in traffic noise levels due to the reduction in trips generated by the reduced number of student commuters as compared to the proposed 2021 LRDP, and an increase in noise from on-campus residents would be minor. However, with the increase in students living on-campus over time, there would be incremental increases in potential impacts to sensitive receivers. Overall impacts related to Noise under the Increased Student Housing Alternative would be slightly **greater than** the proposed 2021 LRDP. *(Greater impact)*

Population and Housing

The proposed 2021 LRDP would accommodate the anticipated regional population forecasts. Furthermore, the proposed 2021 LRDP does not include installation or extension of significant roads or infrastructure that would result in further population growth or housing needs. Direct and indirect impacts related to unplanned population growth would be less than significant. The proposed 2021 LRDP would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing and impacts would be less than significant. The Increased Student Housing Alternative would be the same net new campus population as compared to the proposed 2021 LRDP, but would accommodate more students on-campus, thereby reducing off-campus housing demands and population growth in surrounding communities. Therefore, overall impacts related to Population and Housing would remain less than significant under either scenario; impacts under the Increased Student Housing Alternative would be **less than** the proposed 2021 LRDP. *(Less Impact)*

Public Services

The proposed 2021 LRDP was determined not to result in significant environmental impacts associated with the need for the new or altered fire, police, school, or library facilities. The Increased Student Housing Alternative would double the number of student beds, accommodating up to 60 percent of eligible students. Under this alternative, there would be an increased, localized demand on public services. However, since the total net increase in campus population and total net new development square footage would remain the same compared to the propose 2021 LRDP, it is reasonable to assume that the impacts from the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP. *(Similar Impact)*

Recreation

Similar to proposed 2021 LRDP, the Increased Student Housing Alternative would incrementally develop new recreational facilities and open spaces that would adequately serve the campus population. As discussed in Section 4.14, *Recreation*, while campus population growth assumed under the proposed 2021 LRDP would likely increase the use of existing campus parks or other recreational facilities, regular maintenance of such facilities under established parks and recreation programs, increased funding, and increased recreational space would avoid the potential for substantial physical deterioration. Pursuant to the UCOP Facilities Manual, the UCR construction and maintenance policy outlines procedures for preventative maintenance, general replacement and repair, electrical repairs, ventilation, plumbing, painting, and furniture/cabinetry work.

In addition, UCR tuition fees would include a recreation center fee and recreation center expansion fee, which would provide increased funding for maintenance and operational expenses associated with increased student enrollment and the use of recreation center. Therefore, since regular maintenance of existing recreational facilities would continue to occur, substantial physical deterioration of on-campus recreational facilities is not anticipated, and impacts would be less than significant. Further, it was determined the proposed 2021 LRDP would not result in substantial physical deterioration or accelerate the physical deterioration of existing off-campus parkland, community centers, or bicycle or trail networks, and impacts would be less than significant**.** Since the total net increase in campus population would remain the same compared to the propose 2021 LRDP, it is reasonable to assume that the impacts to recreational facilities from the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP. *(Similar Impact)*

Transportation

The addition of 7,489 more beds (for a total of approximately 21,500 beds) on campus under this alternative would result in reduced VMT compared to the proposed 2021 LRDP, due to the reduction in student commuter trips. Therefore, while VMT impacts would be less than significant for both this alternative and the 2021 LRDP, buildout under the Increased Student Housing Alternative would result in fewer vehicle miles traveled and transportation/traffic impacts would be **less than** the proposed 2021 LRDP.

