

California Environmental Quality Act Findings of Fact Regarding the Final Supplemental Environmental Impact Report for the UC Davis Sacramento Campus 2020 Long Range Development Plan Update State Clearinghouse No. 2020020161

I. CERTIFICATION

The Board of Regents of the University of California (“University”) hereby certifies the Final Supplemental Environmental Impact Report (“Final Supplemental EIR” or “EIR”) (State Clearinghouse No. 2020020161) for the UC Davis Sacramento Campus 2020 Long Range Development Plan Update which consists of the Draft Supplemental EIR, comment letters, responses to comments, text changes to the Draft Supplemental EIR, and the Mitigation Monitoring and Reporting Plan (“MMRP”). In addition, the Final Supplemental EIR provides detailed project analysis for the Aggie Square Phase I project (Volume 2 of the Supplemental EIR). Findings for the Aggie Square Phase I project are provided in a separate document.

In accordance with California Environmental Quality Act (“CEQA”) Guidelines § 15090, the University, as Lead Agency for the Project, certifies that:

1. The Final Supplemental EIR has been completed in compliance with CEQA;
2. The Final Supplemental EIR was presented to the University, and the University has received, reviewed, and considered the information contained in the Final EIR and in the administrative record prior to approving the Project;
3. The Final Supplemental EIR reflects the University’s independent judgment and analysis.

The University further certifies that the Final Supplemental EIR satisfies the requirements for a long range development plan (“LRDP”) EIR prepared pursuant to Public Resources Code (“Public Resources Code” or “PRC”) § 21080.09 and CEQA Guidelines § 15081.5(b).

The University further certifies that this Final Supplemental EIR properly supplements the 2010 UC Davis Sacramento Campus LRDP Environmental Impact Report (“2010 LRDP EIR” or “2020 LRDP Final EIR”), and complies with all relevant requirements for supplemental CEQA documents. CEQA Guidelines Section 15163 sets forth the circumstances under which a project may warrant a supplemental (rather than subsequent) EIR. Specifically, a lead agency shall prepare a supplement to an EIR if any of the conditions described in CEQA Guidelines Section 15162 requiring a further EIR are found, but only minor additions or changes would be necessary to make the original EIR adequate. When certified, this Final Supplemental EIR, along with the 2010 LRDP EIR, will serve as the programmatic environmental document for overall expected growth at the Sacramento campus and will be used for future ongoing tiering of CEQA environmental review when implementing specific projects within the 2020 LRDP Update. Once approved, the UC Davis Sacramento Campus 2020 LRDP Update (“2020 LRDP Update” or the “Project”) will replace the UC Davis Sacramento Campus 2010 LRDP as the planning document for decisions on campus growth and development.

The University has exercised independent judgment in accordance with Public Resources Code § 21082.1(c) in retaining its own environmental consultant and directing the consultant in preparation of the EIR, as well as reviewing, analyzing and revising material prepared by the consultant.

In accordance with Public Resources Code § 21081 and CEQA Guidelines § 15091, the **University** has made one or more specific written findings regarding significant impacts associated with the project. Those findings are presented below, along with the rationale behind each of the findings. Concurrent with the adoption of these findings, the University adopts the MMRP and the Statement of Overriding Considerations.

The documents and other materials that constitute the record of proceedings on which the Project findings are based are located at UC Davis Office of Campus Planning and Environmental Stewardship, 436 Mark Hall, University of California, Davis, CA. 95616. The custodian for these documents is the UC Davis Office of Campus Planning and Environmental Stewardship, 436 Mark Hall, University of California, Davis, CA. 95616. This information is provided in compliance with Public Resources Code § 21081.6(a)(2) and CEQA Guidelines § 15091(e).

II. PROJECT BACKGROUND

2020 LONG RANGE DEVELOPMENT PLAN UPDATE

A. PROJECT DESCRIPTION SUMMARY

The University adopted the Sacramento Campus 2010 LRDP ("2010 LRDP") after certifying the 2010 LRDP EIR in November 2010. The 2010 LRDP was designed to accommodate an increase in building space at the Sacramento Campus from 3.39 million gross square feet (gsf) to 6.57 million gsf and growth in the onsite population (including patients, patient attendants, visitors, staff, faculty and other academic personnel, students, interns, residents, and fellows) from 12,500 persons to 19,700 persons at full implementation. Since 2010, the Sacramento Campus growth has been slower than expected in both new buildings and overall population. In 2019, building space in Sacramento had reached a total of 3.67 million gross square feet (gsf) and the onsite population has reached approximately 13,500. The 2010 LRDP requires updating to reflect new growth projections and development plans.

The 2020 LRDP Update largely continues the 2010 LRDP growth projection for new buildings and population at the Sacramento Campus, but with minor increases in the total amount of expected growth and minor changes to the planned land uses. The 2020 LRDP Update involves modifications to the land use plan established as part of the 2010 LRDP to support potential growth and development. UC Davis anticipates that under the 2020 LRDP Update, the on-campus population could grow over the next 20 years to include a population of 21,200, which is approximately 1,481 over the 2010 LRDP projection for 2025. UC Davis also anticipates growth up to 7.07 million gsf, which is approximately 499,202 gsf above what was analyzed in the 2010 LRDP.

The 2020 LRDP Update proposes the following changes:

- The daily onsite population consists of all persons present on the campus on a given day. This population includes UC Davis Health System patients and visitors, staff, faculty and other academic personnel, students, interns, residents, and fellows. The approximate onsite daily population in 2019 was 13,547. The 2010 LRDP did not include on-campus housing or residential use as a land use activity. The 2020 LRDP Update would include on-campus housing,

or residential use as a land use activity and therefore includes a new projection of campus housing. As shown in Table 2-1 of the Supplemental Final EIR, total onsite daily campus population is anticipated to increase to about 21,200 by 2040, which is 7,653 above baseline conditions and 1,481 above what was analyzed in the 2010 LRDP Final EIR.

- Total building space on the 146-acre campus, excluding parking structures, would increase from approximately 6.57million gsf under the 2010 LRDP to 7.07 million gsf upon full implementation of the 2020 LRDP Update. Parking structure square footage would increase by 2,012,897 gsf by 2040, and there would be 4,324 additional parking spaces on campus between parking structures and surface parking. Open space would also increase by 13 acres by 2040.
- Fewer acres of land would be included for the Rehabilitation Hospital project (west of Stockton Boulevard and south of Broadway, as shown on Figure 2-8) and incorporate this land within the Sacramento Campus boundary. This land is already part of the Sacramento Campus, but has not been formally incorporated into the LRDP for the campus. With the 2020 LRDP Update, these 4 acres would be within the plan area for a total of 146 acres.
- The Education and Research land use designation would be revised to include residential housing. This designation would now be Education, Research, and Housing. This land use is generally on the southwestern portion of the Sacramento Campus.
- Height restrictions would be revised throughout the Sacramento Campus. Under the 2010 LRDP, height restrictions were based on land use designation. The 2020 LRDP Update removes the height restrictions by land use designation and proposes a campus-wide maximum height of 200 feet with setback requirements to ensure there is a buffer between the Sacramento Campus and the residential neighborhoods to the north and east of the campus. Overall, height restrictions are higher in the Education, Research, and Housing land use designation compared to the 2010 LRDP but would be similar in other land use designations. Proposed height restrictions and setback requirements are listed below.
 - Along the northern and eastern campus boundaries, a series of setbacks address the surrounding residential community:
 - 0–40 feet from the edge of campus: buffer (zero height)
 - 40–100 feet from the edge of campus: 40 feet maximum height
 - 100–180 feet from the edge of campus: 75 feet maximum height
 - Along Stockton Boulevard, a setback addresses the mid-rise commercial corridor:
 - 0–50 feet from the edge of campus: 85 feet maximum height
 - 50–100 feet from edge of campus: 120 feet maximum height
 - Adjacent to the Sacramento Language Academy, a series of setbacks address the school:
 - Northern and southern boundaries of the Sacramento Language Academy:
 - 0–40 feet from the edge of campus: buffer (zero height)
 - 40–100 feet from the edge of campus: 75 feet maximum height
 - Western boundary of the Sacramento Language Academy:
 - 0–40 feet from the edge of campus: buffer (zero height)
 - Along Broadway, height restrictions address the low-rise commercial corridor:

- North side of Broadway:
 - 0–100 feet from the edge of campus: 35 feet maximum height
- South side of Broadway:
 - 35 feet maximum height

B. PROJECT OBJECTIVES

The following are the specific objectives of the 2020 LRDP Update.

- Provide additional state-of-the-art inpatient and outpatient capacity to keep pace with community health care needs and to support the UC Davis Health System’s teaching, research, and community engagement missions.
- Facilitate growth in student enrollment and the implementation of major educational initiatives, such as the School of Public Health, to address the existing and projected need for health care professionals and other highly trained, multidisciplinary professionals in the state of California.
- Support growth in workforce development and lifelong learning, including the Continuing and Professional Education program.
- Provide the facilities and infrastructure required to facilitate continued growth of the research enterprise at the Sacramento Campus, especially to foster interaction and collaboration between all campus programs and disciplines.
- Create an expansive and inclusive community of people focused on advancing health-contributing to the well-being of people in the communities we serve, propelling a more diverse and healthier economy and expanding the positive impact of UC Davis Health through more expansive partnerships.
- Support access to jobs and services to a more diverse population, including providing housing and transportation opportunities and community-serving uses.
- Address the constraints to intellectual exchange and collaboration resulting from the dispersed offsite locations of some of the UC Davis Health System educational and research programs.
- Address seismic and other code-related deficiencies in aging buildings, replacing them with state-of-the-art facilities for health care and health-care related research.
- Implement sustainable site design and building design practices to support ongoing implementation of the UC Sustainable Practices Policy.

In addition to the project objectives, the planning principles regarding physical development of the 2020 LRDP Update are listed below.

- Ensure appropriate facility adjacencies.
- Improve campus open space and landscape character.
- Provide convenient access to and within the campus.
- Improve pedestrian connections throughout the campus.
- Provide attractive campus entries and edges.
- Continue to plan and operate a sustainable campus.

C. PROCEDURAL COMPLIANCE WITH CEQA

The CEQA environmental review process for the UC Davis Sacramento Campus 2020 Long Range Development Plan Update started on February 7, 2020, with the UC Davis Sacramento Campus' issuance of a Notice of Preparation ("NOP") of a Supplemental EIR. The key milestones associated with preparation of an EIR are set forth and described below:

In accordance with PRC Section 21092 and CEQA Guidelines Section 15082, a NOP was prepared and circulated on February 7, 2020, for a minimum 30-day period of public and agency comment. The NOP was submitted to the State Clearinghouse and the Sacramento County clerk-recorder. A public scoping session was held February 26, 2020, at the Aggie Square Headquarters at 2270 Stockton Boulevard, Sacramento, California 95817. UC Davis staff and their consulting team were available to answer questions and review draft project graphics and other information. A total of 26 letters were received during the scoping period. A copy of the NOP and a summary of the scoping comments are included in Appendices A and B of the Supplemental EIR, respectively.

The Public Draft Supplemental EIR was issued on July 31, 2020. The Draft Supplemental EIR was circulated until September 17, 2020, for a 49-day period of review and comment by the public and other interested parties, agencies, and organizations. A virtual public hearing (via zoom) was held on September 3, 2020, to receive input from agencies and the public on the Draft Supplemental EIR. Copies of the Draft Supplemental EIR were posted on the UC Davis Environmental Planning website for review. Public libraries were closed due to the COVID-19 shelter in place order. However, hard copies of the document were made available at the UC Davis Health Center and the UC Davis Office of Environmental Stewardship and Sustainability on the UC Davis campus.

Comment letters received on the Draft Supplemental EIR and a transcript of oral testimony provided at the public hearing are provided in their entirety in Chapter 2, *Comments and Responses to Comments*, of Volume 3 of the Final Supplemental EIR.

UC Davis received 20 comment letters, including two from a state agency, six from local agencies, eight from organizations, and four from individuals. In addition, 16 members of the public spoke at the virtual public hearing and provided a total of 42 comments on the Draft Supplemental EIR.

The Final Supplemental EIR was completed and published on November 4, 2020.

Included in the Final Supplemental EIR are Volume 1, the 2020 LRDP Update programmatic analysis, and Volume 2, Aggie Square Phase I project specific analysis. Volume 3 contains an Introduction (Chapter 1) that describes minor changes to the Final Supplemental EIR since public release of the Draft Supplemental EIR on July 31, 2020, comment letters and responses to comments (Chapter 2), the MMRP (Chapter 3), and corrections to the Draft Supplemental EIR (Chapter 4). The Final Supplemental EIR also contains appendices for both volumes of the Supplemental EIR.

Minor changes to the Draft Supplemental EIR include a land use amendment to the 2010 LRDP to accommodate the development of Parking Structure 4 in the north west corner of the Sacramento Campus. Specifically, 1.6 acres of Ambulatory Care land use was redesignated to Parking Structure land use, and 1.6 acres of Parking Structure land use was redesignated to Ambulatory Care land use. This resulted in a minor change to Figures 2-6 and 2-7 of Volume 1 of the Supplemental EIR, and a revision in Volume 1, Chapter 2 of the Supplemental EIR to correct the acreages of these land use designations.

Minor clarifications developed in response to comments on the Draft Supplemental EIR include:

- Minor revisions were made to Mitigation Measure LRDP-AQ-2b to include a recommendation that all diesel on-road trucks used for hauling construction materials use a model year 2010 or newer engine.
- Minor revisions were made to Mitigation Measure LRDP-AQ-2d to describe monitoring requirements.
- Minor revisions were made to Mitigation Measure LRDP-AQ-3a to include consultation between UC Davis and off-campus renters and owners and to provide financial assistance.
- Minor revisions were made to Impact LRDP-EN-1 to include the implementation of mitigation measures LRDP-GHG-2 and LRDP-TRA-1a, which would further reduce operational transportation energy impacts, and to note that this impact would be less than significant with mitigation.
- A footnote was added to Volume 1, Section 3.7 Greenhouse Gases to provide a hyperlink to The Climate Registry.
- A sentence was removed from Volume 1, Section 3.7 Greenhouse Gases to remove a reference to the Transportation and Circulation chapter.
- A note was added to Table 3.7-11 in Volume 1, Section 3.7, to refer to Table 3.7-8.
- Additional descriptive text about the existing and future groundwater supply in the study area was added to Volume 1, Section 3.9.

None of these minor clarifications set forth above constitute significant new information that includes new or more severe impacts or new mitigation measures that would require recirculation per CEQA Guidelines Section § 15088.5, but merely clarify and amplify the analysis presented in the Draft Supplemental EIR.

D. ENVIRONMENTAL IMPACTS AND FINDINGS

Pursuant to Public Resources Code § 21081 and CEQA Guidelines §15091, no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless the public agency makes one or more of the following findings with respect to each significant impact:

1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

The University has made one or more of these specific written findings regarding each significant impact associated with the Project. Those findings are presented below, along with a presentation of facts in support of the findings.

These findings summarize the determinations of the Final Supplemental EIR with respect to the Project's impacts before and after mitigation and do not attempt to describe the full analysis of each environmental impact considered in the Final Supplemental EIR. Instead, the findings provide a summary description of each impact, describe the applicable mitigation measures identified in the Final Supplemental EIR and adopted by the University for the Project, and state the University's findings regarding the significance of each impact with the adopted mitigation measures. The Final Supplemental EIR contains a full explanation of each impact, mitigation measure, and the analysis that led the University to its conclusions on those impacts. These findings hereby incorporate by reference the discussion and analysis in the Final Supplemental EIR, which supports the Final Supplemental EIR's determinations regarding the Project's environmental impacts and mitigation measures. In making these findings, the University ratifies, adopts, and incorporates by reference the Final Supplemental EIR's analysis, determinations, and conclusions relating to environmental impacts and mitigation measures, except to the extent that any such determinations and conclusions are specifically and expressly modified by these findings.

In adopting the mitigation measures described below, the University intends to adopt each of the mitigation measures recommended in the Final Supplemental EIR related to the Project. Accordingly, in the event that a mitigation measure recommended in the Final Supplemental EIR has been inadvertently omitted from these findings, that mitigation measure is hereby adopted and incorporated by reference in the findings. Additionally, in the event that the description of mitigation measures set forth below fails accurately to capture the substance of a given mitigation measure due to a clerical error (as distinct from specific and express modification by the University through these findings), the language of the mitigation measure as set forth in the Final Supplemental EIR shall govern.

The Final Supplemental EIR evaluation included a detailed analysis of impacts in 16 environmental disciplines, analyzing the Project and alternatives, including a No Project Alternative. The Final Supplemental EIR discloses the environmental impacts expected to result from the construction and operation of the Project. Where possible, mitigation measures were identified to avoid or minimize significant environmental effects. In addition, the campus committed to implementing measures in order to reduce the direct and indirect impacts that will result from Project activities. The mitigation measures identified in the EIR are measures proposed by the lead agency, responsible or trustee agencies or other persons that were not included in the project, but could reasonably be expected to reduce adverse impacts if required as conditions of approving the project, as required by CEQA Guidelines § 15126.4(a)(1)(A). Since the 2010 LRDP Final EIR was certified in 2010, the Office of Planning and Research (OPR) recommends that VMT serve as the primary traffic analysis metric, replacing the existing criteria of delay and level of service. In 2018, OPR released a technical advisory outlining potential VMT significance thresholds for different project types. The Final Supplemental EIR includes a VMT analysis to calculate impacts on traffic and GHGs. Furthermore, the baseline for the Final Supplemental EIR is the existing conditions in 2019. The University has adopted this approach because minimal development has occurred since the publication of the 2010 LRDP EIR. As such, a comparison of the incremental impacts of the 2020 LRDP Update to the projected 2010 LRDP future growth would minimize the impacts of the 2020 LRDP Update and provide little meaningful information to the public and the Regents. Accordingly, the Final Supplemental EIR describes the current, actual 2019 conditions for environmental resources. To accurately determine impacts, the Final Supplemental EIR evaluates the growth expected from the 2020 LRDP Update through 2040 as incremental changes compared to the 2019 existing conditions.

1. Findings on Less than Significant Impacts

Based on the issue area assessment in the Final Supplemental EIR, the University has determined that the Project will have no impact or less than significant impacts for several issues as summarized in the table below. The rationale for the conclusion that no significant impact would occur in each of the issue areas in the table is based on the discussion of these impacts in the detailed issue area analyses in Volume 1, Sections 3.1 through 3.16 of the Final Supplemental EIR and the cumulative impacts discussed in Volume 1, Chapter 4 of the Final Supplemental EIR that were found to have no impact or less than significant impacts.

