

## 5.0 ALTERNATIVES

---

### 5.1 INTRODUCTION

This section of the Recirculated Draft SEIR (SEIR) presents an analysis of the alternatives to the proposed 2020 LRDP. CEQA requires that an EIR describe a range of reasonable alternatives to the proposed project or to the location of the project that could feasibly avoid or lessen any significant impacts while feasibly attaining most of the basic objectives of the proposed project. An EIR should also evaluate the comparative merits of the alternatives. This section sets forth potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the *State CEQA Guidelines* pertaining to the analysis of alternatives are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.
- The range of alternatives required in an EIR is governed by a “rule of reason.” Therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- The No Project alternative shall be evaluated along with its impacts. The analysis of the No Project alternative shall discuss the existing conditions at the time the notice of preparation is published. Additionally, the analysis shall discuss what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.
- The range of feasible alternatives should be selected and discussed in a manner intended to foster meaningful public participation and informed decision-making. Among the factors that may be taken into account when addressing the feasibility of alternatives are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an alternative site.
- The EIR should also identify any alternatives that were considered but rejected as infeasible and briefly explain the reasons underlying the lead agency’s determination. Among the factors that may be used to eliminate alternatives from further detailed consideration in an EIR are: (1) failure to meet

most of the basic project objectives; (2) infeasibility; or (3) inability to avoid significant environmental impacts.

- The description of each alternative must be sufficient to allow meaningful evaluation and comparison with the proposed project. The lead agency must also identify the environmentally superior alternative in the Draft EIR.

## 5.2 PROJECT HISTORY

In 1988, The Regents of the University of California (The Regents) authorized the President of the University to initiate planning for additional campuses to accommodate the student population expected in the latter part of the 20<sup>th</sup> century and into the 21<sup>st</sup> century. In 1990, The Regents further determined that the search for the site of the first new campus should focus on the central portion of the Central Valley, specifically the San Joaquin Valley, which was not served by a University of California (UC) campus and where the average university attendance rates for high school graduates were much lower than the state average. More than 85 sites in the Central Valley were considered and, based on a number of factors including but not limited to demographics, transportation, and access to amenities, the University narrowed the list to 20 candidate sites in 1990. In the same year, based on additional evaluation the University further narrowed the potential locations to eight proposed sites. In 1991, three of the eight sites were selected for further analysis and environmental review.

A programmatic EIR was then prepared that presented the impacts from the development of a campus at any of the three sites. That EIR, titled the Site Selection EIR (SCH No. 1994022033), was certified by The Regents in 1995, and the Lake Yosemite site in eastern Merced County was selected by The Regents as the potential location for the development of the 10<sup>th</sup> UC campus and an associated, contiguous, and supporting community (University Community). The site was located within a 7,000-acre property owned by the Virginia Smith Trust (VST). Within the VST property, the campus site was identified in the Site Selection EIR as 2,000 acres in the northwestern portion of the property and consisted of rolling hills and grasslands. In 2000–01, the University and Merced County commenced the planning and environmental review of the development of the campus and the University Community at the Lake Yosemite site. Concurrent with the planning process, the University initiated early consultation with federal and state regulatory agencies to help expedite the permitting of the proposed campus project. In response to input from the agencies and public concern regarding the potential impact on vernal pools and biological resources from siting the campus on the original 2,000-acre site, in late 2000, the University adjusted the campus site to occupy the southwestern portion of the VST property. This shift in the location of the campus also entailed the relocation of the adjacent University Community to the south of and outside of the VST property. This shift reduced impacts to vernal pools and biological resources by

approximately 90 percent and the relocation also resulted in a significant reduction of about 750 acres in the size of both the campus and the University Community.