Buildout of the campus under this alternative, including the designs of internal circulation, would comply with ADA and National Association of City Transportation Officials standards, as well as the Campus Construction and Design Standards, including those applicable to roads, parking facilities, and walkways or bicycle facilities and would not result in hazards due to geometric design features. Further, emergency access would not be adversely affected under the Increased Student Beds Alternative. Finally, the Increased Student Housing Alternative would reduce the number of students commuting to campus thereby reducing AM Peak Hour queueing impacts at the I-215/SR 60 Freeway Southbound Ramps under Cumulative Plus Project conditions. Overall, impacts related to transportation under the Increased Student Housing Alternative would be **less than** the proposed 2021 LRDP. (*Less impact*)

Tribal Cultural Resources

As discussed in Section 4.16, *Tribal Cultural Resources*, the proposed 2021 LRDP has the potential to impact cultural resources of potential Native American origin. Where development occurs in the southeastern quadrant of campus and in areas containing Val Verde Pluton geologic features considered highly sensitive to prehistoric archaeological resources, mitigation would be required for a qualified archaeologist and a Native American monitor to reduce impacts to potential archaeological and/or TCR to less than significant levels. The Increased Student Housing Alternative would result in the same net new square footage compared to the proposed 2021 LRDP and the potential to encounter previously unknown resources would still exist. Impacts to TCR would be less than significant with mitigation, which would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Utilities and Service Systems

The increase in student residential square footage under the Increased Student Housing Alternative would incrementally increase demand for public utilities, including water supply and conveyance, wastewater conveyance and treatment, and solid waste disposal services, compared to the proposed 2021 LRDP. Impacts related to Utilities and Service Systems under the Increased Student

Housing Alternative would be **greater than** the proposed 2021 LRDP although they would remain less than significant, as was concluded for proposed 2021 LRDP. (*Greater impact*)

Wildfire

Similar to the proposed 2021 LRDP, implementation of the Increased Student Housing Alternative could result in temporary lane or roadway closures on the edges of campus and within the campus circulation system during construction activities. Operation of new facilities would not substantially impair an adopted emergency response or evacuation plan. This alternative would still increase the density of development on campus, albeit to a lesser extent, and new buildings and infrastructure would be constructed according to the latest fire code and safety standards. New construction could be in areas within 2 miles of Very High FHSZs under this alternative, similar to the proposed 2021 LRDP. Net new campus population would be the same compared to the proposed 2021 LRDP, and people living, working, and attending class in these areas could be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. New or updated infrastructure would be concentrated in previously developed portions of campus, and any new utilities would be installed in compliance with existing regulations and would not contribute to increased fire risk. Impacts related to wildfire under the Increased Student Housing Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Summary of Alternative 3 (Increased Student Housing)

The Increased Student Housing Alternative would increase the student bed capacity to provide housing for 60 percent of the eligible student body capacity rather than 40 percent compared to the proposed 2021 LRDP. Net new campus population and square footage under this alternative would be the same as the proposed 2021 LRDP.

This alternative would result in less impacts to air quality, fuel consumption, GHG emissions from Scope 3 sources, population and housing, and transportation compared to the proposed 2021 LRDP. Impacts to aesthetics, agricultural resources, biological resources, cultural resources, energy consumption, geology and soils, GHG emissions from Scope 1 and Scope 2 sources, hazards and hazardous materials, hydrology and water quality, public services, recreation, TCR, and wildfire would be similar compared to the proposed LRDP. Impacts to noise and utilities and service systems could be greater than compared to the proposed 2021 LRDP.

6.5.4 Alternative 4: No Agricultural Land Development

This alternative would maintain prime agricultural lands for land-based research. Under the proposed 2021 LRDP, there are nearly 394 acres of prime agricultural lands (i.e., State-designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) located on West Campus in areas designated as Agricultural/Campus Research or Land-based Research. There are approximately 12.2 acres of prime agricultural land on East Campus concentrated near the eastern campus boundary at the USDA Salinity Laboratory. Under Alternative 4, all prime agricultural lands on West Campus and East Campus would be designated for land-based research opportunities or remain as open space. More specifically, the 2021 LRDP designations for Agricultural/Campus Research, Student Neighborhood, and the agricultural portions of the “Campus Support” would be designated with “Land-based Research” designations.

Under Alternative 4, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf), and the net new student enrollment for academic year 2035/2036 would be planned for 10,000 new

students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545 total employees). Under Alternative 4, the campus population in academic year 2035/2036 would be approximately 42,545.