Table 1. Summary of Less Than Significant Impacts

Environmental Impacts
<i>Aesthetics</i>
LRDP-AES-1: The project would have less than significant impact on visual character during construction
<i>Air Quality</i>
LRDP-AQ-3: Exposure of sensitive receptors so substantial asbestos concentrations
LRDP-AQ-4: The project will not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people
<i>Biological Resources</i>
LRDP-BIO-1: The project would not have adverse impacts on valley elderberry longhorn beetle
<i>Cultural Resources</i>
LRDP-TCR-1: The project would not have potential to cause a substantial adverse change in the significance of a tribal cultural resource with cultural value to a California Native American tribe and that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)
LRDP-TCR-2: The project would not have potential to cause a substantial adverse change in the significance of a tribal cultural resource with cultural value to a California Native American tribe and that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1
<i>Energy</i>
LRDP-EN-2: The project would not conflict with or obstruction of a state or local plan for renewable energy or energy efficiency
<i>Geology and Soils</i>
LRDP-GEO-2: The project would not have the potential to result in substantial soil erosion or the loss of topsoil
LRDP-GEO-3: The project would not involve the placement of project-related facilities on expansive soil, creating substantial direct or indirect risks to life or property
<i>Greenhouse Gases</i>
LRDP-GHG-1: The project would not result in the generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
<i>Hazards and Hazardous Materials</i>
LRDP-HAZ-1: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
LRDP-HAZ-3: The project would not result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school

Environmental Impacts

LRDP-HAZ-4: The project would not place project-related facilities on a site that is included on a list of hazardous materials sites, and resulting creation of a significant hazard to the public or the environment

LRDP-HAZ-5: The project would not impair implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan

Hydrology and Water Quality

LRDP-WQ-1: The project would not result in a violation of any water quality standards or waste discharge requirements or other degradation of surface or groundwater quality

LRDP-WQ-2: The project would not result in a substantial decrease of groundwater supplies or substantial interference with groundwater recharge such that the project may impede sustainable groundwater management of the basin

LRDP-WQ-4: The project would not conflict with or obstruction of implementation of a water quality control plan or sustainable groundwater management plan

Land Use

LRDP-LU-1: The project would not cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

Noise

Impact LRDP-NOI-1: The project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project from haul truck activities in excess of applicable standards

Impact LRDP-NOI-2: The project would not result in significant impacts related to traffic noise

Impact LRDP-NOI-2: The project would not result in significant impacts related to loading activity noise

Impact LRDP-NOI-2: The project would not result in significant impacts related to amplified music and sound

Population and Housing

LRDP-POP-1: The project would not induce substantial unplanned population growth either directly or indirectly

LRDP-POP-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere

Public Services

LRDP-PS-1: The project would not create a need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for fire protection facilities

LRDP-PS-2: The project would not create a need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for police protection facilities

LRDP-PS-3: The project would not create a need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for school facilities

LRDP-PS-4: The project would not create a need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for other public facilities

Environmental Impacts
<i>Recreation</i>
LRDP-REC-1: The project would not result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility that would occur or be accelerated
LRDP-REC-2: The project would not result in construction or expansion of recreational facilities that might have an adverse physical effect on the environment
<i>Transportation and Circulation</i>
LRDP-TRA-1: The project would not conflict with a program, plan, ordinance or policy addressing the circulation system for bicycle and pedestrian facilities
LRDP-TRA-2: The project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)
LRDP-TRA-3: The project would not result in changes to the transportation system that would create hazardous features or incompatible traffic uses
LRDP-TRA-4: The project would not result in inadequate emergency access
<i>Utilities</i>
LRDP-UT-1: The project would not result in relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects
LRDP-UT-2: The project would not create a need for new or expanded entitlements or resources for sufficient water supply to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years
LRDP-UT-3: The project would not result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
LRDP-UT-4: the project would not result in project-related exceedance of state or local solid waste standards or of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals
LRDP-UT-5: The project would not result in inconsistency with federal, state, and local management and reduction statutes and regulations related to solid waste
<i>Cumulative Impacts</i>
The project would not result in cumulative impacts related to scenic vistas or scenic highways.
The project would result in a less than significant cumulative air quality impact from construction emissions.
The project would result in a less than significant cumulative impact related to odors.
The project would not result in a cumulative impact on special-status species or their habitat or loss of heritage trees in the region.
The project would result in a less than significant cumulative energy impact.
There is no cumulative impact related to geology, soils, and seismicity.
The project would result in a less than significant impact related to emergency vehicle access and response.
The project would result in a less than significant impact to runoff and water quality.
The project would result in a less than significant impact on hydrology.
There would be no cumulative impact to changes in the aquifer volume or groundwater table.
The project would result in a less than significant land use impact.
The project would result in a less than significant cumulative impact related to vibration damage and vibration annoyance.
The project would result in a less than significant cumulative impact related to traffic noise.

Environmental Impacts
The project would result in less than significant cumulative impact related to emergency generator testing and emergency helicopter operations.
The project would result in a less than significant cumulative impact on population and housing.
The project would result in a less than significant cumulative impact on public services.
The project would result in a less than significant cumulative impact on recreation.
The project would result in a less than significant cumulative impact related to hazards, emergency access, and construction.
The project would result in a less than significant cumulative impact related to bicycle and pedestrian facilities.
The project would result in a less than significant cumulative impact on VMT.
The project would result in a less than significant cumulative impact on utilities.

2. Findings on Significant Environmental Impacts That Can be Reduced to a Less Than Significant Level

The University finds that the following environmental impacts can and will be mitigated to below a level of significance based upon the implementation of the mitigation measures in the Supplemental EIR. These findings are based on the discussion of impacts in the detailed issue area analyses in Volume 1, Sections 3.1 through 3.16 of the Final Supplemental EIR and the cumulative impacts discussed in Volume 1, Chapter 4 of the Final Supplemental EIR. An explanation of the rationale for each finding is presented below.

a) Aesthetics

Impact LRDP-AES-1: Development under the 2020 LRDP Update could result in degradation of the existing visual character or quality of public views of the site and its surroundings; in urbanized areas, conflict with zoning or other regulations governing scenic quality. (See Final Supplemental EIR Section 3.1.2 pages 3.1-5 through 3.1-7)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-AES-1. Specifically, Mitigation Measure LRDP-AES-1 is feasible and is adopted to mitigate significant effects from Impact LRDP-AES-1 to a less than significant level.

Mitigation Measure LRDP-AES-1: Install New Landscaping

The University will install landscaping within the landscape buffer adjacent to new specific projects that are approved. Installation would occur within 1 year of the development of new projects.

Rationale for Finding: Implementation of Mitigation Measure LRDP-AES-1 will reduce visual impacts of new projects by requiring the installation of landscaping within the landscape buffer adjacent to new projects within one year of the development of new projects.

Impact LRDP-AES-2: Development under the 2020 LRDP Update could introduce substantial new sources of light or glare that would adversely affect daytime or nighttime views in the area. (See Final Supplemental EIR Section 3.1.2 pages 3.1-7 through 3.1-8)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact AES-2. Specifically, Mitigation Measures LRDP-AES-2a, LRDP-AES-2b, LRDP-AES-2c, and LRDP-AES-2d are feasible and are adopted to mitigate significant effects from Impact LRDP-AES-2 to a less than significant level.

Mitigation Measure LRDP-AES-2a: Apply Design Measures to Building Exteriors

Design for specific projects will provide for the use of textured, nonreflective exterior surfaces and nonreflective glass.

Mitigation Measure LRDP-AES-2b: Utilize Directional Lighting Methods

Except as provided in Mitigation Measure LRDP AES-4c, all new outdoor lighting will use directional lighting methods with shielded and cutoff light fixtures to minimize glare and upward-directed lighting.

Mitigation Measure LRDP-AES-2c: Review Lighting, Landscape, and Architectural Features Prior to Installation

Noncutoff, unshielded lighting fixtures used to enhance nighttime views of walking paths, specific landscape features, or specific architectural features will be reviewed by Sacramento Campus Facilities Planning, Design, and Construction staff prior to installation to ensure that the minimum amount of required lighting is proposed to achieve the desired nighttime emphasis, and the proposed illumination creates no adverse effect on nighttime views.

Mitigation Measure LRDP-AES-2d: Implement Updated Lighting Design

The University will implement the use of the specific lighting design and equipment designed to reduce light spill and glare when older lighting fixtures and designs are replaced over time.

Rationale for Finding: Implementation of Mitigation Measure LRDP-AES-2a will require new projects use textured, nonreflective exterior surfaces and nonreflective glass. Mitigation Measure LRDP-AES-2b will require directional lighting methods with shielded and cutoff light fixtures to minimize glare for all new outdoor lighting. Mitigation Measure LRDP-AES-2c will require that Sacramento Campus Facilities Planning, Design, and Construction staff review lighting fixtures prior to installation. Mitigation Measure LRDP-AES-2d will implement the use of the specific lighting design and equipment designed to reduce light spill and glare when older lighting fixtures and designs are replaced over time.

Cumulative Impact related to Light and Glare

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from a cumulative impact to light and glare. With implementation of Mitigation Measures LRDP-AES-2b through LRDP-AES-2d, the campus' contribution to cumulative increases of nighttime lighting under the 2020 LRDP Update would be further minimized, and the 2020 LRDP Update's contribution would not be cumulatively considerable. Development under the 2020 LRDP Update would intensify development in the downtown area. However, with implementation of the Sacramento Campus's design review process and implementation of Mitigation Measure LRDP-AES-2a, the project would not result in a cumulatively considerable contribution to significant daytime glare impacts in the Sacramento area.

Mitigation Measure LRDP-AES-2a: Apply Design Measures to Building Exteriors

Mitigation Measure LRDP-AES-2b: Utilize Directional Lighting Methods

Mitigation Measure LRDP-AES-2c: Review Lighting, Landscape, and Architectural Features Prior to Installation

Mitigation Measure LRDP-AES-2d: Implement Updated Lighting Design

Rationale for Finding: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from cumulative aesthetic impacts. Specifically, Mitigation LRDP-AES-2a through LRDP-AES-2d, are feasible and are adopted to mitigate significant cumulative effects from light and glare (Final Supplemental EIR Volume 1, Chapter 4, page 4-4).

b) Air Quality

Impact LRDP-AQ-2: *Development under the 2020 LRDP Update could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard during construction. (See Final Supplemental EIR Section 3.2.2)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-AQ-2. Specifically, Mitigation Measures LRDP-AQ-2a, LRDP-AQ-2b, LRDP-AQ-2c, and LRDP-AQ-2d are feasible and are adopted to mitigate significant effects from Impact LRDP-AQ-2 to a less than significant level for construction activities (Final Supplemental EIR pages 3.2-36 through 3.2-41).

Mitigation Measure LRDP-AQ-2a: Reduce construction-generated fugitive dust

Land use development projects as part of the implementation of the 2020 LRDP Update will require all construction contractors to implement the following measures to reduce construction-generated fugitive dust. Control of fugitive dust is required per SMAQMD Rule 403 and enforced by SMAQMD staff. The list of required measures was informed by SMAQMD's basic and enhanced construction emission control practices.

- Water exposed soil with adequate frequency to prevent fugitive dust and particulates from leaving the project site. However, do not overwater to the extent that sediment flows off the site. Exposed surfaces include, but are not limited to soil piles, graded areas, and unpaved parking areas,
- Suspend excavation, grading, and/or demolition activity when sustained wind speeds exceed 25 miles per hour (mph).
- Install wind breaks (e.g., plant trees, solid fencing) on the average dominant windward side(s) of construction areas. For purposes of implementation, chain-link fencing with added landscape mesh fabric adequately qualifies as solid fencing.
- For dust control in disturbed but inactive construction areas, apply soil stabilization measures adequate to mitigate airborne particulates as soon as possible.

- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Treat site accesses from the paved road with a 6- to 12-inch layer of wood chips, mulch, gravel, or other approved method to reduce generation of road dust and road dust carryout onto public roads.
- Cover or maintain at least 2 feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Establish a 15 mph speed limit for vehicles driving on unpaved portions of project construction sites.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number of the SMAQMD will also be visible to ensure compliance.

UC Davis will ensure that the implementation of this mitigation measure is consistent with the UC Davis stormwater program and does not result in offsite runoff as a result of watering for dust control purposes.

Mitigation Measure LRDP-AQ-2b: Reduce construction-generated emissions from equipment and vehicle exhaust

Land use development projects as part of the implementation of the 2020 LRDP Update will require all construction contractors to implement the following measures to reduce construction-generated emissions from equipment and vehicle exhaust. The list of required measures was informed by SMAQMD's basic and enhanced construction emission control practices.

- For all development except Aggie Square Phase I, use construction equipment with engines meeting EPA Tier 3 or better emission standards prior to 2025 and EPA Tier 4 Final or better emission standards beginning in 2025. For Aggie Square Phase I, all engines must be EPA certified Tier 4 Final or better, regardless of construction year. Equipment requirements may be waived by UC Davis, but only under any of the following unusual circumstances: If a particular piece of off-road equipment with Tier 4 Final standards or Tier 3 standards is technically not feasible, not commercially available, or there is a compelling emergency need to use off-road equipment that does not meet the equipment requirements above. If UC Davis grants the waiver, the contractor will use the next cleanest piece of off-road equipment available, in the following order: Tier 4 Interim, Tier 3, and then Tier 2 engines.
- Use renewable diesel fuel in all heavy-duty off-road diesel-fueled equipment. Renewable diesel must meet the most recent ASTM D975 specification for Ultra Low Sulfur Diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum diesel fuels sold in California.
- All diesel on-road trucks used to haul construction materials will use a model year 2010 or newer engine.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (California Code of Regulations, Title 13, Sections 2449[d][3] and

2485). Provide clear signage that posts this requirement for workers at the entrances to the site.

- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation (California Code of Regulations, Title 13, Sections 2449 and 2449.1).
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Mitigation Measure LRDP-AQ-2c: Reduce evaporative emissions during architectural coatings

Land use development projects as part of the implementation of the 2020 LRDP Update will require all construction contractors to use no- or low-solids content (i.e., no- or low-volatile organic compound [VOC]) architectural coatings with a maximum VOC content of 50 grams per liter.

Mitigation Measure LRDP-AQ-2d: Offset construction-generated NO_x emissions in excess of SMAQMD's threshold of significance

Construction-generated emissions of NO_x would exceed the SMAQMD's threshold of significance during 2020, 2022 and 2024.

Because construction-generated NO_x emissions would exceed SMAQMD's threshold of significance, UC Davis will pay a mitigation fee in the amount of \$4,558 and an administrative fee in the amount of \$228 to SMAQMD to reduce the project impacts from construction NO_x emissions to a less-than-significant level. This fee will be used to fund emissions reduction projects within the Sacramento Valley Air Basin. The types of projects that have been used in the past to achieve such reductions include electrification of stationary internal combustion engines (such as agricultural irrigations pumps); replacing old trucks with new, cleaner, more efficient trucks; and a host of other stationary and mobile source emissions-reducing projects. The fee amount is based on an offset cost of \$30,000 per ton of NO_x and the total quantity of NO_x emissions in excess of SMAQMD's NO_x threshold (304 pounds or 0.15 ton based on the daily exceedances in 2020, 2022, and 2024). The administrative fee is 5 percent of the fee amount.

UC Davis will pay the mitigation and administrative fees in full prior to issuing a demolition or grading permit for the first project developed under the 2020 LRDP Update. For construction projects under the 2020 LRDP Update occurring during 2020, 2022, and 2024, construction contractors will provide annual construction activity monitoring data to estimate actual construction emissions. UC Davis will submit the annual construction activity monitoring data and an estimate of actual annual NO_x emissions to SMAQMD for review by February 1 of each year for the prior construction year. The annual report will reconcile paid fees for the prior year relative to actual emissions. If more emissions were generated than fees paid, UC Davis will submit payment for the deficient amount based on an offset cost of \$30,000 per ton of NO_x. If more fees were paid than emissions generated, SMAQMD will either issue UC Davis a refund for the surplus or a credit that can be applied to future fee payments.

An alternative payment plan may be negotiated by UC Davis based on the timing of construction phases that are expected to exceed the SMAQMD's threshold of significance. Any alternative payment plan must be acceptable to SMAQMD and agreed upon in writing prior to issuance of a demolition or grading permit by UC Davis.

In coordination with SMAQMD, UC Davis, or its designee, may reanalyze construction NO_x emissions from the 2020 LRDP Update prior to starting construction to update the required mitigation and administrative fees. The analysis must be conducted using SMAQMD-approved emissions model(s) and the fee rates published at the time of reanalysis. The analysis may include onsite measures to reduce construction emissions if deemed feasible by UC Davis. All onsite measures assumed in the analysis must be included in the construction contracts and be enforceable by UC Davis.

Rationale for Finding: Implementation of Mitigation Measure LRDP-AQ-2a includes measures to reduce construction-generated fugitive dust. Mitigation Measure LRDP-AQ-2b would reduce construction-generated emissions from equipment and vehicle exhaust. Mitigation Measure LRDP-AQ-2c would reduce evaporative emissions during architectural coatings. Mitigation Measure LRDP-AQ-2d would offset construction-generated NO_x emissions in excess of SMAQMD's threshold of significance.

Impact LRDP-AQ-3: Development under the 2020 LRDP Update could result in regional criteria pollutant emissions in excess of SMAQMD's thresholds of significance during construction, thereby exposing sensitive receptors to substantial pollutant concentrations. (See Final Supplemental EIR Section 3.2.2 pages 3.2-54 through 3.2-56)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment during construction from Impact LRDP-AQ-3. Mitigation Measure LRDP-AQ-2a through LRDP-2d are feasible and are adopted to mitigate significant effects from Impact LRDP-AQ-3 to a less than significant level for construction activities.

Mitigation Measure LRDP-AQ-2a: Reduce construction-generated fugitive dust

Mitigation Measure LRDP-AQ-2b: Reduce construction-generated emissions from equipment and vehicle exhaust

Mitigation Measure LRDP-AQ-2c: Reduce evaporative emissions during architectural coatings

Mitigation Measure LRDP-AQ-2d: Offset construction-generated NO_x emissions in excess of SMAQMD's threshold of significance

Rationale for Finding: Implementation of Mitigation Measures LRDP-AQ-2a through LRDP-AQ-2d would reduce construction-generated emissions below SMAQMD's thresholds of significance. Onsite measures include watering exposed soil, installing wind breaks, establishing a 15 mph speed limit on unpaved roads, requiring use of construction equipment with engines meeting U.S. Environmental Protection Agency (EPA) Tier 3 or 4 emission standards, requiring use of renewable diesel in all heavy-duty off-road diesel-fueled equipment, minimizing idling times of construction equipment, and requiring use of low volatile organic compound (VOC) architectural coatings. Offsite measures include the payment of mitigation fees to SMAQMD for remaining NO_x emissions in excess of their threshold.

Impact LRDP-AQ-3: Development under the 2020 LRDP Update could result regional criteria pollutant emissions in excess of SMAQMD's thresholds of significance during operations, thereby exposing receptors to substantial pollutant concentrations. (See Final Supplemental EIR Section 3.2.2 pages 3.2-54 through 3.2-56)

FINDING: The University finds that changes or alterations have been incorporated into the Project which reduce significant effects on the environment during operations from Impact LRDP-AQ-3. Mitigation Measures LRDP-AQ-2c and TRA-1a are feasible and are adopted to mitigate significant effects from Impact LRDP-AQ-3, but do not reduce them to a less than significant level for operational activities. Therefore, the impact is significant and unavoidable.