In 2001 and 2002, the University prepared a Long Range Development Plan (LRDP) to guide the development of the campus at this site, which was located immediately adjacent to Lake Yosemite Regional Park and prepared an EIR to evaluate and disclose the program-level impacts from the implementation of the proposed LRDP. The 910-acre campus site included an existing 200-acre golf course, about 100 acres of which were developed with a clubhouse, roads, and parking and did not contain any wetlands or other sensitive resources. This area was identified as the location of the first phase of campus facilities and was analyzed at a project-level in the 2002 LRDP EIR. At the same time, Merced County commenced the preparation of a University Community Plan (UCP) to guide the development of the University Community and designate the site in its General Plan for this use, and the preparation of an EIR for the UCP.

The UC Merced 2002 LRDP EIR evaluated 10 on-site alternatives and 8 off-site alternatives to the proposed project. It also provided updated information regarding five alternatives that were previously evaluated in the Site Selection EIR and demonstrated that even with more information available at that time regarding the proposed campus, none of those previously considered alternative locations for the campus were feasible. In 2002, The Regents approved the location of the campus on the 910-acre site adjacent to Lake Yosemite Regional Park, including the development of Phase 1 facilities on the former golf course site.

Upon approval of the 2002 LRDP, the University submitted a Section 404 permit application to the U.S. Army Corps of Engineers (USACE) to obtain authorization to fill wetlands and other waters of the U.S. located on the campus site and the northern portion of the adjacent University Community. The USACE initiated the NEPA process in 2002. Prior to completion of a Draft EIS evaluating the proposed action, the University held a series of meetings with the USACE, U.S. EPA, USFWS, and Merced County to determine whether an additional alternative could be developed that avoided additional wetlands while addressing the University's concerns about the practicability of the alternatives suggested by the USACE. These meetings resulted in the development of a revised footprint for the Campus and University Community, which underwent additional refinement in coordination with a coalition of environmental groups. This refined footprint, which included an 815-acre campus site and an 833-acre University Community North site, then became the Proposed Action that was evaluated in a joint EIS/EIR prepared by the University and the USACE in 2008 and 2009. The 2009 LRDP EIS/EIR included the evaluation of two on-site and two off-site alternatives. It also included a project-level analysis of the environmental impacts from the development of Phase 2 of the campus. The EIS/EIR was certified in March 2009. Since 2009, campus development has been guided by the 2009 LRDP. In 2013, and in 2017, the University prepared two addenda to the 2009 LRDP EIS/EIR to modify the land use plan for the campus and make

other changes to the previously approved Phase 2 campus project to accommodate what is now known as UC Merced 2020 Project.

### 5.3 PROJECT OBJECTIVES AND IMPACTS

To develop and evaluate project alternatives, the University, as Lead Agency, considered the project objectives and reviewed the significant impacts of the proposed project, identified those impacts that could be substantially avoided or reduced through an alternative, and determined the appropriate range of alternatives to be analyzed.

#### 5.3.1 Project Objectives

As stated in **Section 3.0, Project Description**, the overarching project objective is to continue the growth of UC Merced as a premier research university, consistent with the University of California's mission of teaching, research, and service excellence, and to provide an up-to-date land use plan to guide the physical planning and development of the next phase of projected campus growth from about 10,000 to 15,000 students, as well as to establish a paradigm for the campus' character.

The following are the specific project objectives that will facilitate accomplishment of the overarching project objective:

- Provide the physical planning framework to guide development that would be needed to accommodate anticipated increases in enrollment demand for the University of California system, both short-term and long-term.
- Reduce the costs of the next phase of campus development.
- Plan for a compact, pedestrian-oriented campus that reduces the need for new infrastructure.
- Plan and develop the campus to facilitate faculty-student interaction, ease and enjoyment of use of academic facilities, and an environment conducive to learning.
- Offer attractive and centrally located on-campus housing, consistent with UC-wide student housing policies.
- Provide opportunities for on-campus academic field research.
- Provide sufficient athletic facilities to offer high quality NCAA, recreational, and club athletic programs commensurate with other premier universities.
- To the extent practicable, plan and develop the campus with sustainable design by incorporating energy efficiency, water conservation, protection of biological resources, waste reduction and minimization, on-site stormwater management, and reduced dependence on automobiles.