Aesthetics

The No Agricultural Land Development Alternative would maintain approximately 406 acres of prime agricultural land for land-based research only, compared to the proposed 2021 LRDP. As discussed in Section 4.1, *Aesthetics*, the proposed 2021 LRDP would have a significant and unavoidable impact to scenic vistas, specifically related to the Box Springs Mountains. All other impacts related to aesthetics would be less than significant or less than significant with mitigation incorporated. Implementation of the No Agricultural Land Development Alternative would result in no net new building square footage on West Campus and it is reasonable to assume impacts to aesthetic resources would be reduced compared to the proposed 2021 LRDP. However, total net new square footage under this alternative would still be up to 5.5. million gsf. Since the potential locations, height, and massing of new buildings under the No Agricultural Land Development Program Alternative would be similar in nature to those permitted under the proposed 2021 LRDP, impacts to scenic vistas would remain significant and avoidable. In addition, the loss of land to development in West Campus would result in more condensed development in the campus core on East Campus. Overall impacts related to aesthetics under the No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Agricultural Resources

This alternative would maintain prime agricultural lands for land-based research. Under the proposed 2021 LRDP, there are nearly 394 acres of prime agricultural lands (i.e., State-designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) located on West Campus in areas designated as Agricultural/Campus Research or Land-based Research. There are approximately 12.2 acres of prime agricultural land on East Campus concentrated near the eastern campus boundary at the USDA Salinity Laboratory. Under the No Agricultural Land Development Alternative, all prime agricultural lands on West Campus and East Campus would be designated for land-based research opportunities or remain as open space. Again, similar to the proposed 2021 LRDP, this alternative would impact fewer acres of Farmland than previous UCR LRDPs. However, while the No Agricultural Land Development Alternative would reduce the amount of agricultural acreage taken out of production, it would also interfere with agricultural research. Development on West Campus on agricultural land is proposed under the 2021 LRDP to include land use designations for Agricultural/Campus Research and Land-based Research. These designations and secondary uses are designed to provide support facilities for agricultural research.

Nevertheless, implementation of this alternative would reduce land taken out of agricultural production, and therefore impacts would be **less than** compared to the proposed 2021 LRDP. (*Less impact*)

Air Quality

Under the No Agricultural Land Development Alternative, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf), and the net new student enrollment for academic year 2035/2036 would be planned for 10,000 new students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545

total employees). Under this alternative, the campus population in academic year 2035/2036 would still be approximately 42,545. Air quality impacts would be **similar to** the proposed 2021 LRDP as campus population and facility growth would remain the same. *(Similar impact)*

Biological Resources

Impact under the No Agricultural Land Development Alternative would be similar to those for the proposed 2021 LRDP since this alternative would maintain the same net new building space, simply concentrated on East Campus. In addition, there are currently no planned or foreseeable development within the Open Space Reserve areas and that would still be the case under this alternative. Thus, impacts under the No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Cultural Resources

As discussed in Section 4.5, *Cultural Resources*, there are 38 qualifying historical resources on UCR's campus. Among these 38 resources is one eligible historic district (the Mid-Century Modern Core Historic District, with 15 contributing buildings and associated site plan features, circulation corridors, and landscapes), and one cultural landscape (the Citrus Variety Collection Cultural Landscape, with 11 contributing buildings and ancillary structures and associated agricultural fields). Appendix E includes the complete evaluations of each eligible historical resource. Impacts to historic resources would be comparable under the No Agricultural Land Development Alternative, as the net new square footage would not reduce the potential for impacts to historic buildings compared to the proposed 2021 LRDP, and impacts would therefore remain significant and unavoidable.