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

Mitigation Measure LRDP-AQ-2e: Reduce operational PM10 emissions

Rationale for Finding: While Mitigation Measures LRDP-TRA-1a and LRDP-AQ-2e will contribute to mobile source emissions reductions, reductions achieved by the measures may not be enough to reduce particulate matter emissions to below SMAQMD's thresholds. At the programmatic-level, there is no feasible mitigation beyond the UC Sustainable Practices Policy, UC Davis' Green Commuter Program, and Mitigation Measures LRDP-TRA-1a and LRDP-AQ-2e to reduce operational particulate matter emissions below SMAQMD's thresholds. As such, levels of particulate matter emissions associated with full implementation of the 2020 LRDP Update could contribute a significant and unavoidable level of particulate pollution that could degrade regional air quality within the Sacramento Valley Air Basin.

Impact LRDP-AQ-3: *Development under the 2020 LRDP Update could result in an exceedance of localized particulate matter emissions during construction that would exceed SMAQMD's thresholds of significance, thereby exposing sensitive receptors to substantial pollutant concentrations. (See Final Supplemental EIR Section 3.2.2)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-AQ-3 and ensure localized particulate matter emissions do not exceed SMAQMD's thresholds of significance. Mitigation Measures LRDP-AQ-2a and LRDP-AQ-2b are feasible and are adopted to mitigate significant effects from Impact LRDP-AQ-3 to a less than significant level for construction activities (Page 3.2-51 of the Final Supplemental EIR).

Mitigation Measure LRDP-AQ-2a: Reduce construction-generated fugitive dust

Rationale for Finding: Implementation of Mitigation Measure LRDP-AQ-2a includes measures to reduce construction-generated fugitive dust below SMAQMD's thresholds of significance. Measures include watering exposed soil, installing wind breaks, and establishing a 15 mph speed limit on unpaved roads.

Impact LRDP-AQ-3: *Development under the 2020 LRDP Update may expose sensitive receptors to substantial toxic air contaminants during project operation. (See Final Supplemental EIR Section 3.2.2)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-AQ-3 and would reduce operational health risks to less than significant. Mitigation Measure LRDP-AQ-3b is feasible and is adopted to mitigate significant effects from Impact LRDP-AQ-3 to a less than significant level for construction activities (Pages 3.2-54 through 3.2-56 of the Supplemental EIR).

Mitigation Measure LRDP-AQ-3b: Reduce receptor exposure to operations generated toxic air contaminants

UC Davis will require all diesel emergency generators on the Sacramento Campus to use renewable diesel fuel. Renewable diesel must meet the most recent ASTM D975 specification for Ultra Low Sulfur Diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum diesel fuels sold in California. The five existing diesel generators at the Central Energy Plant must be transitioned to renewable diesel fuel no later than at completion of construction of the Replacement Hospital Tower. The diesel emergency generator at the Facilities Support Services Building and at the Administrative Support Building must be transitioned to renewable diesel fuel no later than December 31, 2030.

UC Davis will then employ a tiered approach to further reduce sensitive receptor exposure to toxic air contaminants generated by the Sacramento Campus Central Energy Plant. The selected control strategy must be implemented prior to December 31, 2039. The approach will be taken in the following way:

- Replace at least three of the existing Tier 0 generators with engines meeting EPA Tier 4 Final or better emission standards. If the engine cannot be replaced, then;
- Require at least three of the existing Tier 0 generators operate with the most effective California Air Resources Board Verified Diesel Emissions Controls (VDECs) available for the engine type (effectively level 3). If the engine cannot be retrofitted with VDECs, then;
- Require all existing Tier 0 generators without VDECs to increase the stack height by at least 20 feet.

The above options do not preclude replacement of existing diesel engines with zero-emissions equipment (e.g., additional solar with battery backup, fuel cells), should that equipment be cost effective and achieve functional operating requirements for the Sacramento Campus Central Energy Plant.

Rationale for Finding: Implementation of Mitigation Measure LRDP-AQ-3b would require all diesel generators to use renewable fuel. The measure also requires UC Davis to employ a tiered approach to further reduce exposure to TACs generated by the Central Energy Plant.

Cumulative Impact related to Operational Criteria Pollutant Emissions

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from a cumulative impact related to operational criteria pollutant emissions. Implementation of Mitigation Measure LRDP-AQ-3b is feasible and will mitigate significant effects from cumulative impacts related to operational criteria pollutants to less than significant.

Mitigation Measure LRDP-AQ-3b: Reduce receptor exposure to operations generated toxic air contaminants

Rationale for Finding: Implementation of Mitigation Measure LRDP-AQ-3b will reduce impacts related to the project's contribution to operational criteria pollutant emissions (Supplemental EIR Volume 1, Chapter 4, page 4-6).

c) Biological Resources

Impact LRDP-BIO-2: *Development under the 2020 LRDP Update could disturb vegetation-nesting migratory birds and raptors, including Swainson's hawk and white-tailed kite. (See Final Supplemental EIR Section 3.3.2)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-BIO-1. Specifically, Mitigation Measure LRDP-BIO-2 is feasible and is adopted to mitigate significant effects from Impact LRDP-BIO-2 to a less than significant level for construction activities (Supplemental EIR pages 3.3-36 through 3.3-41).

Mitigation Measure LRDP-BIO-2: Conduct preconstruction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers

For any projects implemented under the 2020 LRDP Update that would require vegetation removal (i.e., trees, shrubs, and ruderal vegetation) or would result in construction disturbances in the vicinity of vegetated areas, the following measures will be implemented prior to initiation of construction to avoid and minimize impacts to Swainson's hawk, white-tailed kite, and other vegetation-nesting migratory birds and raptors, and to avoid violation of the MBTA, CESA, and California Fish and Game Code Sections 3503, 3503.5, and 3511.

- For construction activities that occur during the nesting season for migratory birds and raptors, between February 15 and August 31, the University will ensure that a qualified wildlife biologist familiar with the nesting behavior of bird species that occur in the plan area to conduct a preconstruction nesting bird survey. The nesting bird surveys will be conducted no more than 14 days prior to vegetation removal or construction disturbance activities near nesting habitat. The survey will include a search of all trees and shrubs, and ruderal areas that provide suitable nesting habitat for birds and raptors within the construction disturbance area. In addition, a 600-foot area around the construction area will be surveyed for nesting raptors and a 100-foot area around the construction area will be surveyed for songbirds.
- If no special-status raptor species (i.e., Swainson's hawk or white-tailed kite) or active bird or raptor nests are detected during the preconstruction surveys, then no additional measures are required. If an active nest is found in the survey area, a no-disturbance buffer will be established to avoid disturbance or destruction of the nest site until the end of the breeding season (generally August 31) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the construction area (this date varies by species). The extent of these buffers will be determined by a qualified biologist in coordination with any applicable agencies (as determined by species), and will depend on the level of noise or construction disturbance taking place, the line-of-sight between the nest and the disturbance, ambient levels of noise and other non-project disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species; however, a minimum of 50 feet for songbirds and 300 feet for raptors is typical. In developed habitats, buffer areas may be adjusted based on presence of existing barriers.

Rationale for Finding: Implementation of Mitigation Measure LRDP-BIO-2 includes measures to conduct preconstruction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers.

Impact LRDP-BIO-3: Development under the 2020 LRDP Update could disturb structure-nesting migratory birds, including purple martin. (See Final Supplemental EIR Section 3.3.2)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-BIO-3. Specifically, Mitigation Measure LRDP-BIO-3 is feasible and is adopted to mitigate significant effects from Impact LRDP-BIO-3 to a less than significant level for construction activities (Supplemental EIR pages 3.3-13 through 3.3-15).

Mitigation Measure LRDP-BIO-3: Modify existing structures during the non-breeding season for purple martin and other structure-nesting migratory birds or implement exclusion measures to deter nesting

For any projects implemented under the 2020 LRDP Update that would modify or demolish any existing building structures, the following measures will be implemented prior to initiation of construction to avoid and minimize impacts on purple martins and other structure-nesting migratory birds, and to avoid violation of the MBTA and California Fish and Game Code Section 3503.

- Conduct building demolition and modification activities during the non-breeding season for structure-nesting migratory birds (generally September 1 through January 31). If this is not possible, the University will implement the following avoidance measures.
- Prior to the start of each phase of demolition/construction that is anticipated to occur during the migratory bird breeding season (generally February through August), the University will retain a qualified wildlife biologist to thoroughly inspect structures that would be modified or disturbed to locate remnant bird nests or areas such as drain holes or crevices that could be used as nesting areas by migratory birds such as purple martins. It is preferable to perform this survey in the non-breeding season (September 1 through January 31) so that if nests are found and are determined to be inactive, they may be removed.
- After inactive nests are removed and prior to construction that would occur between February 1 and August 31, known or potential nesting areas on or within the building structure to be modified or demolished will be covered with a suitable exclusion material that will prevent birds from nesting (i.e., 0.5- to 0.75-inch mesh netting, plastic tarp, or other suitable material safe for wildlife). Portions of the existing structures containing drain holes or crevices that would be modified or disturbed also will be covered or filled with suitable material to prevent nesting (i.e., fiberglass insulation, foam padding, and polyvinyl chloride [PVC]/acrylonitrile butadiene styrene [ABS] caps). The University will ensure that a qualified wildlife management specialist experienced with installation of bird exclusion materials will ensure that exclusion devices are properly installed and will avoid inadvertent entrapment of migratory birds. All exclusion devices will be installed before February 1 and will be monitored throughout the breeding season (typically several times a week). The exclusion material will be anchored so that birds cannot attach their nests to the structures through gaps in a net.
- Exclusion devices for migratory birds will be installed consistent with bat exclusion measures and in a manner that does not entrap day-roosting bats.
- If exclusion material is not installed on structures prior to February 1 and migratory birds colonize a structure, removal or modification to that portion of the structure may not occur

until after August 31, or until a qualified biologist has determined that the young have fledged and the nest is no longer in use.

- If surveys determine that no active bird nests are present within existing structures to be modified or demolished and appropriate steps are taken to prevent migratory birds from constructing new nests as described in the preceding measures, work can proceed at any time of the year.

Rationale for Finding: Implementation of Mitigation Measure LRDP-BIO-3 includes measures to modify structures to avoid impacts on purple martins and other structure-nesting birds, such as conducting demolition activities during the non-breeding season, conducting inspections, and covering structures with exclusion material.

Impact LRDP-BIO-4: *Development under the 2020 LRDP Update could disturb structure-roosting bats. (See Final Supplemental EIR Section 3.3.2)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-BIO-4. Specifically, Mitigation Measure LRDP-BIO-4 is feasible and is adopted to mitigate significant effects from Impact LRDP-BIO-4 to a less than significant level (Supplemental EIR pages 3.3-16 through 3.3-17).

Mitigation Measure LRDP-BIO-4: Conduct pre-construction surveys for roosting bats and implement protection measures

Baseline data about how bats may use structures in the plan area, their individual numbers, or how they vary seasonally are not available. Daily and seasonal variations in habitat use by bats is common. To obtain the highest likelihood of detection, the following pre-construction bat surveys will be conducted within the construction area prior to modification or demolition of existing building structures. If surveys determine that bats are roosting in the construction area, the University will implement the following protective measures.

Conduct Pre-Construction Surveys at Structures

- Before work begins on any building or structure, qualified biologists will conduct a daytime search for bat signs and evening emergence surveys to determine whether the structure is being used as a roost. Biologists conducting daytime surveys will listen for audible bat calls and will use the naked eye, binoculars, and a high-powered spotlight to inspect crevices, drain holes, and other visible features that could house bats. Building surfaces and the ground around the structure will be surveyed for bat signs, such as guano, staining, and prey remains. Surveys will occur no earlier than two weeks prior to the construction start-date.
- Qualified biologists also will conduct evening emergence surveys at structures that contain suitable roosting areas. The surveys will consist of at least one biologist stationed near potential entry and exit points of the structure watching for emerging bats from a half hour before sunset to 1–2 hours after sunset for a minimum of 2 nights at each survey location within the season that construction would be taking place. Surveys may take place over several nights to fully cover the extent of structure work. All emergence surveys will be conducted during favorable weather conditions (calm nights with temperatures conducive to bat activity and no precipitation predicted). Survey methodology may be supplemented as new research identifies advanced survey techniques and equipment that would aid in bat

detections. Acoustic detectors will be used during emergence surveys to obtain data on bat species present in the survey area at the time of detection.

- If a building or structure proposed for modification or demolition is identified as supporting an active bat roost, additional surveys may be required to determine how the structure is used by bats—whether it is used as a night roost, maternity roost, migration stopover, or for hibernation.

Identify Protective Measures for Bats Using Structures

- If it is determined that bats are using building structures within or adjacent to the construction area as roost sites, the University will coordinate with CDFW to identify protective measures to avoid and minimize impacts on roosting bats based on the type of roost and timing of activities. These measures could include the following actions.
 - If a non-maternity roost is located within a structure that would be modified or disturbed in a manner that would expose the roost, bats will be excluded from the structure by a qualified wildlife management specialist working with a bat biologist. An exclusion plan will be developed in coordination with CDFW that identifies the type of exclusion material/devices to be used, the location and method for installing the devices, and monitoring schedule for checking the effectiveness of the devices. Exclusion devices will be installed between September 15 and October 31 to avoid affecting maternal and hibernating bat roosts and will take place during weather and temperature conditions conducive to bat activity. Because bats are expected to tolerate temporary construction noise and vibrations, bats will not be excluded from structures if no direct impacts on the roost are anticipated.
 - An alternative to installing exclusion devices would be to make structural changes to a known roost proposed for removal to create conditions in the roost that are undesirable to roosting bats and encourage the bats to leave on their own (e.g., open additional portals so that the temperature, wind, light, and precipitation regime in the roost change). Structural changes to the roost will be authorized by CDFW and will be performed during the appropriate exclusion timing (listed above) to avoid harming bats.
 - If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or until a qualified biologist has determined that the roost is no longer active.

Rationale for Finding: Implementation of Mitigation Measure LRDP-BIO-4 includes preconstruction surveys to avoid impacts on structure-roosting bats and implementing protective measures if bats are found.

Impact LRDP-BIO-5: Development under the 2020 LRDP Update could conflict with a local policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance. (See Final Supplemental EIR Section 3.3.2)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-BIO-5. Specifically, Mitigation Measures LRDP-BIO-5a and LRDP-BIO-5b are feasible and are adopted to mitigate significant effects from Impact LRDP-BIO-5 to a less than significant level (Supplemental EIR pages 3.3-17 through 3.3-18).

Mitigation Measure LRDP-BIO-5a: Avoid removal of protected trees

Before a project is approved under the 2020 LRDP Update, the University will determine whether a tree that would be protected under the University's tree ordinance (i.e., Healthy valley oak trees with trunk diameters of 33 inches or greater at a height of 24 inches from the ground, or Specimen Trees: Healthy trees or stands of trees that are of high value to the campus because of their size, species, extraordinary educational and research value, and other exceptional local importance) is present on the site. If a protected tree is present within the development footprint, the University will modify project design to avoid the protected tree, if feasible.

Mitigation Measure LRDP-BIO-5b: Compensate for unavoidable loss of protected trees

If avoidance is not feasible, the University will replace the removed heritage or specimen tree with the same species as any removed specimen tree at a ratio of 3:1.

Rationale for Finding: Implementation of Mitigation Measures LRDP-BIO-5a and LRDP-BIO-5b would avoid removal of protected trees per the University's tree ordinance and would compensate for loss of trees if avoidance is not feasible at a ratio of 3:1.

d) Cultural Resources

Impact LRDP-CUL-2: *Development under the 2020 LRDP Update could cause an adverse change in the significance of an archaeological resource. (See Final Supplemental EIR Section 3.4.2)*

FINDING: No archaeological resources have been identified within the 2020 LRDP Update plan area. However, there is potential that buried archaeological resources could be encountered during construction. Specifically, Mitigation Measures LRDP-CUL-2a and LRDP-CUL-2b are feasible and are adopted; implementation of Mitigation Measures LRDP-CUL-2a and LRDP-CUL-2b would ensure that impacts on unknown archaeological resources are avoided, reducing this impact to a less than significant level. (Final Supplemental EIR pages 3.4-18 through 3.4-19).

Mitigation Measure LRDP-CUL-2a: Conduct cultural resources sensitivity training

Prior to any ground disturbance, construction crews will be required to attend a cultural resources sensitivity training. The training will focus on identifying potential archaeological resources as well as human remains. If potential archaeological resources or human remains are encountered, construction crews will be instructed to notify the University immediately.

Mitigation Measure LRDP-CUL-2b: Stop work in the event of discovery of an archaeological resource

If an archaeological resource is discovered during construction, all project-related ground disturbance within 100 feet of the find will cease. The University will contact a qualified archaeologist within 24 hours to inspect the site. If a resource is determined to qualify as a unique archaeological resource (as defined by CEQA), and the University determines, in compliance with PRC 21083.2, which requires preservation in place as a first option, that the resource cannot feasibly be avoided, the University will retain a qualified archaeologist to conduct excavations to recover the material. Any archaeologically important artifacts recovered during monitoring will be cleaned, catalogued, and analyzed, with the results presented in an archaeological data recovery report.

Rationale for Finding: Implementation of Mitigation Measures LRDP-CUL-2a and LRDP-CUL-2b would entail conducting cultural resources sensitivity training and require that work will be stopped in the event of discovery of an archaeological resource.

Impact LRDP-CUL-3: *Development under the 2020 LRDP Update could cause disturbance of any human remains, including those interred outside of dedicated cemeteries. (See Final Supplemental EIR Section 3.4.2)*

FINDING: There is a high potential to encounter historic-era human remains, especially in the northern portion of the Sacramento Campus, where an unmarked cemetery associated with the Sacramento County Hospital was discovered in 2005. Damage or destruction of human remains would be a significant impact. Specifically, Mitigation Measures LRDP-CUL-3a and LRDP-CUL-3b are feasible and are adopted; implementation of Mitigation Measures LRDP-CUL-3a and LRDP-CUL-3b would ensure that impacts on unknown archaeological resources are less than significant. (Supplemental EIR pages 3.3-19 through 3.3-20).

Mitigation Measure LRDP-CUL-3a: Retain qualified archaeologist

As a first step during a project's environmental review, the University will determine whether the project being implemented under the 2020 LRDP Update is in the portion of the campus where human remains associated with the former burial ground could likely be encountered. If the project site is in or near that area, the University will retain a qualified archaeologist to review the project information and, as necessary, develop and implement a subsurface testing program to check for human remains. If no human remains are encountered, the project may proceed to construction. If human remains are encountered, Mitigation Measure LRDP-CUL-3b will be implemented.

Mitigation Measure LRDP-CUL-3b: Stop work if human remains are encountered

In the event of a discovery on campus of human bone, suspected human bone, or a burial, all excavation within 100 feet of the find will halt immediately and the University will contact a qualified archaeologist or the County Coroner within 24 hours to determine whether the bone is human. Consistent with California Health and Safety Code Section 7050.5(b), which prohibits disturbance of human remains uncovered by excavation until the coroner has made a finding relative to PRC Section 5097.5 procedures, the University will ensure that the remains, and a reasonable buffer around the remains established in coordination with the coroner or archaeologist, are protected against further disturbance. If it is determined that the find is of Native American origin, the University will comply with the provisions of PRC Section 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD).