- Promote community integration and reflect the landscape, history, resources, and diverse cultures of the San Joaquin Valley in terms of physical development.

### 5.3.2 Project Impacts

The analysis of the proposed project's environmental impacts is presented in **Section 4.0** of this SEIR. The analysis concludes that campus development under the 2020 LRDP would result in significant or potentially significant impacts in seven resource areas: air quality; biological resources; greenhouse gas emissions; hydrology and water quality; noise; public services; and transportation. With the exception of five identified impacts, all of the significant and potentially significant impacts of the proposed project would be reduced to a less than significant level with the incorporation of mitigation measures into the proposed project. The exceptions would be two significant and unavoidable project impacts on air quality, a significant and unavoidable cumulative impact related to hydrology and water quality, and two significant and unavoidable impacts related to transportation. A summary discussion of project impacts under each resource area is presented below based on the analysis in **Section 4.0** of this SEIR.

#### *Air Quality*

The analysis in **Section 4.1, Air Quality**, of this SEIR identified two significant air quality impacts. The analysis under **LRDP Impact AQ-2** and **Cumulative Impact C-AQ-1** determined that implementation of the 2020 LRDP would result in operational emissions of ROG and NO<sub>x</sub> that would exceed applicable thresholds, and therefore would have the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. The analysis further concluded that despite available mitigation, the emissions would still exceed the thresholds and the impacts on air quality would be significant and avoidable. All other air quality impacts were determined to be less than significant.

#### *Biological Resources*

The analysis in **Section 4.2, Biological Resources**, of this SEIR identified two potentially significant impacts on biological resources. The analysis under **LRDP Impact BIO-4** found that the implementation of the 2020 LRDP would result in potentially significant impacts on Crotch bumble bee. However, this impact would be reduced to a less than significant level with mitigation. The analysis under **LRDP Impact BIO-9** found that the implementation of the 2020 LRDP would result in potentially significant adverse impacts on special-status bird species and non-special-status migratory birds and raptors. However, this impact would be reduced to a less than significant level with mitigation. No significant and unavoidable biological resource impacts were identified.

### *Greenhouse Gas Emissions*

The analysis in **Section 4.3, Greenhouse Gas Emissions**, of this SEIR identified three significant impacts related to GHG emissions. The analysis under **LRDP Impact GHG-1** found that the proposed project would generate substantial GHG emissions that would have a significant impact on the environment. The analysis under **LRDP Impact GHG-2** concluded that the project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. **Cumulative Impact C-GHG-1** also concluded that the project's emissions would be substantial. However, with mitigation, all three impacts would be reduced to a less than significant level. No significant and unavoidable impacts related to GHG emissions were identified.

### *Hydrology and Water Quality*

The analysis in **Section 4.4, Hydrology and Water Quality**, of this SEIR identified a significant cumulative impact (**Cumulative Impact C-HYD-2**) related to depletion of groundwater supplies, which would not be reduced to a less than significant level with mitigation. All other impacts of the project would be less than significant.

### *Noise*

The analysis in **Section 4.5, Noise**, of this SEIR identified one potentially significant noise impact. The analysis under **LRDP Impact NOI-3** concluded that construction activities associated with development proposed under the 2020 LRDP could expose existing off-site and future on-site noise-sensitive receptors to elevated noise levels, a potentially significant impact which would be reduced to less than significant with mitigation. All other impacts were determined to be less than significant. No significant and unavoidable impacts related to noise were identified.

### *Population and Housing*

The analysis in **Section 4.6, Population and Housing**, of this SEIR found that implementation of the 2020 LRDP would not result in any significant impacts on population and housing. No significant and unavoidable impacts related to population and housing were identified.

### *Public Services and Recreation*

The analysis in **Section 4.7, Public Services and Recreation**, of this SEIR found that implementation of the 2020 LRDP would result in one potentially significant impact (**LRDP Impact PUB-6**) related to the deterioration of Lake Yosemite Regional Park from campus population-related use, which would be reduced to a less than significant level with mitigation. All other impacts on public services and

recreational facilities would be less than significant. No significant and unavoidable impacts related to public services and recreation were identified.