With respect to archaeological resources, development anticipated under the No Agricultural Land Development Alternative would be similar to the proposed 2021 LRDP and the potential to encounter previously unknown resources would still exist. Impacts would be less than significant with mitigation, which would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Energy

With no change in the square footage of development under the No Agricultural Land Development Alternative compared to the proposed 2021 LRDP, construction-related energy (i.e., fuel) consumption would be similar compared to those of the proposed 2021 LRDP. In addition, the No Agricultural Land Development Alternative would result in a similar amount of students needing to commute to campus compared to the proposed 2021 LRDP. As such, the No Agricultural Land Development Alternative would result in similar VMT and associated transportation-related energy (i.e., fuel) consumption compared to the proposed 2021 LRDP. Therefore, construction and operational GHG emissions impacts associated with the No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP.

As described in Section 4.6, Energy, the proposed 2021 LRDP would result in an increase in operational energy, including non-renewable energy, consumption due to provision of additional land uses, additional VMT, and accommodation of additional student enrollment. The No Agricultural Land Development alternative would include similar facilities as that of the proposed 2021 LRDP and because facilities operation constitutes the largest consumption of energy, including non-renewable energy, the No Agricultural Land Development Alternative would result in similar overall operational energy, including non-renewable energy, consumption compared to the proposed 2021 LRDP. Impacts would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Geology and Soils

The No Agricultural Land Development Alternative would result in the same net new building square footage compared to the proposed 2021 LRDP. Both the No Agricultural Land Development Alternative and the proposed 2021 LRDP would be required to comply with CBC building requirements, as well as the UC Seismic Safety Policy and UC Facilities Manual Seismic Program Guidelines, which would reduce impacts related to geology and soils to less than significant levels. Section 4.7, *Geology and Soils*, also found impacts to paleontological resources to be less than significant with the implementation of mitigation measures related to paleontological resources monitoring and steps to be taken if a paleontological resource is uncovered during construction activities. These measures would apply to development under the No Agricultural Land Development Alternative as well. Overall impacts related to geology and soils under the I No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Greenhouse Gas Emissions

With no change in the square footage of development under the No Agricultural Land Development Alternative compared to the proposed 2021 LRDP, construction-related emissions would be similar compared to those of the proposed 2021 LRDP. In addition, the No Agricultural Land Development Alternative would result in a similar amount of students needing to commute to campus compared to the proposed 2021 LRDP. As such, the No Agricultural Land Development Alternative would result in similar VMT and associated transportation-related (i.e., Scope 3) GHG emissions compared to the proposed 2021 LRDP. Therefore, construction and operational GHG emissions impacts associated with the No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP.

As described in Section 4.8, *Greenhouse Gas Emissions*, the proposed 2021 LRDP would result in an increase in operational GHG emissions due to provision of additional land uses, VMT, and accommodation of additional student enrollment. The No Agricultural Land Development Alternative would not eliminate GHG emissions and a similar amount of facilities would be developed under the No Agricultural Land Development Alternative. Since facilities energy-related (i.e., Scope 2) GHG emission are the largest contributor of UCR GHG Emissions, the No Agricultural Land Development Alternative would result in similar overall operational GHG emissions compared to the proposed 2021 LRDP. Because the No Agricultural Land Development Alternative would generate similar overall operational GHG emissions, impacts would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Hazards and Hazardous Materials

The No Agricultural Land Development Alternative would result in the same net new building space and campus population compared to the proposed 2021 LRDP. This alternative, similar to the proposed 2021 LRDP, would be required to comply with federal and State regulations, as well as existing UCR policies, related to the routine transport, use, or disposal of hazardous materials and impacts would therefore be less than significant without mitigation requirements. Mandatory compliance with existing regulations pertaining to the identification, handling, and disposing of hazardous materials, along with the implementation of mitigation measures would ensure impacts from the accidental release of hazardous materials on or nearby campus, including within one-quarter mile of a school, would be less than significant.