If human remains cannot be left in place, the University will ensure that the qualified archaeologist and the MLD are provided opportunity to confer on archaeological treatment of human remains, and that appropriate studies, as identified through this consultation, are carried out prior to reinterment. The University will provide results of all such studies to the local Native American community and will provide an opportunity of local Native American involvement in any interpretative reporting.

If the human remains are determined to be historic, and cannot be avoided and preserved in place, the area of the project site will be excavated under the supervision of an archaeologist and all human remains and associated artifacts will be removed from the site and analyzed. After

analysis, all recovered human remains and associated artifacts will be placed in caskets and buried in a single mass grave at a local cemetery.

Rationale for Finding: Implementation of Mitigation Measures LRDP-CUL-3a and LRDP-CUL-3b would entail conducting cultural resources sensitivity training and require that work will be stopped in the event of discovery of human remains.

e) Energy

Impact LRDP-EN-1: *Wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. (See Final Supplemental EIR Section 3.5.2)*

FINDING: UC Davis has incorporated a wide variety of energy efficient design measures to reduce wasteful, inefficient, or unnecessary energy use into the Project. In addition, Mitigation Measures LRDP-TRA-1a and LRDP-GHG-2 include project-specific measures to further reduce energy consumption associated with the 2020 LRDP Update (Final Supplemental EIR Volume 1, Section 3.5 pages 3.5-11 through 3.5-14).

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

During the 2020–2021 academic year, UC Davis shall coordinate with SacRT and other relevant transit operators to establish baseline on-time performance metrics for routes operating on Broadway and Stockton Boulevard within the vicinity of the Sacramento Campus consistent with established standards and methods. This process should consider the effects of the current COVID-19 pandemic on transit performance. UC Davis shall additionally coordinate with SacRT and other relevant transit operators to assess on-time performance for routes operating on Broadway and Stockton Boulevard within the vicinity of the Sacramento Campus every two years over the 2020 LRDP Update planning horizon. During its standard project review process, UC Davis shall forecast and analyze traffic conditions on Broadway and Stockton Boulevard within the vicinity of the Sacramento Campus for individual development projects proposed under the 2020 LRDP Update that are expected to affect operations on these roadways. Relative to baseline levels, if operations on Broadway and Stockton Boulevard are found to cause transit services to fail to meet established standards or to worsen transit performance for services that already fail to meet established standards, or if a project-level analysis indicates the same, UC Davis shall institute TDM strategies to reduce peak hour vehicle trips and, in turn, delays to transit service on Broadway and Stockton Boulevard within the vicinity of the Sacramento Campus.

The implementation of TDM strategies shall offset degradations to transit on-time performance in excess of established on-time performance standards (per the most up-to-date SacRT Service Standards) that are attributable to the implementation of the 2020 LRDP Update.

Implementation of TDM strategies that would reduce delays to transit service on Broadway to Stockton Boulevard include strategies to reduce vehicle travel to and from campus and to minimize the effect of campus operations on surrounding roadways. Specific potential TDM strategies include, but are not limited to, the following:

- Modify campus-operated shuttles to avoid Broadway and Stockton Boulevard, to the extent practical;
- Promote walking and bicycling for student and employee trips to and from the UC Davis Sacramento Campus;

- Expand public transit service, including additional service connecting campus with student and employee residential areas;
- Implement a fair value commuting program or other pricing of vehicle travel and parking;
- Provide carpool and/or vanpool incentive programs;
- Allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours; and
- Offer remote working options.

The TDM strategies implemented to reduce delays to transit service at these locations will be consistent with existing and planned TDM programs on campus. If these TDM strategies are not sufficient to reduce delays to transit service per the criteria described above, additional TDM measures or adjustments to the measures above shall be implemented, as needed to reduce peak hour intersection delay consistent with the criteria described above.

Mitigation Measure LRDP-GHG-2: Implement Verifiable Actions or Activities or Purchase the Equivalent GHG Credits from a CARB Approved Registry or a Locally Approved Equivalent Program to Reduce GHG Emissions Generated by the Sacramento Campus

As part of this mitigation measure, UC Davis is making the following separate, though overlapping, GHG emission reduction commitments: (1) As a CARB-covered entity, UC Davis will ensure emissions generated by the Central Energy Plant comply with CARB's cap and trade program; (2) Per the UC Sustainable Practices Policy, Scope 1 and Scope 2 GHG emissions generated by the Sacramento Campus shall, commencing in 2025, be entirely carbon neutral; (3) Also per the UC Sustainable Practices Policy, commencing in 2050, Scope 1, Scope 2, and Scope 3 (commuting and air travel) emissions generated by the Sacramento Campus shall be offset; and (4) UC Davis shall undertake additional action to achieve the following GHG reduction performance standards for the Sacramento Campus:

- By 2030, GHG emissions generated by the Sacramento Campus shall not exceed 60 percent of emissions generated by the campus in 1990.
- By 2040, GHG emissions generated by the Sacramento Campus shall not exceed 20 percent of emissions generated by the campus in 1990.
- By 2045 and thereafter, the Sacramento Campus shall achieve carbon neutrality (i.e., net zero emissions).

GHG emissions generated by the Sacramento Campus in 1990 have been quantified as part of this Supplemental EIR and total 50,404 metric tons CO₂e. This yields the following GHG targets for the above performance standards.

- By 2030, GHG emissions generated by the Sacramento Campus shall not exceed 30,242 metric tons CO₂e.
- By 2040, GHG emissions generated by the Sacramento Campus shall not exceed 10,081 metric tons CO₂e.
- By 2045 and thereafter, GHG emissions generated by the Sacramento Campus shall not exceed net 0 metric tons CO₂e.

The 2030, 2040, and 2045 reduction targets are required to be achieved based on actual emission calculations as completed in the future, as discussed below under “Measure Monitoring and Reporting,” and may therefore change overtime.

It is possible that some strategies implemented under the below commitments could independently achieve the performance standards of this measure. Various combinations of strategies could also be pursued to optimize total costs or community co-benefits. UC Davis will be responsible for determining the overall mix of strategies necessary to ensure the performance standards to mitigate GHG generated by the Sacramento Campus. Each of the measure commitments is described in more detail below.

Compliance with CARB's Cap and Trade Program

Any carbon credits purchased for the purpose of compliance with CARB's cap and trade program shall be purchased from an accredited carbon credit market. Such credits (or California Carbon Offsets) shall be registered with, and retired¹ by an Offset Project Registry, as defined in 17 California Code of Regulations § 95802(a), approved by the California Air Resources Board (CARB) such as, but not limited to, Climate Action Reserve (CAR), American Carbon Registry or Verra (formerly Verified Carbon Standard). In order to demonstrate that the carbon credits provided are real, permanent, additional, quantifiable, verifiable, and enforceable, as those terms are defined in the California Health and Safety Code Sections 38562(d)(1) and (2), UC Davis shall document in its annual report: (i) the protocol used to develop those credits, and (ii) the third-party verification report concerning those credits. As and when the credits are retired, UC Davis shall document in its annual report the unique serial numbers of those credits showing that they have been retired.

Compliance with the UC Sustainable Practices Policy

Compliance with the UC Sustainable Practices Policy for carbon neutrality will be accomplished through reductions in direct emissions, the purchase of renewable electricity and possibly biomethane, and the purchase of carbon credits. UC Davis will purchase voluntary carbon credits as the final action to reach the GHG emission reduction targets outlined in the UC Sustainable Practices Policy. As part of the University Carbon Neutrality Initiative, internal guidelines have been developed to ensure that any use of credits for this purpose will result in additional, verified GHG emissions reductions from actions that align, as much as possible, with the University's research, teaching, and public service mission. Specifically, any voluntary carbon credits used by UC Davis to comply with the UC Sustainable Practices Policy will:

1. Prioritize local (within the Sacramento region) and in-state credits over national credits. Credits shall be third-party verified by a major registry recognized by CARB such as CAR. If sufficient local and in-state credits are not available, UC Davis will purchase CARB conforming national credits registered with an approved registry.
2. Be reported publicly and tracked through the Climate Registry (TCR) as required by the UC Sustainable Practices Policy.² TCR is a non-profit organization governed by U.S. states and Canadian provinces and territories. UC Davis TCR reports will be third-party verified and posted publicly.

¹ When Climate Reserve Tonnes (CRTs) are transferred to a retirement account in the Reserve System, they are considered retired. Retirement accounts are permanent and locked to prevent a retired CRT from being transferred again. CRTs are retired when they have been used to offset an equivalent ton of emissions or have been removed from further transactions on behalf of the environment.

² Reports can be accessed at: <https://cris4.org/>.

Additional GHG Reduction Actions

UC Davis shall do one or more of the following options to reduce GHG emissions generated by the Sacramento Campus to achieve the measure performance standards.

1. Implement onsite GHG reduction actions on the Sacramento Campus (Option 1).
2. Implement GHG reduction actions throughout the communities surrounding the Sacramento Campus in the City of Sacramento (Option 2).
3. Purchase CARB verified GHG credits (Option 3).

Each of the options is described in more detail below.

Onsite GHG Reduction Actions

Actions to reduce GHG emissions on the Sacramento Campus (Option 1) must exceed or not duplicate activities implemented pursuant to the UC Sustainable Practices Policy. Potential actions may include, but are not limited to the following.

- **(1)-1:** All campus fleet vehicles scheduled for retirement shall be replaced with fuel efficient, LEV, ZEV, and/or alternative-fueled vehicles consistent with the needs of the campus.
- **(1)-2:** New construction shall be required to employ solar roofs on at least 30 percent of roof square footage, unless mechanical equipment or other building specifications safely prohibit inclusion of solar roofs. The inclusion of solar roofs may be part of meeting LEED Silver or equivalent requirements.
- **(1)-3:** Require use of natural alternatives to HFCs that are feasible and readily available for refrigeration and air conditioning. Natural refrigerants include ammonia, CO₂, or hydrocarbons. UC Davis shall require all future development to meet CARB regulations restricting HFCs, if and when adopted.

If UC Davis complies with the performance standards of this measure, as specified above, through implementation of onsite GHG reduction actions (Option 1), then no further action shall be required. If additional GHG reductions are required to meet the performance standards, they may be achieved through offsite GHG reduction actions (Option 2) or procurement of GHG credits (Option 3).

Offsite GHG Reduction Actions

Actions to reduce GHG emissions throughout the surrounding community (Option 2) may include, but are not limited to the following.

- **(2)-1:** Develop a residential energy retrofit package in conjunction with the SMUD to achieve reductions in natural gas and electricity usage by the surrounding community. The retrofit package may include identification and sealing of dust and air leaks, installation of programmable thermostats, replacement of interior high use incandescent lamps with compact florescent lamps or LEDs, replacement of natural gas dryers with electric clothes dryers, replacement of windows with double-pane or triple-pane solar-control low-E argon gas filled wood frame windows, or other strategies selected by UC Davis in consultation with SMUD.

- **(2)-2:** Develop a commercial energy retrocommissioning package in conjunction with SMUD to improve the energy efficiency of surrounding commercial buildings by at least 15 percent, relative to current (2019) energy consumption levels.
- **(2)-3:** Develop a residential rooftop solar installation program in conjunction with SMUD. The installation program will allow surrounding homeowners to install solar photovoltaic systems at zero or minimal up-front cost. All projects installed under this measure must be designed for high performance (e.g., optimal full-sun location, solar orientation) and additive to utility RPS goals.
- **(2)-4:** Develop a commercial rooftop solar installation program in conjunction with SMUD. The installation program will allow surrounding business owners to install solar photovoltaic systems at zero or minimal up-front cost. All projects installed under this measure must be designed for high performance (e.g., optimal full-sun location, solar orientation) and additive to utility RPS goals.
- **(2)-5:** Partner with Sacramento Regional Transit to assess the feasibility of improving high-quality, regional transit serving the Sacramento Campus.

GHG reductions achieved by all offsite projects must be real, permanent, quantifiable, verifiable, enforceable, and additional (per the definition in California Health and Safety Code Sections 38562(d)(1), as defined further below under Option 3. If UC Davis complies with the performance standards of this measure, as specified above, through implementation of offsite GHG reduction actions (Option 2), then no further action shall be required. If additional GHG reductions are required to meet the performance standards, they may be achieved through onsite GHG reduction actions (Option 1) or procurement of GHG credits (Option 3).

GHG Credits

UC Davis may purchase GHG credits from a voluntary GHG credit provider that has an established protocol that requires projects generating GHG credits to demonstrate that the reduction of GHG emissions are real, permanent, quantifiable, verifiable, enforceable, and additional (per the definition in California Health and Safety Code Sections 38562(d)(1) and (2)). Definitions for these terms are as follows.

- **Real:** Estimated GHG reductions should not be an artifact of incomplete or inaccurate emissions accounting. Methods for quantifying emission reductions should be conservative to avoid overstating a project's effects. The effects of a project on GHG emissions must be comprehensively accounted for, including unintended effects (often referred to as "leakage")³.
- **Additional:** GHG reductions must be additional to any that would have occurred in the absence of the Climate Action Reserve, or of a market for GHG reductions generally. "Business as usual" reductions (i.e., those that would occur in the absence of a GHG reduction market) should not be eligible for registration.
- **Permanent:** To function as offsets to GHG emissions, GHG reductions must effectively be "permanent." This means, in general, that any net reversal in GHG reductions used to offset emissions must be fully accounted for and compensated through the achievement of additional reductions.

³ To ensure that GHG reductions are real, CARB requires the reduction be "a direct reduction within a confined project boundary."

- **Quantifiable:** The ability to accurately measure and calculate GHG reductions or GHG removal enhancements relative to a project baseline in a reliable and replicable manner for all GHG emission sources, GHG sinks, or GHG reservoirs included within the offset project boundary, while accounting for uncertainty and activity-shifting leakage and market-shifting leakage.
- **Verified:** GHG reductions must result from activities that have been verified. Verification requires third-party review of monitoring data for a project to ensure the data are complete and accurate.
- **Enforceable:** The emission reductions from offset must be backed by a legal instrument or contract that defines exclusive ownership and the legal instrument can be enforced within the legal system in the country in which the offset project occurs or through other compulsory means. Please note that per this mitigation measure, only credits originating within the United States are allowed.

GHG credits may be in the form of GHG offsets for prior reductions of GHG emissions verified through protocols or forecasted mitigation units for future committed GHG emissions meeting protocols. All credits shall be documented per protocols functionally equivalent in terms of stringency to CARB's protocol for offsets in the cap and trade program. If using credits not from CARB protocols, UC Davis must provide the protocols from the credit provider and must document why the protocols are functionally equivalent in terms of stringency to CARB protocols.

UC Davis shall identify GHG credits in geographies closest to the Sacramento Campus first and only go to larger geographies (i.e., California, United States) if adequate credits cannot be found in closer geographies, or the procurement of such credits would create an undue financial burden. UC Davis shall provide the following justification for not using credits in closer geographies in terms of either availability or cost prohibition.

- Lack of enough credits available in closer geographies (i.e., Sacramento County).
- Prohibitively costly credits in closer geographies defined as credits costing more than 300 percent the amount of the current costs of credits in the regulated CARB offset market.
- UC Davis documentation submitted supporting GHG credit proposals shall be prepared by individuals qualified in GHG credit development and verification and such individuals shall certify the following.
 - Proposed credits meet the criteria in California Health and Safety Code Section 38562(d)(1) and (d)(2).
 - Proposed credits meet the definitions for the criteria provided in this measure.
 - The protocols used for the credits meet or exceed the standards for stringency used in CARB protocols for offsets under the California cap-and-trade system.

Measure Monitoring and Reporting

As a CARB-covered entity, UC Davis will ensure emissions generated by the Central Energy Plant comply with CARB's cap and trade program. Likewise, UC Davis will implement the UC Sustainable Practices Policy to meet the requirement of carbon neutrality for Scope 1 and 2 emissions by 2025 and carbon neutrality for Scope 3 emissions by 2050, as described above. These commitments will be incorporated into UC Davis' annual GHG inventory, which is used to

track GHG emissions and sources on the Sacramento Campus. As part of the annual GHG inventory for the Sacramento Campus, UC Davis shall submit a report to The Regents specifying the annual amount of metric ton CO₂e reduction achieved by additional GHG reduction actions implemented pursuant to this mitigation (i.e., Option 1, onsite actions, and Option 2, offsite actions). The report must include evidence that these actions are not being used to mitigate GHG for any other project or entity.

GHG reductions achieved by the onsite and offsite actions should be incorporated into the Sacramento Campus' annual GHG inventory. The estimated annual emissions shall then be compared to the measure performance standards described above to determine the level of additional GHG reductions (if any). For the identified amount of exceedance of the performance standard(s), UC Davis shall purchase carbon credits according to the requirements established above under Option 3. As and when the credits are retired, UC Davis shall document in its annual report the unique identifier of those credits showing that they have been retired and accepted by TCR.

Rationale for Finding: The Project is not anticipated to result in a substantial use of energy, but there would be operational-related energy demand that would result from increases in vehicular traffic. Implementation of Mitigation Measures LRDP-GHG-2 and LRDP-TRA-1a, which would reduce operational transportation energy, would further reduce this impact to less than significant.

f) Geology, Soils, and Seismicity

Impact LRDP-GEO-1: Development under the 2020 LRDP Update could cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction. (See Final Supplemental EIR Section 3.6.2)

FINDING: Geotechnical investigations would be necessary to eliminate risks related to liquefaction. Mitigation Measure LRDP-GEO-1 is feasible and is adopted; implementation of Mitigation Measure LRDP-GEO-1 would reduce this impact to a less than significant level. (Final Supplemental EIR pages 3.6-7 through 3.6-8).

Mitigation Measure LRDP-GEO-1: Conduct Geotechnical Investigation

A site-specific, design-level geotechnical investigation will be conducted during the design phase of each building project under the 2020 LRDP Update. This investigation will be conducted by a licensed geotechnical engineer and include a seismic evaluation of ground acceleration under the design event as well as relevant soil conditions at the site. Geotechnical recommendations will subsequently be incorporated into the foundation and building design for the building project.

Rationale for Finding: Implementation of Mitigation Measure LRDP-GEO-1 would require a geotechnical investigation including a seismic evaluation and would provide recommendations regarding building foundations and design.

g) Greenhouse Gases

Impact LRDP-GHG-2: *Development under the 2020 LRDP would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Supplemental EIR pages 3.7-32 through 3.7-44.)*

FINDING: Implementation of the 2020 LRDP Update would result in per capita mobile source emissions in exceedance of SACOG's MTP/SCS GHG reduction target. Total emissions resulting from the 2020 LRDP Update would also exceed project-specific emissions thresholds derived from the state's long-term climate change goals under SB 32 and EO B-55-18. Specifically, Mitigation Measures LRDP-AQ-2e, LRDP-TRA-1a, and LRDP-GHG-2 are feasible, and are adopted to mitigate the significant effects from Impact LRDP-GHG-2 to a less than significant level. Implementation of the UC Sustainable Practices Policy, Mitigation Measures LRDP-AQ-2e, LRDP-TRA-1a, and LRDP-GHG-2 would reduce emissions consistent with the state's climate change reduction trajectory, as articulated under statewide regulations and legislation (e.g., SB 32, EO B-55-18).