### ***Transportation***

The analysis in **Section 4.8, Transportation**, of this SEIR found that the proposed project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of nine intersections under 2030 conditions (**LRDP Impact TRANS-1**) and 15 intersections under 2035 conditions (**Cumulative Impact C-TRANS-1**). The analysis further concluded that although improvements to the affected intersections would be feasible, because the implementation of the improvements is not within University control and depends on the responsible agencies with jurisdiction over the affected intersections (the City of Merced, Merced County, and/or Caltrans), both impacts would remain significant and unavoidable with mitigation. All other transportation impacts were determined to be less than significant.

### ***Tribal Cultural Resources***

The analysis in **Section 4.9, Tribal Cultural Resources**, of this SEIR found that campus development under the 2020 LRDP would not result in any significant impacts on tribal cultural resources (TCR). No significant and unavoidable impacts related to TCRs were identified.

### ***Utilities and Service Systems***

The analysis in **Section 4.10, Utilities and Service Systems**, of this SEIR found that implementation of the 2020 LRDP would not result in any significant impacts on utilities and service systems. No significant and unavoidable impacts related to utilities were identified.

### ***Energy***

The analysis in **Section 4.11, Energy**, of this SEIR concluded that although the proposed project would increase energy demand compared to existing conditions, it would not result in a wasteful, inefficient or unnecessary consumption of energy resources and the impact would be less than significant. No significant and unavoidable impacts related to energy were identified.

## **5.4 ALTERNATIVES CONSIDERED BUT NOT EVALUATED IN DETAIL**

Section 15126.6(c) of the *State CEQA Guidelines* states that an EIR should briefly describe the rationale for selecting the alternatives to be discussed and the reasons for eliminating alternatives from detailed consideration in an EIR. Among the factors that may be used to eliminate alternatives from detailed

consideration in an EIR is failure to meet most of the basic project objectives, infeasibility, or inability to avoid or substantially reduce significant environmental impacts. According to Section 15162.6(f)(1) “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.”

The following alternatives were considered by the University but were not carried forth for detailed evaluation because they were determined not to meet most of the project objectives or were found to be infeasible based on economic viability and inconsistency with project objectives. Each alternative is described below along with a brief explanation of the reasons for its exclusion.

#### **5.4.1 Increased On-Campus Housing**

UC Merced considered an alternative that would increase the number of students who would be housed on campus as a means of reducing the significant impacts of the proposed project with respect to daily vehicle trips. Under this Increased On-Campus Housing Alternative, the increase in the total population of the campus (enrollment and employment) would be the same as analyzed for the proposed 2020 LRDP. However, UC Merced would establish a goal to house all 5,300 new students on the campus and plan to provide the necessary student beds. The land use plan under this alternative would be the same as the land use diagram under the 2020 LRDP. The additional housing would be accommodated on campus by increasing the density of student housing within the CMU area in the 2020 LRDP land use diagram or by utilizing the lands designated Campus Building Reserve and Support Land.

This alternative was not carried forth because housing all of the new students on campus would be infeasible. UC housing construction is approved only when the results of demand analysis can support the need for additional housing. National housing enrollment trends and historical trend analysis suggest that the likely demand for University housing is in the range of 50 percent. These trends are driven by several factors that are primarily associated with the preferences of undergraduate students to seek increased levels of independence as they progress into their upper class years as well as the relative cost of housing. Ample housing is available in the City of Merced and other nearby communities and more housing is under construction or planned. The cost of housing off campus is also low. The provision of housing units beyond 50 percent would result in substantial vacancy rates on campus. Further, public institution requirements that mandate on-campus living for students have not been supported by the courts. If housing supply provided under this alternative did prove to be in excess of demand, UC



Merced would be in a position of having to maintain excess, vacant housing, the cost of which would translate directly into increased student housing fees, thus making on-campus housing less attractive and potentially increasing the on-campus vacancy rate further. For these reasons, this alternative was not carried forward for further evaluation in this SEIR.