Section 4.9.3, Impact HAZ-4, of this EIR found that the UCR West Campus includes a site with a restricted land use covenant. Implementation of this alternative would reduce potential impacts related to hazardous materials at this restricted site. Mitigation measures generally would be required to reduce the impact to less than significant for both the No Agricultural Land Development Alternative and the proposed 2021 LRDP. Therefore, overall, impacts related to hazards and hazardous materials under the No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Hydrology and Water Quality

Under the No Agricultural Land Development Alternative, construction and operation would occur in compliance with applicable water quality standards and waste discharge requirements. In accordance with regulations and policies, a SWPPP would be implemented during construction activities and a SWMP would be implemented during operations, to provide on-site construction and post-construction prevention, capture, and treatment of stormwater runoff, such that potential water quality impacts would be less than significant. Potential impacts to groundwater supplies and recharge would be less than significant. Similar to the proposed 2021 LRDP, development under this alternative would not alter the course of a stream or river and would not alter regional stormwater drainage patterns. Compliance with applicable regulations and policies, including implementation of a SWPPP during construction and a SWMP during operation, would provide sufficient on-site construction and post-construction prevention, capture, and treatment of stormwater runoff, and would minimize or avoid potentially adverse impacts such that they would be less than significant. Development under the No Agricultural Land Development Alternative would implement water quality BMPs in accordance with applicable requirements, reducing potential downstream water quality impacts to ensure no conflict with or obstruction of the implementation of the Water Quality Control Plan or a sustainable groundwater management plan. The same standard regulations would apply to this alternative compared to the proposed 2021 LRDP. Overall impacts related to hydrology and water quality under the No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Noise

The net new building square footage and campus population would be the same compared to the proposed 2021 LRDP. However, the No Agricultural Land Development Alternative would result in a greater concentration of net new campus facilities located on East Campus and an increase in operational noise associated with stationary (building mechanical) operation. With the increase in campus population growth over time and the concentration of that growth on East Campus, there would be incremental increases in potential impacts to sensitive receivers. Overall impacts related to Noise under the No Agricultural Land Development Alternative would be **slightly greater than** the proposed 2021 LRDP. *(Slightly greater impact)*

Population and Housing

Under the No Agricultural Land Development Alternative, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf), and the net new student enrollment for academic year 2035/2036 would be planned for 10,000 new students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545 total employees). Under this alternative, the campus population in academic year 2035/2036 would

still be approximately 42,545. Population and housing impacts would be **similar to** the proposed 2021 LRDP as campus population and facility growth would remain the same. *(Similar impact)*

Public Services

Under the No Agricultural Land Development Alternative, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf), and the net new student enrollment for academic year 2035/2036 would be planned for 10,000 new students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545 total employees). Under this alternative, the campus population in academic year 2035/2036 would still be approximately 42,545. Public services impacts would be **similar to** the proposed 2021 LRDP as campus population and facility growth would remain the same. *(Similar impact)*

Recreation

Under the No Agricultural Land Development Alternative, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf), and the net new student enrollment for academic year 2035/2036 would be planned for 10,000 new students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545 total employees). Under this alternative, the campus population in academic year 2035/2036 would still be approximately 42,545. Recreation impacts would be **similar to** the proposed 2021 LRDP as campus population and facility growth would remain the same. *(Similar impact)*

Transportation

Under the No Agricultural Land Development Alternative, net new development would still total up to 5.5 million gsf, with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf), and the campus population in academic year 2035/2036 would still be approximately 42,545. Transportation and traffic impacts would be less than significant for both this alternative and the 2021 LRDP. Buildout of the campus under this alternative, including the designs of internal circulation, would comply with ADA and National Association of City Transportation Officials standards, as well as the Campus Construction and Design Standards, including those applicable to roads, parking facilities, and walkways or bicycle facilities and would not result in hazards due to geometric design features. Further, emergency access would not be adversely affected under this alternative. Overall, impacts related to transportation under the No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP. (*Similar impact*)

Tribal Cultural Resources

As discussed in Section 4.16, *Tribal Cultural Resources*, the proposed 2021 LRDP has the potential to impact cultural resources of potential Native American origin. Where development occurs in the southeastern quadrant of campus and in areas containing Val Verde Pluton geologic features considered highly sensitive to prehistoric archaeological resources, mitigation would be required for a qualified archaeologist and a Native American monitor to reduce impacts to potential archaeological and/or TCR to less than significant levels. The No Agricultural Land Development Alternative would result in the same net new square footage compared to the proposed 2021 LRDP and the potential to encounter previously unknown resources would still exist. Impacts to TCR

would be less than significant with mitigation, which would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Utilities and Service Systems