Mitigation Measure LRDP-AQ-2e: Reduce operational PM10 emissions

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

Mitigation Measure LRDP-GHG-2: Implement Verifiable Actions or Activities or Purchase the Equivalent GHG Credits from a CARB Approved Registry or a Locally Approved Equivalent Program to Reduce GHG Emissions Generated by the Sacramento Campus

Rationale for Finding: With implementation of Mitigation Measure LRDP-AQ-2e, LRDP-TRA-1a, and LRDP-GHG-2, greenhouse gases would be reduced, or compensated for by purchasing the equivalent GHG credits from a CARB approved registry or a locally approved equivalent program.

Cumulative Impact related to Greenhouse Gas Emissions

FINDING: With implementation of the University Carbon Neutrality Initiative pursuant to the UC Sustainable Practices Policy (University of California 2019), implementation of the 2020 LRDP Update would reduce GHG emissions below existing conditions, and therefore would not contribute a significant amount of GHG emissions or contribute to existing cumulative emissions. Implementation of the UC Sustainable Practices Policy (University of California 2019), Mitigation Measures LRDP-AQ-2e, LRDP-TRA 1a, and LRDP-GHG-2 would reduce emissions consistent with the state's climate change reduction trajectory, as articulated under statewide regulations and legislation (e.g., SB 32, EO B-55-18).

Mitigation Measure LRDP-AQ-2e: Reduce operational PM10 emissions

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

Mitigation Measure LRDP-GHG-2: Implement Verifiable Actions or Activities or Purchase the Equivalent GHG Credits from a CARB Approved Registry or a Locally Approved Equivalent Program to Reduce GHG Emissions Generated by the Sacramento Campus

Rationale for Finding: Mitigation Measures LRDP-AQ-2e, LRDP-TRA 1a, and LRDP-GHG-2 would reduce the contribution of the 2020 LRDP to the cumulative impact to meet statewide planning goals and therefore the contribution would be less than cumulatively considerable. (Supplemental EIR Volume 1, Chapter 4, pages 4-8 through 4-9).

h) Hazards and Hazardous Materials

Impact LRDP-HAZ-2: *Development under the 2020 LRDP would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (Supplemental EIR pages 3.8-12 through 3.8-14.)*

FINDING: Site workers, the public, and the environment could be inadvertently exposed to preexisting onsite contaminants during construction in the plan area. Mitigation Measure LRDP-HAZ-2 is feasible, and is adopted to mitigate significant effects from Impact LRDP-HAZ-2 to a less than significant level by requiring a Phase I Environmental Site Assessment.

Mitigation Measure LRDP-HAZ-2: Prepare a Phase I Environmental Site Assessment

To minimize the risk of encountering unknown contamination during construction under the 2020 LRDP Update, the UC Davis Sacramento Campus would retain an environmental professional to prepare a Phase I Environmental Site Assessment before all ground-disturbing construction in areas not previously investigated. A Phase I Environmental Site Assessment would conform with the American Society for Testing and Materials Standard Practice E1527-05 and include at a minimum the following site assessment requirements.

- An onsite visit to identify current conditions (e.g., vegetative dieback, chemical spill residue, presence of above- or underground storage tanks).
- An evaluation of possible risks posed by neighboring properties.
- Interviews with persons knowledgeable about the site's history (e.g., current or previous property owners, property managers).
- An examination of local planning files to check prior land uses and any permits granted.
- File searches with appropriate agencies (e.g., State Water Board, fire department, county health department) having oversight authority relative to water quality and groundwater and soil contamination.
- Examination of historical aerial photography of the site and adjacent properties.
- A review of current and historic topographic maps of the site to determine drainage patterns.
- An examination of chain-of-title for environmental liens and/or activity and land use limitations.

If the Phase I Environmental Site Assessment indicates likely site contamination, a Phase II Environmental Site Assessment will be performed (also by an environmental professional).

A Phase II Environmental Site Assessment would comprise the following.

- Collection of original surface and/or subsurface samples of soil, groundwater, and building materials to analyze for quantities of various contaminants.

- An analysis to determine the vertical and horizontal extent of contamination (if the evidence from sampling shows contamination).

If contamination is uncovered as part of Phase I or II Environmental Site Assessments, remediation per EPA's RCRA regulations in 40 CFR Parts 260–299 will be required, and materials will be properly managed and disposed of prior to construction.

Any contaminated soil identified on a project site must be properly disposed of in accordance with Department of Toxic Substances Control regulations in effect at the time.

If, during construction, soil or groundwater contamination is suspected, construction activities in the vicinity of the discovery will cease and appropriate health and safety procedures will be implemented, including the use of appropriate personal protective equipment (e.g., respiratory protection, protective clothing, helmets, goggles).

Rationale for Finding: With implementation of Mitigation Measure HAZ-2, risks related to exposure to hazardous materials through encountering unknown contamination during construction would be reduced to a less than significant level.

i) Noise

Impact LRDP-NOI-2: Development under the 2020 LRDP Update could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project from generator testing and other mechanical equipment in excess of applicable standards. (See Final Supplemental EIR Section 3.11.2)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-NOI-2. Specifically, Mitigation Measure LRDP-NOI-2a is feasible and is adopted to mitigate significant effects from Impact LRDP-NOI-2 to a less than significant level (Supplemental EIR pages 3.11-30 through 3.11-34).

Mitigation Measure LRDP-NOI-2a: Reduce Noise Exposure from Emergency Generators

Prior to approval of a building permit for individual LRDP development projects proposing the installation of emergency generators, documentation will be submitted to the University demonstrating with reasonable certainty that noise from testing of the proposed generator(s) would not exceed 55 dBA at the nearest residential land use. Acoustical treatments to reduce noise from generator testing may include, but are not limited to, the following.

- Enclosing generator(s)
- Incorporating the use of exhaust mufflers or silencers to reduce exhaust noise
- Selecting a relatively quiet generator model
- Orienting or shielding generator(s) to protect noise-sensitive receptors to the greatest extent feasible
- Increasing the distance between generator(s) and noise-sensitive receptors
- Placing barriers or enclosures around generator(s) to facilitate the attenuation of noise.

In addition, all project generator(s) will be tested only between the hours of 7:00 a.m. and 10:00 p.m.

The University will ensure that all recommendations from the acoustical analysis necessary to ensure that generator noise would meet the above requirements will be incorporated into the building design and operations.

Rationale for Finding: Implementation of Mitigation Measure LRDP-NOI-2 would reduce noise exposure from emergency generators by applying acoustical treatments so that noise would not exceed 55 dBA at the nearest residential land use.

Impact LRDP-NOI-2: *Development under the 2020 LRDP Update could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project from stationary sources in excess of applicable standards. (See Final Supplemental EIR Section 3.11.2)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-NOI-2. Specifically, Mitigation Measure LRDP-NOI-2b is feasible and is adopted to mitigate significant effects from Impact LRDP-NOI-2 to a less than significant level (Supplemental EIR pages 3.11-34 through 3.11-35).

Mitigation Measure LRDP-NOI-2b: Reduce Noise Exposure from New Stationary Noise Sources

During project design of individual projects proposed under the 2020 LRDP Update, UC Davis will review and ensure that noise-generating equipment, including heating and cooling equipment and exhaust fans, would not result in noise levels in excess of 50 dBA L_{eq} at the nearest residential land use. The project design will incorporate features to reduce equipment noise, as necessary, to ensure the 50 dB L_{eq} at nearby residential land uses is not exceeded. Design features that may be implemented to reduce noise include, but are not limited to: locating equipment within equipment rooms or enclosures that incorporate noise reduction features, such as acoustical louvers; incorporating exhaust and intake silencers, as applicable; or selecting quieter equipment. Should noise levels potentially exceed 50 dBA at the nearest residential land use, UC Davis may require the completion and implementation of a detailed noise control analysis (by a person qualified in acoustical analysis and/or engineering) that includes the incorporation of noise reduction measures (including quieter equipment, construction of barriers or enclosures, etc.) prior to the issuance of building permits.

Rationale for Finding: Implementation of Mitigation Measure LRDP-NOI-2 would reduce noise exposure from emergency generators by applying acoustical treatments so that noise would not exceed 55 dBA at the nearest residential land use.

Impact LRDP-NOI-3: *Development under the 2020 LRDP Update could generate excessive groundborne vibration or groundborne noise levels. (See Final Supplemental EIR Section 3.11.2)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-NOI-3. Specifically, Mitigation Measures LRDP-NOI-3a and NOI-3b are feasible and are adopted to mitigate significant effects from Impact LRDP-NOI-3 to a less than significant level (Supplemental EIR pages 3.11-39 through 3.11-35).

Mitigation Measure LRDP-NOI-3a: Implement Measures to Reduce Vibration-Related Annoyance Impacts to Onsite Land Uses

Should vibration-generating construction activities that do not involve pile driving be proposed within 140 feet of on-campus Category 1 buildings, or should pile driving activities be proposed within 500 feet of Category 1 land uses, the construction contractor will work with the University to identify vibration-producing activities on the construction schedule in advance. The construction contractor will coordinate the timing of the activities with hospital or research units that may be affected to reduce potential vibration-related annoyance effects on sensitive onsite hospital or research receptors. In addition, the construction contractor will appoint a project vibration coordinator who will serve as the point of contact for vibration-related complaints during project construction. Contact information for the project vibration coordinator will be posted at the project site and on a publicly available project website. The project vibration coordinator will be contacted should vibration effects become too disruptive at on-campus uses, and the project vibration coordinator will then work with the construction team to adjust activities to reduce vibration or to reschedule activities for a less sensitive time.

Mitigation Measure LRDP-NOI-3b: Implement Measures to Reduce Vibration-Related Annoyance Impacts to Offsite Land Uses

Should vibration-generating construction activities for future development under the 2020 LRDP Update (other than pile driving) be proposed outside of the daytime hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday and between 9:00 a.m. and 6:00 p.m. on Sunday, equipment must not operate within 100 feet of on-campus or off-campus residential (Category 2) land uses. Vibration levels at the nearest Category 2 land use will not exceed the applicable vibration criteria of 72 VdB. The contact information for the project vibration coordinator (described in Mitigation Measure LRDP-NOI-3a) will be posted at the project site and on a publicly available project website. Should residents in the project area submit complaints to the project vibration coordinator for nighttime construction vibration concerns, the construction team will adjust activities to reduce vibration, or will reschedule activities for a less sensitive time such that vibration does not exceed 72 dB at nearby Category 2 land uses.

Rationale for Finding: Implementation of Mitigation Measures LRDP-NOI-3a and NOI-3b would reduce vibration impacts by limiting hours of operation, limiting operation near residences, and coordinating with residents.

Impact LRDP-NOI-3: Development under the 2020 LRDP Update could result in vibration-related structural damage. (See Final Supplemental EIR Section 3.11.2)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-NOI-3. Specifically, Mitigation Measure LRDP-NOI-3c is feasible and is adopted to mitigate significant effects from Impact LRDP-NOI-3 to a less than significant level (Supplemental EIR pages 3.11-43 through 3.11-45).

Mitigation Measure LRDP-NOI-3c: Protect Adjacent Potentially Susceptible Structures from Construction-Generated Vibration during Pile Driving

The construction contractor for development projects under the 2020 LRDP Update will consult with the University to determine whether adjacent or nearby buildings constitute structures that could be adversely affected by construction-generated vibration. For purposes of this

measure, nearby potentially susceptible buildings within 100 feet of a construction site for a future development project will be considered if pile driving would be required at that site.

If buildings adjacent to construction activity are identified that could be adversely affected, the project sponsor will incorporate into construction specifications for the proposed project a requirement that the construction contractor(s) use all feasible means to avoid damage to adjacent and nearby buildings. Such methods to help reduce vibration-related damage effects may include maintaining a safe distance between the construction site and the potentially affected building (e.g., at least 100 feet for “historic and some old buildings”), or using “quiet” pile-driving technologies (such as predrilling piles or using sonic pile drivers).

Should pile driving be required within 100 feet of a building in the “historic or some old building” category, within 75 feet of buildings in the “older residential structures” category, and within 55 feet of buildings in the “modern industrial/commercial category,” the University will work with the construction contractor to implement a monitoring program to minimize damage to adjacent buildings and ensure that any such damage is documented and repaired. If required, the monitoring program will include the following components:

- Prior to the start of any ground-disturbing activity, the project sponsor will engage a historic architect or qualified historic preservation professional to undertake a preconstruction survey nearby affected buildings that may be considered historic. For buildings that are not potentially historic, a structural engineer or other professional with similar qualifications will document and photograph the existing conditions of potentially affected buildings within 100 feet of pile-driving activity.
- Based on the construction and condition of the resource(s), the consultant will also establish a standard maximum vibration level that will not be exceeded at any building, based on existing conditions, character-defining features, soil conditions, and anticipated construction practices (common standards are a peak particle velocity of 0.25 inch per second for “historic and some old buildings,” a peak particle velocity of 0.3 inch per second for “older residential structures,” and a peak particle velocity of 0.5 inch per second for “new residential structures” and “modern industrial/commercial buildings,” as shown in Table 3.11-4).
- To ensure that vibration levels do not exceed the established standard, the project sponsor will monitor vibration levels at each structure and prohibit vibratory construction activities that generate vibration levels in excess of the standard.
- Should vibration levels be observed in excess of the selected standard, construction will be halted and alternative construction techniques put in practice, to the extent feasible (e.g., predrilled piles could be substituted for driven piles, if feasible, based on soil conditions, or smaller, lighter equipment could be used in some cases).
- The historic preservation professional (for effects on historic buildings) and/or structural engineer (for effects on non-historic structures) will conduct regular periodic inspections (every 3 months) of each building during ground-disturbing activity on the project site. Should damage to any building occur, the building(s) will be remediated to their preconstruction condition at the conclusion of ground-disturbing activity on the site.

Rationale for Finding: Implementation of Mitigation Measure LRDP-NOI-3 would protect adjacent potentially susceptible structures from construction-generated vibration during pile driving by establishing limitations.

j) Transportation and Circulation

Impact LRDP-TRA-1: Implementation of the 2020 LRDP Update could result in construction activity that could cause temporary impacts to transportation and traffic. (See Final Supplemental EIR Section 3.15.2)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-TRA-5. Specifically, Mitigation Measure LRDP-TRA-5 is feasible and is adopted to mitigate significant effects from Impact LRDP-TRA-5 to a less than significant level (Final Supplemental EIR pages 3.15-38 through 3.15-40).

Mitigation Measure LRDP-TRA-5: Prior to the issuance of any grading or building permits, a Construction Traffic Management Plan (TMP) will be prepared to the satisfaction of UC Davis Health and the City of Sacramento Department of Public Works for City-owned roadways

The Construction TMP will include items such as the following.

- Preserving emergency vehicle access routes to existing buildings on the Sacramento Campus
- Providing truck circulation routes/patterns that minimizes effects on existing vehicle traffic during peak travel periods and maintains safe bicycle circulation
- Monitoring for roadbed damage and timing for completing repairs
- Preserving safe and convenient passage for bicyclists and pedestrians through/around construction areas
- Creating methods for partial (i.e., single lane)/complete street closures (e.g., timing, signage, location and duration restrictions), if necessary
- Identifying detour routes for roadways subject to partial/complete street closures
- Identifying temporary UC Davis shuttle stops and detoured shuttle routes if existing stops or routes are affected
- Identifying temporary SacRT bus stops and detoured bus routes, if existing stops or routes are affected
- Developing criteria for use of flaggers and other traffic controls
- Providing a point of contact for nearby residents, Sacramento Campus staff, students, and visitors, and other stakeholders to contact to obtain construction information and have questions answered

The Construction TMP will be developed so that the following performance standards are achieved throughout project construction.

- Maintain emergency vehicle access to all buildings on the Sacramento Campus at all times.
- Maintain identified emergency vehicle routes to UC Davis Health medical facilities at all times. Notify appropriate contacts for UC Davis Health and/or emergency responders at least 24 hours prior to any construction-related partial/complete closures that may affect emergency vehicle routes, and provide clear identification of detours when necessary.
- Minimize construction traffic during morning and evening peak periods when street traffic on local and campus streets are highest

- Close (i.e., partially or fully) any construction-related public roadways only during off-peak periods and provide appropriate construction signage, including detour routing
- Limit detour routing to campus roadways or City collector and arterial roadways, such as Stockton Boulevard and Broadway, to the extent feasible. Include measures to minimize traffic increases on local residential roadways; this may include signage and law enforcement presence during partial/complete closures to discourage through-traffic use of local residential roadways
- Clear roadways, sidewalks, crosswalks, and bicycle facilities of debris (e.g., rocks) that could otherwise impede travel and impact public safety, and maintain them in this condition

UC Davis will also consider any concurrent construction activity and other active Construction TMPs when reviewing new Construction TMPs for specific LRDP implementation projects. This review will address the effects of simultaneous construction activity.

Rationale for Finding: Implementation of Mitigation Measure LRDP-TRA-5 entails implementation of a Traffic Management Plan (TMP) that will include items such as identifying detours, providing emergency vehicle access and safe and convenient passage for bicyclists and pedestrians.

3. Findings on Significant Environmental Impacts That Cannot be Avoided or Reduced to a Less Than Significant Level

FINDING: Based on the issue area assessment in the Final Supplemental EIR, the University has determined that the Project will have significant impacts in the resource areas discussed below, and that these impacts cannot be avoided or reduced to a level of insignificance despite the incorporation of all feasible mitigation measures. These findings are based on the discussion of impacts in the detailed issue area analyses in Volume 1, Sections 3.2, 3.4, 3.11, and 3.15 of the Final Supplemental EIR and the cumulative impacts discussed in Volume 1, Chapter 4 of the Final Supplemental EIR. For each significant and unavoidable impact identified below, the University has made a finding(s) pursuant to Public Resources Code § 21081. An explanation of the rationale for each finding is also presented below.

a) Air Quality

Impact LRDP-AQ-1: Development under the 2020 LRDP Update would conflict with or obstruct implementation of the applicable air quality plan. (Final Supplemental EIR pages 3.2-33 through 3.2-36.)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-AQ-1. Specifically, Mitigation Measure AQ-1, set forth below, is feasible and is adopted to mitigate significant effects from Impact LRDP-AQ-1. However, even with implementation of this measure, significant unavoidable impacts will occur. Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-AQ-1 to a less than significant level.

Mitigation Measure LRDP-AQ-1: Coordinate with SACOG and SMAQMD on Planning Assumptions

Within 90 days from certification of the 2020 LRDP Update Supplemental EIR, UC Davis will provide SACOG and SMAQMD with revised population, employment, building gsf, and housing

growth forecasts that account for implementation of 2020 LRDP Update. UC Davis will coordinate with SMAQMD to ensure that emissions associated with campus growth can be accounted in their forthcoming plan to address the 2015 federal ozone standard.