Under the No Agricultural Land Development Alternative, net new development would still total up to 3.7 million asf (5.5 million gsf), with a maximum buildout of approximately 8.5 million asf (approximately 12.7 million gsf), and the net new student enrollment for academic year 2035/2036 would be planned for 10,000 new students (35,000 total students). Net new faculty and staff projections for academic year 2035/2036 would be approximately 2,800 new employees (7,545 total employees). Under this alternative, the campus population in academic year 2035/2036 would still be approximately 42,545. Impacts to utilities and service systems would be **similar to** the proposed 2021 LRDP as campus population and facility growth would remain the same. *(Similar impact)*

Wildfire

Similar to the proposed 2021 LRDP, implementation of the No Agricultural Land Development Alternative could result in temporary lane or roadway closures on the edges of campus and within the campus circulation system during construction activities. Operation of new facilities would not substantially impair an adopted emergency response or evacuation plan. This alternative would still increase the density of development on campus, albeit to a lesser extent, and new buildings and infrastructure would be constructed according to the latest fire code and safety standards. New construction could be in areas within 2 miles of Very High FHSZs under this alternative, similar to the proposed 2021 LRDP. Net new campus population would be the same compared to the proposed 2021 LRDP, and people living, working, and attending class in these areas could be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. New or updated infrastructure would be concentrated in previously developed portions of campus, and any new utilities would be installed in compliance with existing regulations and would not contribute to increased fire risk. Impacts related to wildfire under the No Agricultural Land Development Alternative would be **similar to** the proposed 2021 LRDP. *(Similar impact)*

Summary of Alternative 4 (No Agricultural Land Development)

The No Agricultural Land Development Alternative would result in the same net new campus population and square footage as the proposed 2021 LRDP. This alternative would maintain approximately 406 acres of prime agricultural lands for land-based research or open space.

This alternative would result in less impacts to agricultural resources compared to the proposed 2021 LRDP. Impacts to aesthetics, air quality, biological resources, cultural resources, energy consumption, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, population and housing, public services, recreation, transportation, TCR, utilities and service systems and wildfire would be similar compared to the proposed LRDP. Impacts related to noise could be slightly greater than compared to the proposed 2021 LRDP.

6.6 Comparison of Alternatives

Table 6-1 indicates whether each alternative's environmental impact is less than, similar to, or greater than that of the proposed 2021 LRDP for each of the issue areas studied.

Table 6-1 Impact Comparison of Alternatives

Issue	2021 LRDP Maximum Impact Classification	Alternative 1: No Project – Continue 2005 LRDP	Alternative 2: Reduced Development Program	Alternative 3: Increased Student Housing	Alternative 4: No Agricultural Land Development
Aesthetics	SU	Similar	Similar	Similar	Similar
Agricultural Resources	SU	Greater	Similar	Similar	Less
Air Quality	SU	Greater	Similar	Less	Similar
Biological Resources	LTSM	Slightly Greater	Slightly Less	Similar	Similar
Cultural Resources	SU	Similar	Similar	Similar	Similar
Energy	LTSM	Greater	Less (locally) Similar (regionally)	Less (fuel) Similar (other energy)	Similar
Geology and Soils	LTSM	Similar	Similar	Similar	Similar
GHG	LTSM	Greater	Less (locally) Similar (regionally)	Less (Scope 3) Similar (Scopes 1 and 2)	Similar
Hazards and Hazardous Materials	LTSM	Greater	Similar	Similar	Similar
Hydrology and Water Quality	LTS	Similar	Similar	Similar	Similar
Noise	SU	Slightly Greater	Less	Greater	Slightly Greater
Population/Housing	LTS	Greater	Similar	Less	Similar
Public Services	LTS	Greater	Similar	Similar	Similar
Recreation	LTSM	Similar	Similar (locally) Greater (regionally)	Similar	Similar
Transportation	SU	Greater	Less (locally) Similar (regionally)	Less	Similar
Tribal Cultural Resources	LTSM	Slightly Greater	Similar	Similar	Similar

Issue	2021 LRDP Maximum Impact Classification	Alternative 1: No Project – Continue 2005 LRDP	Alternative 2: Reduced Development Program	Alternative 3: Increased Student Housing	Alternative 4: No Agricultural Land Development
Utilities and Service Systems	LTS	Similar	Less	Greater	Similar
Wildfire	LTSM	Similar	Similar	Similar	Similar

LTS – Less than Significant; LTSM – Less than Significant with Mitigation Incorporated; SU – Significant and Unavoidable

6.7 Environmentally Superior Alternative

The 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 section of this EIR, there would be significant and unavoidable impacts associated with the proposed 2021 LRDP. These impacts are related to aesthetics, agricultural resources, air quality, cultural resources, noise, and transportation. Each of the evaluated action alternatives would result in lesser environmental impacts on some environmental resources and greater impacts on others compared to the proposed 2021 LRDP. None of the action alternatives presented would reduce all the impacts associated with the proposed 2021 LRDP.

Alternative 1 (No Project Alternative), would not be considered the environmentally superior alternative as described above in Section 6.5.1. Alternative 1 would not reduce any of the significant adverse impacts, and it would result in greater impacts related agricultural resources, air quality, biological resources, energy, GHG emissions, hazards and hazardous materials, noise, population and housing, public services, transportation, and TCR. All other impacts areas would be similar to those under the proposed 2021 LRDP.

Alternative 2 (Reduced Development Program Alternative) would result in fewer impacts to biological resources, local energy consumption, local GHG emissions, noise, local transportation, and utilities and service systems compared to the proposed 2021 LRDP. Impacts to aesthetics, agricultural resources, air quality, cultural resources, regional energy consumption, geology and soils, regional GHG emissions, hazards and hazardous materials, hydrology and water quality, population and housing, public services, local recreation, regional transportation, TCR, and wildfire would be similar compared to the proposed LRDP. Impacts to regional recreation would be greater compared to the proposed 2021 LRDP.

Alternative 3 (Increased Student Housing Alternative) would result in fewer impacts related to air quality, fuel consumption, GHG emissions for Scope 3 sources, population and housing, and transportation. Impacts to aesthetics, agricultural resources, biological resources, cultural resources, energy consumption, geology and soils, GHG emissions for Scope 1 and Scope 2 emissions, hazards and hazardous materials, hydrology and water quality, public services, recreation, TCR, and wildfire would be similar compared to the proposed LRDP. Impacts related to noise and utilities and service systems would be greater under Alternative 3 compared to the proposed 2021 LRDP.

Alternative 4 (No Agricultural Land Development Alternative) results in the fewest reductions in impacts in comparison to the proposed 2021 LRDP, resulting in fewer impacts to agricultural resources. All other areas of environmental concern would have similar impacts as the proposed 2021 LRDP under Alternative 4 with the exception for noise which would have a slightly greater impact compared to the proposed 2021 LRDP.

As demonstrated, there are different tradeoffs for each alternative (e.g. local versus regional impacts), which are dependent upon the specific resource areas. Individuals and the decision-makers may weigh these resource areas differently. Alternative 3 would result in fewer impacts to areas found to be significant and unavoidable under the proposed 2021 LRDP – air quality and transportation, and while impacts related to noise would be greater under this alternative due to the increase in students living on-campus (i.e. increase number of sensitive receptors), the decrease in the other areas of concern (fuel consumption, GHG emissions for Scope 3 sources, and population and housing) are found to be of greater local and regional value. Furthermore, although impacts

related to utilities and service systems under this alternative would be greater than the proposed 2021 LRDP, they would remain less than significant, as was concluded for proposed 2021 LRDP. Therefore, the Increase Student Housing Alternative, is considered the environmentally superior alternative.

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