Rationale for Finding: Mitigation Measure LRDP-AQ-1 is required to ensure the administrative process to update SACOG's growth projections is completed, thus ensuring the air quality analysis and strategies contained within SMAQMD's forthcoming ozone attainment plan adequately consider implementation of the 2020 LRDP Update. Implementation of Mitigation Measure LRDP-AQ-1 will ultimately ensure that the 2020 LRDP Update is consistent with SMAQMD's long-term ozone planning efforts for the Sacramento region. However, updates to the growth projections and development of the ozone plan would be completed by external agencies (SACOG and SMAQMD) and are therefore beyond the direct control of the University. There is no feasible mitigation beyond Mitigation Measure LRDP-AQ-1 to avoid conflicts with SMAQMD's air quality attainment plans. Accordingly, this impact is conservatively determined to be significant and unavoidable.

Impact LRDP-AQ-2: *Development under the 2020 LRDP Update would result in a net increase of operational PM10 emissions that would exceed SMAQMD thresholds, even with implementation of Mitigation Measures LRDP-AQ-2e and LRDP-TRA-1a. (Final Supplemental EIR pages 3.2-41 through 3.2-47.)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-AQ-2. Specifically, Mitigation Measures LRDP-AQ-2e and LRDP-TRA-1a set forth below, are feasible and are adopted to mitigate significant effects from Impact LRDP-AQ-1. However, even with implementation of these measures, significant unavoidable impacts will occur. Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-AQ-2 to a less than significant level.

Mitigation Measure LRDP-AQ-2e: Reduce operational PM10 emissions

UC Davis will implement a program that incentivizes employees, students, residents, and visitors to carpool, use electric vehicles (EVs), walk/bike, or use public transit to commute to and from the Sacramento Campus. The program will include, but is not limited to, the following features.

- **Parking:** Limit parking capacity to meet onsite demand and provide preferential parking to carpool vehicles, vanpool vehicles, and EVs. The program will implement the following parking related sub-measures.
 - a. Provide no more onsite parking spaces than necessary to accommodate the number of employees working at a project site and/or the number of residents living at a project site, as determined by the project size and design.
 - b. Where feasible, for future residential units (on-campus and Aggie Square Phase I), lease/sell parking space separately from the unit and provide the tenant the option of not purchasing/owning a space.
 - c. Nonresidential land uses with 20 or more onsite parking spaces will dedicate preferential parking spaces to vehicles with more than one occupant and zero emission vehicles (including battery electric vehicles and hydrogen fuel cell vehicles). The number of dedicated spaces should be no less than two spaces or 5 percent of the total

parking spaces on the project site, whichever is greater. These dedicated spaces will be in preferential locations such as near the main entrances to the buildings served by the parking lot and/or under the shade of a structure or trees. These spaces will be clearly marked with signs and pavement markings. This measure will not be implemented in a way that prevents compliance with requirements in the California Vehicle Code regarding parking spaces for disabled persons or disabled veterans.

- d. Maintain a virtual or real “ride board” for employees and students to organize carpools and incentives for employees using public transit to commute to and from campus.
- **Vendor Trips:** Implement a program that incentivizes vendors to reduce the emissions associated with vehicles and equipment serving the UC Davis Sacramento Campus. The program will implement the following sub-measures to reduce vendor-related, mobile-source emissions.
 - a. Incentivize the use of electric vehicles or other clean fuels in their trucks and equipment.
 - b. Work with vendors, especially those using trucks, to reduce the number of vendor trips made to the campus through trip chaining, reducing the number of shipments, or other methods.
- **Campus Shuttles:** Work with Fleet Services to convert Med-Transit (onsite) shuttles to electric or lower-emission fuels or implement emission control technologies to reduce criteria air pollutant emissions from existing conditions.
- **Pedestrian and Bicycle Infrastructure:** Enhance walkability and connectivity of the Sacramento Campus to surrounding residential and commercial uses. The program will implement the following site design related sub-measures.
 - a. Ensure all new external connections from the Sacramento Campus to existing or planned streets include bicycle/pedestrian access.
 - b. Eliminate physical barriers such as walls, landscaping, and slopes that impede pedestrian circulation throughout the Sacramento Campus.
 - c. Require all new sidewalks internal and adjacent to the Sacramento Campus to be at least 5 feet wide. Provide grade separation and wider sidewalks (e.g., 7 feet), wherever feasible.
 - d. Require all new sidewalks on the Sacramento Campus to include vertical curbs or a planting strip to separate the sidewalk from the parking or travel lane.
 - e. Construct new roads on the Sacramento Campus to include at least one traffic calming feature, such as street parking, chicanes, horizontal shifts (lane centerline that curves or shifts), bollards, rumble strips, or woonerfs. Coordinate with the City of Sacramento to encourage these features on external roads connecting to the campus.
 - f. Construct new intersections on the Sacramento Campus to include marked crosswalks, count-down signal timers, curb extensions, channelization islands, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, traffic circles or mini-circles. Coordinate with the City of Sacramento to encourage these features on external intersections connecting to the campus.

- **Landscaping Equipment:** Reduce emissions from landscaping equipment through the following sub-measures.
 - a. Beginning in 2030, require UC Davis landscapers and contracted landscaping companies that maintain campus greenspaces to utilize electric or alternatively fueled mowers and handheld equipment (e.g., trimmers, blowers).
 - b. Encourage xeriscape landscaping in all new campus greenspaces.

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

Rationale for Finding: While Mitigation Measures LRDP-TRA-1a and LRDP-AQ-2e will contribute to mobile source emissions reductions, UC Davis does not have jurisdiction over transit service or vehicle trips. The effectiveness of Mitigation Measure LRDP-AQ-2e, for example, would depend on the cooperation of visitors, employees, patients, and vendors visiting the plan area. Reductions achieved by Mitigation Measures LRDP-TRA-1a and LRDP-AQ-2e may not be enough to reduce PM10 emissions to below SMAQMD's thresholds. At the programmatic level, there is no feasible mitigation beyond the UC Sustainable Practices Policy, UC Davis' Green Commuter Program, and Mitigation Measures LRDP-TRA-1a and LRDP-AQ-2e to reduce operational PM10 emissions below SMAQMD's thresholds. Accordingly, this impact would be significant and unavoidable.

Impact LRDP-AQ-3: *Development under the 2020 LRDP Update could result in regional criteria pollutant emissions in excess of SMAQMD's thresholds of significance during operations, thereby exposing receptors to substantial pollutant concentrations. (Final Supplemental EIR pages 3.2-47 through 3.2-56.)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-AQ-3. Mitigation Measures LRDP-AQ-2c and TRA-1a are feasible and are adopted to mitigate significant effects from Impact LRDP-AQ-3, but do not reduce them to a less than significant level for operational activities. Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-AQ-3 to a less than significant level.

Mitigation Measure LRDP-AQ-2e: Reduce operational PM10 emissions

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

Rationale for Finding: While Mitigation Measures LRDP-TRA-1a and LRDP-AQ-2e will contribute to mobile source emissions reductions, reductions achieved by the measures may not be enough to reduce particulate matter emissions to below SMAQMD's thresholds. At the programmatic-level, there is no feasible mitigation beyond the UC Sustainable Practices Policy, UC Davis' Green Commuter Program, and Mitigation Measures LRDP-TRA-1a and LRDP-AQ-2e to reduce operational particulate matter emissions below SMAQMD's thresholds. As such, levels of particulate matter emissions associated with full implementation of the 2020 LRDP Update could contribute a significant and unavoidable level of particulate pollution that could degrade regional air quality within the Sacramento Valley Air Basin. Accordingly, this impact is conservatively determined to be significant and unavoidable.

Impact LRDP-AQ-3: Development under the 2020 LRDP Update expose sensitive receptors to substantial toxic air contaminants during construction. (Final Supplemental EIR pages 3.2-52 through 3.2-54.)

FINDING: Construction would result in DPM emissions primarily from diesel-fueled off-road equipment and heavy-duty trucks. Mitigation Measure LRDP-AQ-2b would reduce the cancer risk at all receptor locations except existing impacted residential receptors. Mitigation Measure LRDP-AQ-3a provides feasible options for reducing construction generated DPM. However, without specific details on how individual projects will implement the measure, a quantified analysis of health risks with Mitigation Measure LRDP-AQ-3a is not possible. Accordingly, this impact is conservatively concluded to be **significant and unavoidable**.

Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-AQ-3 to a less than significant level.

Mitigation Measure LRDP-AQ-2b: Reduce construction-generated emissions from equipment and vehicle exhaust

Mitigation Measure LRDP-AQ-3a: Reduce receptor exposure to construction generated diesel particulate matter

Land use development projects implemented under the 2020 LRDP Update will require its prime construction contractor to implement the following measures to reduce receptor exposure to DPM concentrations and associated health risks.

- Limit excess equipment idling to no more than 5 minutes (included in Mitigation Measure LRDP-AQ-2b).
- Locate operation of diesel-powered construction equipment as far away from sensitive receptors as possible.
- Use equipment during times when receptors are not present (e.g., when school is not in session or during non-school hours), as feasible.
- Establish staging areas for the construction equipment that are as distant as possible from offsite receptors, including existing residences.
- Where feasible, use equipment with engines meeting EPA Tier 4 Final or better emission standards prior to 2025 (Mitigation Measure LRDP-AQ-2b requires Tier 4 Final engines beginning in 2025 for all development except Aggie Square Phase I, which is required to use EPA Tier 4 Final or better engines regardless of the construction year).
- Where feasible, use haul trucks with on-road engines instead of off-road engines even for onsite hauling.
- Use electric, compressed natural gas, or other alternatively fueled construction equipment instead of the diesel counterparts, where available.
- Coordinate with existing off-campus renters and homeowners where projected cancer risks exceed 10 per million and offer financial assistance to use Minimum Efficiency Reporting Value (MERV) 15 air filters. Financial assistance will be provided for the purchase of up to two filters per year, or per manufacturer recommendations. If a resident's home is not equipped with a heating, ventilation, and air conditioning (HVAC) system that can accept a MERV 15 air filter, UC Davis will purchase a portable home air cleaning device. UC Davis will

establish an online procurement system (or similar) to facilitate the purchase and distribution of the filters to residents electing to participate in the program.

Rationale for Finding: Mitigation Measures LRDP-AQ-2b and LRDP-AQ-3a would reduce DPM and cancer risk. However, because a quantitative analysis cannot be performed at the program level, this impact is conservatively determined to be significant and unavoidable.

Cumulative Impact related to Exposure of Sensitive Receptors to Substantial Contributions of DPM

FINDING: Diesel particulate matter (DPM) generated by diesel fueled construction equipment and vehicles would contribute to health risks in excess of SMAQMD's threshold. Mitigation Measure LRDP-AQ-3a would reduce the severity of this impact, but not to a less-than-significant level. There would be a significant and unavoidable cumulative impact from exposure of receptors to substantial concentrations of DPM (Final Supplemental EIR Volume 1, Chapter 4, Page 4-5).

Mitigation Measure LRDP-AQ-3a: Reduce receptor exposure to construction generated diesel particulate matter

Rationale for Finding: Mitigation Measure LRDP-AQ-3a would reduce DPM and cancer risk, but not below SMAQMD's thresholds of significance. There are not other feasible mitigation measures to further reduce this impact.

Cumulative Impact related to Operational Emissions

FINDING: Operational emissions would exceed SMAQMD's daily and annual PM10 thresholds. Implementation of Mitigation Measures LRDP-AQ-2e and LRDP-TRA-1a reduce the 2020 LRDP Update's operational impacts, but not to a less-than-significant level. Accordingly, the 2020 LRDP Updates' long-term operational emissions would be cumulatively considerable (Final Supplemental EIR Volume 1, Chapter 4, pages 4-5 and 4-6).

Mitigation Measure LRDP-AQ-2e: Reduce operational PM10 emissions

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

Rationale for Finding: Mitigation Measures LRDP-AQ-2e and LRDP-TRA-1a would reduce operational emissions. However, emissions would still exceed SMAQMD's daily and annual PM10 thresholds. No additional mitigation beyond that suggested in Section 3.2, *Air Quality* is available to reduce the 2020 LRDP Update's contribution. Accordingly, this impact is significant and unavoidable.

c) Cultural Resources

Impact LRDP-CUL-1: Development under the 2020 LRDP would have the potential to cause a substantial adverse change in the significance of a historical resource (Final Supplemental EIR pages 3.4-16 through 3.4-18.)

FINDING: Renovation of the Governor's Hall building would potentially result in impacts to a historic structure. With implementation of Mitigation Measure LRDP-CUL-1a, the University will prepare a Historic Structure Report (HSR) prior to renovating the Governor's Hall building. LRDP-CUL-1b would require that buildings 50 years of age or older be evaluated prior to

development that may affect them. Implementation of Mitigation Measure LRDP-CUL-1c would reduce significant impacts to potentially historical resources that have not been formally evaluated or have not yet reached 50 year of age, because actions would be taken to record, evaluate, avoid, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. While it may be possible to complete modifications or renovations consistent with the Secretary's Standards, resulting in a less-than-significant impact, it is possible that this could not be achieved or that a structure would need to be demolished. Additionally, CEQA Guidelines (CCR Section 15126.4[b][2]) note that in some circumstances, documentation of a historical resource will not mitigate the effects of demolition of that resource to a less-than-significant level. Accordingly, this impact is conservatively concluded to be significant and unavoidable.

Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-CUL-1 to a less than significant level.

Mitigation Measure LRDP-CUL-1a: Prepare Historic Structure Report, adhere to Secretary of the Interior's Standards for the Treatment of Historic Properties, the California State Historical Building Code, and Relevant National Park Service Preservations Briefs

Prior to renovating the Governor's Hall building, the University will retain a qualified historic preservation planner to prepare a historic structure report (HSR) for the building in accordance with National Park Service (NPS) Preservation Brief 43 (The Preparation and Use of Historic Structure Reports) and include mitigation measures in conformance with the Secretary of the Interior's Standards (SOIS) for the Treatment of Historic Properties or the California State Historic Building Code (CHBC). The HSR shall identify historic preservation objectives and requirements for the treatments and use of the building prior to initiation of renovations to ensure that the historical significance and condition of the building are considered in the development of proposed renovation work.

The University will ensure that preservation treatment objectives outlined in the HSR for the Governor's Hall building seek to meet all SOIS for character-defining features designated in the HSR as having primary significance status, and meet as many SOIS as feasible for those character-defining features designated as having secondary significance status. In instances when the university must address human safety issues not compatible with the SOIS, the university will adhere to the CHBC to the extent feasible. The CHBC is defined in Sections 18950–18961 of Division 13, Part 2.7 of Health and Safety Code and is a mechanism that provides alternative building regulations for permitting repairs, alterations and additions to historic buildings and structures. These standards and regulations are intended to facilitate the rehabilitation and preservation of historic buildings. The CHBC proposes reasonable alternatives so that a property's fire protection, means of egress, accessibility, structural requirements, and methods of construction would not need to be modernized in a manner that compromises historic integrity. The CHBC is intended to allow continued, safe occupancy while protecting the historic fabric and character-defining features that give a property historic significance, thus promoting adherence to the SOIS. The CHBC recognizes that efforts to preserve the historic materials, features, and overall character of a historical resource at times may conflict with the requirements of regular buildings codes. The Office of the State Fire Marshall has ultimate authority over health and safety and may require use of the standard building code in some instances.

The University will use the HSR to help meet SOIS and CHBC requirements as it includes treatments that draw from National Park Service Preservation Briefs relevant to the proposed renovation work. The university will ensure that the HSR's historic preservation objectives and treatment requirements for the Governor's Hall building are incorporated into the design and construction specifications. The University will consult with the qualified preservation planner and with staff preservation architects within the Architectural Review and Environmental Compliance Unit of the State Office of Historic Preservation for guidance as needed. The University will ensure the HSR's historic preservation objectives and treatment requirements for the Governor's Hall building are incorporated into the proposed renovation specifications.

Mitigation Measure LRDP-CUL-1b: Conduct project-specific level surveys to identify built-environment historical resources

Before altering or otherwise affecting a building or structure 50 years of age or older, the University will retain a qualified architectural historian to record it on a California Department of Parks and Recreation DPR 523 form or equivalent documentation. Its significance will be assessed by a qualified architectural historian, using the significance criteria set forth for historic resources under State CEQA Guidelines Section 15064.5. The evaluation process will include the development of appropriate historical background research as context for the assessment of the significance of the resource in the history of the Sacramento Campus and the region. If the university determines an historical resource will be affected by a project-level action, then Mitigation Measure LRDP-CUL-1b shall apply.

Mitigation Measure LRDP-CUL-1c: Implement measures to protect identified historic resources

For a building or structure that qualifies as a historical resource, the qualified architectural historian and the University will consult to consider measures that would enable the project to avoid direct or indirect impacts on the building or structure. These could include preserving a building on the margin of the project site, using it "as is," or other measures that would not alter the building. If alteration of a historic building or structure cannot be reasonably avoided, necessary alterations will be carried out in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Section 15126.4[b][1]). If the removal of a historic building or structure cannot be avoided, the University will ensure that a qualified architectural historian thoroughly documents the building and associated landscaping and setting. Documentation will include still and video photography and a written documentary record of the building to the standards of the Historic American Building Survey or Historic American Engineering Record, including accurate scaled mapping, architectural descriptions, and scaled architectural plans, if available.

Rationale for Finding: While implementation of Mitigation Measures LRDP-CUL-1a through LRDP-CUL-1c could avoid impacts to a historic structure, it is possible that this could not be achieved or that a structure would need to be demolished. Additionally, CEQA Guidelines (CCR Section 15126.4[b][2]) note that in some circumstances, documentation of a historical resource will not mitigate the effects of demolition of that resource to a less-than-significant level. Accordingly, this impact is conservatively concluded to be significant and unavoidable.

Cumulative Impact to Cultural Resources

FINDING: Any disturbance of native soils carries the potential to result in impacts on archaeological resources. Campus development under the 2020 LRDP Update and other development in Sacramento County over time could result in some impacts on built environment historical resources and unique archaeological resources. If archaeological or historical resources are encountered, the campus will carry out a program of archaeological investigation as stipulated under Mitigation Measures LRDP-CUL-1a through LRDP-CUL-3b, which will, in most cases, enable the University to avoid or preserve unique archaeological resources and historical resources, and will appropriately recover data from and document resources that cannot be preserved in place.

Mitigation Measure LRDP-CUL-1a: Prepare Historic Structure Report, adhere to Secretary of the Interior's Standards for the Treatment of Historic Properties, the California State Historical Building Code, and Relevant National Park Service Preservations Briefs

Mitigation Measure LRDP-CUL-1b: Conduct project-specific level surveys to identify built-environment historical resources

Mitigation Measure LRDP-CUL-1c: Implement measures to protect identified historic resources

Rationale for Finding: Based on the nature and types of structures on campus that would be altered or removed under the 2020 LRDP Update, and based on the highly disturbed nature of the campus site, it is unlikely unique archaeological or significant historical resources (other than the Governor's Hall) would be altered or removed. This analysis conservatively concludes that the impact on historic resources could be significant and unavoidable.

d) Noise

Impact LRDP-NOI-1: Development under the 2020 LRDP Update would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project from construction activities in excess of applicable standards (Final Supplemental EIR pages 3.11-23 through 3.2-36.)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-NOI-1. Specifically, Mitigation Measure LRDP-NOI-1, set forth below, is feasible and is adopted to mitigate significant effects from Impact LRDP-NOI-1. However, even with implementation of this measure, significant unavoidable impacts will occur. Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-NOI-1 to a less than significant level.

Mitigation Measure LRDP-NOI-1: Implementation of Measures to Reduce Construction Noise

For construction activities associated with future projects under the 2020 LRDP Update, UC Davis will implement or incorporate the following noise reduction measures into construction specifications for contractor(s) implementation during project construction:

1. Construction activities will be limited to the daytime hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday and between 9:00 a.m. and 6:00 p.m. on Sunday, when feasible.

2. Pile driving will not occur outside of the daytime hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday and between 9:00 a.m. and 6:00 p.m. on Sunday.
3. All construction equipment used for future projects will be equipped with suitable exhaust and intake silencers in good working order. All construction equipment will be properly maintained and equipped with intake silencers and exhaust mufflers and/or engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds, if used, will be closed during equipment operation.
4. All construction equipment and equipment staging areas will be located as far as possible from nearby noise-sensitive land uses, and/or located such that existing or constructed noise attenuating features (e.g., temporary noise wall or blankets) block line of sight between affected noise-sensitive land uses and construction staging areas, to the extent feasible.
5. Individual operations and techniques will be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete offsite instead of onsite) where feasible and consistent with building codes and other applicable laws and regulations.
6. Stationary noise sources such as generators or pumps will be located as far as feasible from noise-sensitive land uses.
7. No less than one week prior to the start of construction activities at a particular location, notification will be provided to academic, administrative, and residential or noise-sensitive uses (such as schools) located within 500 feet of the construction site.
8. For any construction activity that must extend beyond the daytime hours of 7:00 a.m. and 6:00 p.m. on weekdays and Saturdays, and between 9:00 a.m. and 6:00 p.m. on Sundays, the construction contractor for that project will ensure that noise levels at the nearest noise-sensitive land use do not exceed 55 dBA during the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA during the hours of 10:00 p.m. to 7:00 a.m., as feasible. In addition to measures described above, the following measures may also help achieve this performance standard.
 - a. Install temporary noise barriers as close as possible to the noise source or the receptor and located within the direct line-of-sight path between the noise source and nearby sensitive receptor(s). The barrier should be constructed of material that has a surface weight of at least 1 pound per square foot and has an acoustical rating of at least 25 STC (Sound Transmission Class). This can include a temporary barrier constructed with plywood support on a wood frame, sound curtains supported on a frame, or other comparable material.
 - b. Use “quiet” gasoline-powered compressors or electrically powered compressors as well as electric rather than gasoline- or diesel-powered forklifts for small lifting, where feasible.
 - c. Prohibit idling of inactive construction equipment for prolonged periods (i.e., more than 2 minutes).
 - d. Retain a qualified noise specialist to conduct noise monitoring to ensure that noise reduction measures achieve the necessary reductions such that levels at the receiving land uses do not exceed 55 dBA during the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA during the hours of 10:00 p.m. to 7:00 a.m.

Rationale for Finding: Implementation of Mitigation Measure LRDP-NOI-1 would reduce construction exposure to noise-sensitive land uses and would therefore reduce the severity of construction noise impacts. However, and as was the case for the 2010 LRDP, some future development under the 2020 LRDP Update may not be able to reduce construction noise sufficiently to eliminate the potential for impacts to occur. Therefore, construction noise impacts would be significant and unavoidable.

Impact LRDP-NOI-2: *Development under the 2020 LRDP Update would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project from operations in excess of applicable standards (Final Supplemental EIR pages 3.11-30 through 3.2-36.)*

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-NOI-1. Specifically, Mitigation Measure LRDP-NOI-1, set forth below, is feasible and is adopted to mitigate significant effects from Impact LRDP-NOI-1. However, even with implementation of this measure, significant unavoidable impacts will occur. Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-NOI-1 to a less than significant level.

Mitigation Measure LRDP-NOI-1: Implementation of Measures to Reduce Construction Noise

Rationale for Finding: Implementation of Mitigation Measure LRDP-NOI-1 would reduce construction exposure to noise-sensitive land uses and would therefore reduce the severity of construction noise impacts. However, and as was the case for the 2010 LRDP, some future development under the 2020 LRDP Update may not be able to reduce construction noise sufficiently to eliminate the potential for impacts to occur. Therefore, construction noise impacts would be significant and unavoidable.

Impact LRDP-NOI-2: *Development under the 2020 LRDP Update would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project from emergency helicopter noise in excess of applicable standards (Final Supplemental EIR pages 3.11-38 through 3.11-39.)*

FINDING: The University finds that there are no feasible mitigation options to reduce the significant noise impact related to emergency helicopter operations to less than significant levels. Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-NOI-2 to a less than significant level.

Rationale for Finding: There are no feasible mitigation options to reduce the noise impact from emergency helicopter operations. Therefore, construction noise impacts would be significant and unavoidable.

Impact LRDP-NOI-4: *Development under the 2020 LRDP Update would place project-related activities in the vicinity of a private airstrip or an airport land use plan or within 2 miles of a public airport or public use airport, resulting in exposure of people residing or working in the project area to excessive noise levels (Final Supplemental EIR pages 3.11-46 through 3.11-47.)*

FINDING: The University finds that there are no feasible mitigation options to reduce the significant noise impact related to emergency helicopter operations to less than significant

levels. Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-NOI-4 to a less than significant level.

Rationale for Finding: Although emergency helicopter activity already occurs, the additional landing and takeoff could result in increased sleep disturbance in the project area. In addition, the projected growth in helicopter operations would expand the 65 CNEL contour to include residences north of the campus that are not included in this contour under existing conditions. There are no feasible mitigation options to reduce the significant impact related to emergency helicopter operations to less than significant levels. Therefore, this impact is significant and unavoidable.

Cumulative Impact related to Short-Term Construction Noise

FINDING: Implementation of Mitigation Measure LRDP-NOI-1 would reduce construction exposure to noise-sensitive land uses and would therefore reduce the severity of construction noise impacts. However, it is not possible to ensure that noise from construction would be reduced to less than significant levels for all future projects and in all locations. Accordingly, the 2020 LRDP Updates' impact on short-term construction noise is cumulatively considerable (Final Supplemental EIR Volume 1, Chapter 4, Pages 4-11 through 4-12).

Mitigation Measure LRDP-NOI-1: Implementation of Measures to Reduce Construction Noise

d) Transportation and Circulation

Impact LRDP-TRA-1: Implementation of the 2020 LRDP would conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (Final Supplemental EIR pages 3.15-26 through 3.115-33.)

FINDING: The University finds that changes or alterations have been incorporated into the Project which mitigate significant effects on the environment from Impact LRDP-TRA-1. Specifically, Mitigation Measures LRDP-TRA-1a through LRDP-TRA-1c, set forth below, are feasible and are adopted to mitigate significant effects from Impact LRDP-TRA-1. However, even with implementation of this measure, significant unavoidable impacts will occur. Therefore, the University finds that specific economic, legal, social, technological, or other considerations make it infeasible to reduce Impact LRDP-TRA-1 to a less than significant level.

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

Mitigation Measure LRDP-TRA-1b: Monitor transit service performance and implement transit service and/or facility improvements

During the 2020–2021 academic year, UC Davis shall coordinate with SacRT and other relevant transit operators to establish baseline transit performance (i.e., loading, productivity, and on-time performance) and safety metrics for routes operating within the vicinity of the Sacramento Campus consistent with established standards and methods. This process should consider the effects of the current COVID-19 pandemic on transit performance. UC Davis shall additionally coordinate with SacRT and other relevant transit operators to assess transit performance and safety for routes operating within the vicinity of the Sacramento Campus every two years over the 2020 LRDP Update planning horizon.

Relative to baseline levels, if the performance of routes operating within the vicinity of the Sacramento Campus is found to fail to meet established standards or if performance worsens for services that already fail to meet established standards, SacRT and other relevant transportation agencies shall implement transit service and/or facility improvements. The implementation of transit service and/or facility improvements shall offset degradations to transit performance in excess of established performance standards (per the most up-to-date SacRT Service Standards) that are attributable to the implementation of the 2020 LRDP Update.

Currently, SacRT and other relevant transit operators regularly monitor transit service performance and adjust service levels, as feasible, according to established service standards. SacRT and other relevant transit operators would continue to implement this monitoring and service change process over the duration of the 2020 LRDP Update implementation. Moreover, UC Davis would continue to adjust campus-operated shuttle routes and schedules as warranted by passenger demand and other operating considerations. Additionally, nearby roadway owners such as the City of Sacramento and Caltrans operate and maintain their facilities consistent with their policies and standards related to multi-modal transportation operations. As requested, UC Davis shall meet with SacRT, the City of Sacramento, Caltrans, and/or other transportation agencies to coordinate the implementation of transit service and/or facility improvements.

Potential transit improvements include modifying existing transit routes or adding new routes to serve areas of the Sacramento Campus underserved by transit, adding service capacity (through increased headways and/or larger vehicles) to prevent chronic overcrowding, constructing transit priority treatments to improve service reliability (i.e., transit only lanes on Broadway and Stockton Boulevard, transit signal priority at traffic signals, etc.), improving terminal facilities to accommodate additional passengers and transit vehicles, and improving coordination between transit providers. Improvements should be selected based on existing performance data and targeted to address those areas not meeting established service standards (e.g., investing in transit priority treatments if on-time performance is the issue, or adding service capacity if vehicle loading is the issue).

Transit facility and roadway improvements shall be designed and constructed in accordance with industry best practices and applicable UC Davis, City of Sacramento, and State of California standards. Improvements shall be implemented or constructed in a manner that would not physically disrupt existing transit service or facilities (e.g., additional bus service that exceeds available bus stop or transit terminal capacity) or otherwise adversely affect transit operations.

Mitigation Measure LRDP-TRA-1c: Monitor transit-related collisions and implement countermeasures to minimize potential conflicts with transit service and facilities

During the 2020–2021 academic year and every 2 years thereafter, UC Davis shall record on-campus collisions involving a transit vehicle and establish a transit vehicle collision rate. The rate should be sensitive to transit provider, location context, and facility type (e.g., intersection versus segment). UC Davis shall determine the on-campus transit vehicle collision rate as part of a biennial mitigation monitoring program. In instances where the rate increases from the prior observation period, UC Davis shall develop and implement countermeasures that address collision hot-spots and common primary collision factors. UC Davis shall also identify and develop countermeasures for locations where the change in the mix of travel patterns and behavior is determined to be incompatible with the facility as designed. Potential countermeasures include physically separating modes in shared operating environments, particularly high- versus low-speed travel modes, and increased education and enforcement.

Transit facility and roadway improvements that intend to minimize conflicts between transit vehicles and other travel modes shall be designed and constructed in accordance with industry best practices and applicable UC Davis, City of Sacramento (for facilities within the City of Sacramento), and State of California standards. Improvements shall be implemented or constructed in a manner that would not physically disrupt existing transit service or facilities or otherwise adversely affect transit operations.

Rationale for Finding: Implementation of Mitigation Measures LRDP-TRA-1a through LRDP-TRA-1c would minimize impacts on transit performance. However, the improvements that are necessary to improve transit performance identified in Mitigation Measure LRDP-TRA-1a would require implementation by SacRT and the City of Sacramento. Moreover, the effectiveness of the TDM strategies identified in Mitigation Measure TRA-1c are not known and subsequent vehicle trip reduction effects and, in turn, reductions to delays to transit, cannot be guaranteed. Because UC Davis cannot guarantee that these improvements would be implemented and/or be effective, this impact would remain significant and unavoidable.

Cumulative Impact related to Transit

FINDING: Implementation of the 2020 LRDP Update would increase demand for transit, as noted in Impact LRDP-TRA-1. Increases to transit travel times caused by the project as well as reasonably foreseeable land use growth would adversely affect the on-time performance and service quality of transit services under cumulative conditions. However, the service improvements that are necessary to improve transit performance identified in Mitigation Measure LRDP-TRA-1a would require implementation by SacRT. Since UC Davis cannot guarantee that these service improvements would be implemented, this cumulative impact would remain significant and unavoidable.

Mitigation Measure LRDP-TRA-1a: Monitor transit service performance and implement strategies to minimize delays to transit service

Mitigation Measure LRDP-TRA-1b: Monitor transit service performance and implement transit service and/or facility improvements

Mitigation Measure LRDP-TRA-1c: Monitor transit-related collisions and implement countermeasures to minimize potential conflicts with transit service and facilities

Rationale for Finding: Implementation of Mitigation Measures LRDP-TRA-1a, LRDP-TRA-1b, and LRDP-TRA-1c would reduce the significance of this impact, but not to a less than significant level, as UC Davis cannot guarantee that these service improvements would be implemented. This cumulative impact is significant and unavoidable.

E. FINDINGS ON PROJECT ALTERNATIVES

1. Alternatives Screened Out from Detailed Consideration in the Supplemental EIR

For the 2020 LRDP Update, a range of alternatives was analyzed in Volume 1, Chapter 6, Section 6.4 of the Final Supplemental EIR. The alternatives that were considered but ultimately dismissed include: (1) Maximize Open Space, which would convert several existing and proposed surface and structured parking areas to open space to maximize open space on campus; however, while it would add additional campus open space and landscaping, it would not make efficient use of limited campus land resources or facilitate additional facilities where increased demand in community

health care needs could be met more efficiently; (2) Offsite Aggie Square Location Alternative, which would locate Aggie Square away from the Sacramento Campus, and which was rejected because it would not meet the basic project objectives of creating Aggie Square as a collaborative ecosystem, and would not provide efficient movement between Aggie Square, UC Davis Hospital and nearby clinics; and (3) Housing-Focused Alternative, which would convert proposed education and research buildings to housing along V Street at 49th Street south of the existing nursing building to increase the overall number of housing units on the Sacramento Campus, and which was rejected because it could potentially displace buildings that would facilitate growth of teaching, research and education initiatives, and growth in job creation and workforce development for health care professionals, which would not meet overall project objectives.

The University finds that all of the alternatives eliminated from further consideration in the Draft Supplemental EIR are infeasible, would not meet most project objectives and/or would not reduce or avoid any of the significant effects of the proposed project, for the reasons detailed in Volume 1, Chapter 6, Section 6.4 of the Final Supplemental EIR.

2. Alternatives Analyzed in the Supplemental EIR

In compliance with CEQA and the CEQA Guidelines, the EIR evaluated a reasonable range of alternatives to the Project. The EIR's analysis examined the potential feasibility of each alternative, its environmental effects, and its ability to meet the basic project objectives. The alternatives analysis included analysis of a no-project alternative and identified the environmentally superior alternative, as required by CEQA. The Draft Supplemental EIR evaluated four alternatives to the Project:

Alternative 1: No Project

Alternative 2: Reduced Development Program. The Reduced Development Alternative would proceed with 2020 LRDP Update implementation, but with an overall reduction in planned campus development. New development under the 2020 LRDP Update is projected to be 3,400,189 gsf. The Reduced Development Program would limit new development on the Sacramento Campus by approximately 30 percent. Development would be reduced partially by limiting Aggie Square building heights. Under the Reduced Development Program, new building square footage associated with Aggie Square Phase I would be 1,020,056 gsf.

Alternative 3: Alternative Land Use Plan. The Alternative Land Use Plan Alternative would relocate Aggie Square to the Cypress Building area in the northwest corner of the campus.

Alternative 4: Offsite Housing and Offices. The Offsite Housing and Offices Alternative would locate the 2020 LRDP Update's proposed housing component and a portion of the administrative, education, and community serving space to an offsite location and into existing nearby vacant office and/or retail buildings.

Brief summaries of these alternatives and findings regarding these alternatives are provided below.

- **Alternative 1: No Project Alternative:** The No Project Alternative would not proceed with 2020 LRDP Update implementation, and the existing 2010 LRDP would continue to guide campus long-range development. Under provisions of the 2010 plan, additional growth would occur primarily associated with new buildings and reconfigured square footage in the hospital, patient care, and education components of the campus. Since the existing 2010 LRDP does not include housing or community serving uses, these would not be included under the No Project Alternative. Because the existing 2010 LRDP would continue to guide development on campus,

the No Project Alternative would not preserve the existing environmental conditions. Impacts analyzed in the 2010 LRDP Final EIR would still occur. Individual projects would proceed through individual CEQA approvals and amendments to the 2010 LRDP Final EIR, as necessary (See Final Supplemental EIR pages 6-6 through 6-9).

FINDING: Pursuant to Public Resources Code section 21081(a)(3) and CEQA Guidelines section 15091(a)(3), The University finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the No Project Alternative infeasible. Under the No Project Alternative, new residential housing, community serving uses, and expansion of the education core would not occur to the extent proposed in the 2020 LRDP Update. Therefore, the No Project Alternative would not achieve several of the identified project objectives. These include facilitating growth in student enrollment through on-campus housing and expanded education facilities, community engagement and community well-being through community serving uses and expanded community partnerships and addressing the projected increased need for health care professionals and workforce development through educational initiatives. This alternative would also not avoid existing significant and unavoidable impacts identified in the 2010 LRDP, including impacts to cultural resources and noise. The University therefore rejects this alternative for the reasons listed above.

- **Alternative 2: Reduced Development Program Alternative:** Under the Reduced Development Program Alternative, UC Davis would proceed with the 2020 LRDP Update but with an overall reduction in planned campus development compared with the 2020 LRDP Update, particularly associated with Aggie Square Phase I. The addition of Aggie Square Phase I and other future projects would still be incorporated into the 2020 LRDP Update but would be reduced in size through a limit on square footage and through reducing the proposed Aggie Square building height to no more than four stories. The intent of the Reduced Development Program Alternative is to reduce the amount of new building square footage, and correspondingly reduce the future campus population, which is intended to reduce aesthetic, transportation, noise, air quality, and GHG impacts associated with implementation of the 2020 LRDP Update. A reduction in development at the Sacramento Campus by approximately 30 percent would reduce the proposed new building square footage by approximately 1,020,056 gsf. This reduction in gsf is partially related to limiting the Aggie Square Phase I development, but also by limiting other development on campus. A reduction in square footage of that scale would cause a resultant reduction in proposed campus population growth of approximately 30 percent, or an increase of about 1,366 instead of the full increase described for the proposed project. This would bring the total campus daily on-site population to approximately 19,834, which is slightly above what was analyzed in the 2010 LRDP Final EIR (see Final Supplemental EIR pages 6-9 through 6-13).

FINDING: Pursuant to Public Resources Code section 21081(a)(3) and CEQA Guidelines section 15091(a)(3), The University finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the Reduced Development Program Alternative infeasible. By reducing the size of the proposed project, this alternative would not achieve the University's objectives of providing on-campus housing. Under the Reduced Development Program Alternative, impacts on aesthetics, traffic, noise, and air quality would be reduced; however, a reduction in planned development would not achieve several project objectives. These include keeping pace with the increased demand for community health care, expanding teaching, education and research missions, and facilitating enrollment growth to meet the increased need for health care professionals. In addition, a reduced development program would limit the ability to provide state-of-the-art facilities that support research, workforce development, and education initiatives to support a healthy local economy through

an increase in and access to jobs. Furthermore, while impacts would be slightly reduced, this alternative would not avoid the Project's significant and unavoidable impacts on air quality, cultural resources, noise, and transit.

- **Alternative 3: Alternative Land Use Plan:** Under the Alternative Land Use Plan Alternative, Aggie Square Phase I site would be relocated to the Cypress side of the campus, which is in the northwest corner of the campus south of V Street and east of Stockton Boulevard. The Cypress Building would have to either be demolished or renovated to make room for Aggie Square Phase I (demolition of the Cypress Building is also part of the 2020 LRDP Update). The Aggie Square Phase I site would remain in its current use until such time that new Education, Research and & Housing uses are developed. The intent of the Alternative Land Use Plan Alternative is to move the more intensive Aggie Square land uses to a portion of the campus that is closer to U.S. Highway 50. This would move the traffic impacts of the proposed 2020 LRDP Update from the Broadway and Stockton Boulevard intersection and adjacent residential areas closer to the freeway. Building heights would likely need to be higher to accommodate the Aggie Square development at this location, which could result in additional visual impacts (see Final Supplemental EIR pages 6-13 through 6-17).

FINDING: Pursuant to Public Resources Code section 21081(a)(3) and CEQA Guidelines section 15091(a)(3), The University finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the Alternative Land Use Plan Alternative infeasible. Siting the Aggie Square Phase I project further from the Sacramento Language Academy would still result in traffic impacts, but they would be concentrated further north on Stockton, and toward V Street. It would also be inefficient to locate this project within the Hospital land use designation. The 2020 LRDP seeks to combine like structures and land uses to improve campus efficiency. Furthermore, the Alternative Land Use Plan would not significantly reduce environmental impacts, and would have additional aesthetic impacts.

- **Alternative 4: Offsite Housing and Offices:** Under the Offsite Housing and Offices Alternative, the changes proposed under the 2020 LRDP Update would still occur; however, some of the components would be provided at offsite locations. The Offsite Housing and Offices Alternative is intended to address several of the project impacts, such as increased aesthetics, air quality, and traffic impacts, that would occur in the immediate vicinity of the campus and disperse those impacts over a broader area away from the campus. Near the campus, there are existing commercial and office buildings that are vacant or underutilized, or a combination of both. However, a large number of buildings would be required as the Aggie Square Phase I project includes several high-rise buildings. The existing buildings or the site on which they are located could serve as locations for retrofitting those buildings to serve the office needs of UC Davis Health or they could be redeveloped/retrofitted to provide a location for the proposed 324 units of student housing (see Final Supplemental EIR pages 6-17 through 6-22).

FINDING: Pursuant to Public Resources Code section 21081(a)(3) and CEQA Guidelines section 15091(a)(3), The University finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the Offsite Housing and Offices Alternative infeasible. Offsite Housing and Offices Alternative would result in reduced impacts on air quality and cultural resources but could result in impacts elsewhere. This alternative would not meet several of the identified project objectives. Interaction and collaboration among all the varied uses comprising the health care campus community would be more difficult if those varied uses are dispersed away from the campus. In addition, locating housing away from campus would remove a population that would energize the community serving uses proposed as part of the 2020 LRDP Update.

FINDING: The Draft Supplemental EIR identified the Reduced Development Program Alternative as the environmentally superior alternative. While the Reduced Development Program Alternative would result in less impacts overall compared to the Project, it would still result in Project's significant and unavoidable impacts on air quality, cultural resources, noise, and transit. The Reduced Development Program Alternative, however, is infeasible because it would not achieve the University's objective of keeping pace with the increased demand for community health care, expanding teaching, education and research missions, and facilitating enrollment growth to meet the increased need for health care professionals. It would also not meet the University's objective to provide state-of-the-art facilities that support research, workforce development, and education initiatives to support a healthy local economy through an increase in and access to jobs, nor would it meet the University's objective to provide the amount of infrastructure needed to facilitate continued growth of research and collaboration efforts on the Sacramento Campus. There would be fewer employment and partnership opportunities with less building space, and the Reduced Development Program Alternative would not provide as much opportunity for growth in workforce development and lifelong learning. For these reasons, the University rejects the environmentally superior alternative as infeasible. When compared to these alternatives analyzed in the Draft Supplemental EIR, the Project provides the best available and feasible balance between maximizing attainment of the Project's objectives and minimizing significant environmental impacts.

F. FINDINGS ON MITIGATION MEASURES AND ALTERNATIVES PROPOSED IN COMMENTS

Several comments on the Draft Supplemental EIR suggested mitigation measures and/or project alternatives. However, where the suggestions requested minor modifications in adequate mitigation measures, requested mitigation for impacts that the Draft Supplemental EIR determined were less than significant, or requested mitigation for impacts for which the Draft Supplemental EIR already identified measures that would reduce the impact to less than significant, these requests were declined as unnecessary. The University adopts and incorporates by reference the specific reasons for declining such mitigation measures and/or project alternatives contained in the responses to comments in the Final EIR as its grounds for rejecting these measures and/or alternatives.

Additionally, certain mitigation measures and/or alternatives suggested in comments could reduce impacts that would otherwise be significant, but implementation of measures and/or alternatives would be infeasible.

FINDING: The University finds that specific economic, legal, social, technological, or other considerations make infeasible the following mitigation measures or project alternatives identified in the final EIR, for the reasons explained below.

Several commenters recommended incorporating full *Recommended Guidance for Land Use Emission Reductions* (Version 4.2) measures in its AQMP for emission reductions quantification and specific implementation actions. The measures included in the Draft Supplemental EIR partially duplicate Guidance v4.2 where applicable; for example, SMAQMD's operational mitigation measures TST-3 and TST-4 target expanded transit service and frequency, consistent with Mitigation Measure LRDP-TRA-1a. Other measures in Guidance 4.2 are not applicable to the 2020 LRDP Update; for example, SMAQMD's operational mitigation measure TRT-13 seeks to implement a school bus program, which is not applicable to a medical campus. In some cases, it would be infeasible for UC Davis to implement both the University's measures in the Sustainable Practices Policy while also implementing all of the measures in Recommended Guidance v4.2. In general, the Recommended Guidance v4.2 would not be considerably different from other mitigation measures previously

analyzed in the Draft Supplemental EIR or would not clearly lessen the environmental impacts of the Project as discussed and analyzed in Volume 3, Chapter 2 pages of the Final Supplemental EIR (Final Supplemental EIR pages 2-37 through 2-42).

One commenter stated that an alternative that focuses on renewable energy should have been included. While more renewables would reduce air quality emissions, if the impacts would nevertheless remain significant and unavoidable due to mobile sources, then an alternative that includes renewable energy would likely not substantially reduce air quality impacts. Whether the comment is considered as a mitigation measure or as an alternative, it would not address the significant and unavoidable air quality impacts of the project. The Draft Supplemental EIR discusses sustainability as part of the project descriptions in Volume 1, Section 2.8.4, *Sustainability*, and in Volume 2, Section 2.9, *Sustainability*. CEQA does not require that a renewable energy alternative be considered. In addition, energy impacts were found to be less than significant in the Supplemental EIR. Consequently, an alternative to address energy or additional mitigation to address energy is not needed as there is no impact. More detail is provided in the Final Supplemental EIR, Master Response 2: Sustainability.

One commenter suggested that the Draft Supplemental EIR should have included a “housing focused alternative”. Generally, the addition of more housing increases localized impacts related to traffic, and therefore, air quality and noise. Additional construction of a housing building consisting of 13 stories would increase temporary air quality and noise impacts related to construction and would also result in additional impacts to aesthetics. This alternative would result in an increase in the campus’ residential population, which would result in additional energy, GHG, and public services and utilities impacts, especially in terms of energy and water usage. It would likely result in additional environmental impacts above what was analyzed in the Draft Supplemental EIR. As such, an alternative increasing the amount of housing in Aggie Square Phase I would not result in fewer or lesser impacts than the environmentally superior alternative described in the Draft Supplemental EIR, and the University further finds the suggested alternative to be infeasible. The suggested alternative would also not meet several basic project objectives, such as creating state-of-the art facilities for science, technology, engineering and research as well as office space and education. The suggested alternative also would not meet the goal of locating the LLL and LSTE buildings adjacent to the existing hospital and focusing on the proximity to existing researchers and clinical operations, rather than providing housing for all students on campus. In addition, the University requires that prevailing wage be paid on all Project components, including housing, which would make the construction of additional housing infeasible given the increase in the cost of construction by approximately 20 percent (Final Supplemental EIR Volume 3, Chapter 2, pages 2-120 through 2-121).

Several commenters also suggested that the University should implement Mitigation Measure LRDP-GHG-2 and begin purchasing carbon offsets prior to 2025; however, the University finds that it is not necessary to modify this mitigation measure in order to avoid a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases as analyzed in the discussion for Impact LRDP-GHG-2, and for the reasons explained in Volume 3, Chapter 2 of the Final Supplemental EIR (page 2-132).

G. FINDING ON RESPONSES TO COMMENTS ON THE DRAFT SUPPLEMENTAL EIR, REVISIONS TO THE FINAL SUPPLEMENTAL EIR, AND OTHER FINDINGS

Volume 3, Chapter 2 of the Final Supplemental EIR includes the comments received on the Draft Supplemental EIR and responses to those comments. The focus of the responses to comments is on the disposition of significant environmental issues as raised in the comments, as specified by CEQA Guidelines § 15088(b). The University finds that responses to comments made on the Draft Supplemental EIR and revisions to the Final Supplemental EIR merely clarify and amplify the analysis presented in the document and do not trigger the need to recirculate per CEQA Guidelines §15088.5(b).

No changes have been made to the 2020 LRDP Update Project Description in Volume 1 of this Final Supplemental EIR. Revisions made to the Aggie Square Phase I component of the LRDP Update are described in a separate findings document. However, the revisions are minor and would not change the overall growth envelope of the 2020 LRDP Update for the reasons stated in Volume 3, Chapter 1, Section 1.2. Therefore, the population projections for 2040 (i.e., 21,200 persons) and the total campus buildings space projections for 2040 (i.e., 7,070,000 gross square feet [gsf]) remain the same, and no revisions to the environmental analysis are warranted.

On August 21, 2020, the UC Regents approved a land use amendment to the 2010 LRDP to accommodate the development of Parking Structure 4 in the north west corner of the Campus. This land use amendment moved the location for Parking Structure 4 by exchanging the Parking Structure land use with Ambulatory Care land use. Specifically, 1.6 acres of Ambulatory Care land use was redesignated to Parking Structure land use, and 1.6 acres of Parking Structure land use was redesignated to Ambulatory Care land use. The land use change was made to allow for the development of Parking Structure 4. During the planning efforts for Parking Structure 4 and the X and 48th Streets intersection improvements, alternative locations and designs for Parking Structure 4 were evaluated to determine the optimal location for user convenience. The Parking Structure 4 project was previously anticipated to occupy an area along the east side of 49th Street and north of Parking Structure 2. However, the revised location is closer to the UC Davis Main Hospital and would allow the campus to maintain adequate building footprints for future ambulatory care or office uses between 48th and 49th streets and north of Y Street. The land use amendment optimized site efficiencies for the UC Davis Sacramento Campus parking structure.

The land uses in the north west of the UC Davis Sacramento Campus have been slightly modified since the public release of the Draft Supplemental EIR. The Parking Structure land use to accommodate Parking Structure 4 is now proposed to extend slightly farther to the east. This modification would make the Parking Structure land use designation approximately 0.35 acres larger, with an equal amount of decrease to the adjacent Ambulatory Care land use. Figure 2-7 and Table 2-3 in Volume 1, Chapter 2 of the Final Supplemental EIR, have been updated to show these changes.

As stated in Volume 1, Chapter 1, of the Supplemental EIR, the Replacement Hospital Tower project was not considered as a stand-alone project in this EIR. However, because it was one of the future projects that would occur under the 2020 LRDP Update, it was included in the overall planning scenario. The metrics considered in the overall planning scenario for the 2020 LRDP Update are included in Appendix C of the Final Supplemental EIR. The Replacement Hospital Tower was proposed to be built by 2027, with a proposed net increase of 680,000 gsf. A slightly larger project is being proposed in response to the coronavirus disease 2019 (COVID-19) pandemic, but the project will fit within the overall growth envelope envisioned for the 2020 LRDP Update as the slight increase in size for the Replacement Hospital Tower will be offset by the reduction in size for Aggie

Square Phase I, as well as offset by other minor adjustments to building square footages for projects to be implemented through the 2020 LRDP Update. Project specific CEQA analysis of the Replacement Hospital Tower project will be conducted in 2021.

In addition, since the publication of the Draft Supplemental EIR, the Sacramento Area Council of Governments has indicated in its comment letter (Comment Letter L-1) that it finds the 2020 LRDP Update as a whole consistent with its Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), and that the EIR for the MTP/SCS encompasses impacts related to population growth and displacement arising from the Project. This information merely clarifies and amplifies the analysis presented in the document and does not trigger the need to recirculate per CEQA Guidelines §15088.5(b).

The University finds that these changes to the 2020 LRDP Update are minor and do not trigger the need to recirculate per CEQA Guidelines §15088.5(b).

FINDING: The University finds that no significant new information was added to the Draft Supplemental EIR after the public review period. The University specifically finds that: no new significant environmental impact would result from the Project or from the implementation of a mitigation measure; no substantial increase in the severity of an environmental impact would result, or if such an increase would result, the University has adopted mitigation measures to reduce the impact to a level of insignificance; the University has not declined to adopt any feasible project alternative or mitigation measures considerably different from others previously analyzed that would clearly lessen the environmental impacts of the Project; and the Draft Supplemental EIR is not so fundamentally and basically inadequate in nature that it precluded meaningful public review.

III. STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.” (CEQA Guidelines § 15093.) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency must state in writing the specific reason to support its actions based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record. (Id.)

Having (i) adopted all feasible mitigation measures, (ii) recognized all significant, unavoidable impacts, and (iii) balanced the benefits of the Project against its significant and unavoidable impacts, the University finds that the Project’s benefits outweigh and override its significant unavoidable impacts for the reasons stated below. Each benefit set forth below constitutes an overriding consideration warranting approval of the Project, independent of the other benefits, despite each and every unavoidable impact.

- The 2020 LRDP Update would provide additional state-of-the-art inpatient and outpatient capacity to keep pace with community health care needs and to support the UC Davis Health System’s teaching, research, and community engagement missions.
- The University is charged, under the California Master Plan for Higher Education, with providing the opportunity for undergraduate education to those California’s who graduate in the top one-

eighth of their high school class. The University is also charged with admitting those students who complete coursework in the lower division transfer curriculum at community colleges and who meet minimum grade point average requirements. The University serves as the state's primary research agency and is the primary public institution in the state offering doctoral and certain professional degrees. The 2020 LRDP Update helps achieve these University objectives.

- The 2020 LRDP Update would facilitate growth in student enrollment and the implementation of major educational initiatives, such as the School of Public Health, to address the existing and projected need for health care professionals and other highly trained, multidisciplinary professionals in the state of California. The project would also support workforce development.
- The 2020 LRDP Update would provide the facilities and infrastructure required to facilitate continued growth of the research enterprise at the UC Davis Sacramento Campus, especially to foster interaction and collaboration between all campus programs and disciplines, including advancing healthcare research with emerging new technologies in translational health therapies, biomedical devices, and immunotherapies to improve the global human health condition.
- The 2020 LRDP Update would create more expansive partnerships between UC Davis and the City of Sacramento, local agencies, and local organizations and neighbors. including the expected completion of a City of Sacramento tax increment financing mechanism to catalyze new community and infrastructure investments within and nearby the campus.
- The 2020 LRDP Update would address seismic and other code-related deficiencies in aging buildings, replacing them with state-of-the-art facilities for health care and health-care related research so that critical regional healthcare services continue operating during and after major seismic events.
- The 2020 LRDP Update will help attain UC Davis' sustainability goals through incorporation of the UC Sustainable Practices Policy into and integration with the 2020 LRDP EIR.
- The 2020 LRDP Update will advance California's economic, social and cultural development, which depends upon broad access to an educational system that prepares all of the state's inhabitants for responsible citizenship and meaningful careers.
- The 2020 LRDP Update will constitute a significant economic benefit to the Sacramento region. UC Davis has a significant economic impact on the area's economy. The total economic impact of UC Davis in the region is much greater than the sum of the direct expenditures made by UC Davis and its affiliated organizations and populations. Each dollar spent locally by UC Davis cycles through the area economy, generating additional income and employment.
- The 2020 LRDP Update would also ensure appropriate facility adjacencies, improve campus open space, and improve pedestrian and bicycle facilities to achieve a connected campus supporting bike and pedestrian mobility and avoiding use of single occupancy vehicles to help reduce overall vehicle miles travelled (VMT). These benefits would also contribute to the low VMT designation of the campus and nearby neighborhoods to support the VMT goals of the City of Sacramento, Sacramento Area Council of Governments, and the State of California.
- The 2020 LRDP Update provides many indirect community contributions in the form of education, recreation, artistic, and cultural enrichment to residents of the Sacramento area through such functions as extension courses, performing arts events, art exhibits, sporting events, conferences and workshops. As the 2020 LRDP is implemented, the level of these benefits and services will grow.

- UC Davis is the largest employer in the Davis area and one of the largest employers in the Sacramento Valley. This is particularly significant because of the quality and diversity of new jobs which are related to the implementation of the 2020 LRDP.
- The 2020 LRDP Update increased economic activity resulting from campus growth is also expected to result in secondary growth in non-University businesses in the Sacramento area. Implementation of the 2020 LRDP Update will also provide construction employment as individual building projects are developed.
- When compared to the alternatives analyzed in the Final Supplemental EIR (including the No Project Alternative), the 2020 LRDP Update provides the best available balance between maximizing attainment of the project objectives and minimizing significant environmental impacts.

IV. APPROVALS

The University hereby takes the following actions:

1. The University certifies the Final Supplemental EIR.
2. The University adopts as conditions of approval of the Project all mitigation measures within the responsibility and jurisdiction of the University.
3. The University adopts the Mitigation Monitoring and Reporting Program for the Project.
4. The University adopts the Findings in their entirety, including the Statement of Overriding Considerations.
5. Having certified the Final Supplemental EIR, incorporated mitigation measures into the Project, and adopted the Mitigation Monitoring and Reporting Program and the foregoing Findings and Statement of Overriding Considerations, the University hereby approves the Project, and directs staff to prepare and file a Notice of Determination for the Project.