#### **5.4.2 Accommodate Enrollment Increase through Expanded Distance Learning Programs**

UC Merced considered an alternative that would expand distance learning programs as a means of reducing the number of students that would travel to the campus for classes and the associated significant transportation impacts of the proposed project due to an increase in daily and peak hour vehicle trips. UC Merced currently operates limited distance learning programs, including some courses offered online, the Study Abroad program, and UC Merced Washington Program (UCDC). Under this alternative, the existing distance learning programs offered by UC Merced would be expanded to include extensive electronic instruction delivered at remote sites or through personal computers. A substantial undergraduate instructional program would be provided electronically. Strategies to provide instruction at a distance could include the use of televised classes, passive and interactive web sites, and computerized instruction. Some graduate and faculty research and collaboration would also take place via telecommunications and computer networks. Under this alternative, construction of some new building space would be necessary to house facilities and programs for the development and delivery of distance learning programs, and there would be some increase in faculty and staff to develop and deliver the needed programs, but the increase would be much smaller than envisioned under the 2020 LRDP.

This alternative was not carried forth for detailed analysis for a number of reasons. While this alternative would provide some elements of a UC education to a larger population, it would not provide the opportunities for laboratory work, face-to-face discussion and collaboration, or the educational community environment that is provided at a UC campus, and thus would not meet the goal of providing an intellectual and social community. The in-residence educational experience and access to University human capital and facilities are a key part of a UC education. Web-based instruction cannot substitute for in-person collaboration. Because of the relative isolation, lack of access to many of the resources of the campus (such as libraries and research and studio spaces), and the limitations on collaborative research, expanded electronic distance learning would not accommodate the expansion of high-quality research programs or support the depth and breadth of academic and professional degree programs that are goals of the proposed project. For these reasons, this alternative was determined to be infeasible based on inconsistency with project objectives and was not analyzed further in this SEIR.

## 5.5 ALTERNATIVES EVALUATED IN THIS SEIR

According to the *State CEQA Guidelines*, in addition to considering a “no project” alternative, the discussion of alternatives should focus on alternatives to a project or its location that can avoid or substantially lessen the significant effects of the project, while feasibly attaining most of the basic project objectives. The *State CEQA Guidelines* indicate that the range of alternatives included in this discussion should be sufficient to allow decision makers to make a reasoned choice. The alternative analysis should provide decision makers with an understanding of the merits and disadvantages of the alternatives.

Alternatives considered for detailed evaluation in this SEIR include the mandatory No Project Alternative along with other potential alternate projects that meet most of the project’s basic objectives while eliminating or reducing significant environmental impacts of the proposed project. Alternatives considered in this SEIR for detailed evaluation include the following:

- No Project Alternative
- Reduced Development Alternative
- Distributed Employment Location Alternative

**Table 5.0-1, Development Program and On-Campus Population under Study Alternatives**, below presents the building program and on-campus population under these three alternatives. Additional descriptions of the alternatives are presented below.

## 5.6 ALTERNATIVE IMPACT ANALYSIS

### 5.6.1 Alternative 1: No Project Alternative

#### *Description of Alternative*

*State CEQA Guidelines* require the analysis of a No Project Alternative (Section 15126.6(e)). The analysis must discuss existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the proposed project were not to be approved, based on current plans, site zoning, and consistent with available infrastructure and community services. If a project is a development project on an identifiable site, *State CEQA Guidelines* Section 15126.6(e)(3)(B) provides that the discussion of the No Project Alternative should compare the environmental effects of the site remaining in its existing state against environmental effects which would occur if the project is approved.

The 2020 LRDP is a land use plan and policy document to guide campus development. An LRDP does not limit or induce enrollment growth. Instead, using the enrollment and employment growth projections, the Campus estimates the additional building space (academic, administrative, housing,

student services, athletics, and support) that would be needed to accommodate the projected growth. Once the building space is estimated, the Campus prepares an LRDP land use diagram that identifies areas within the campus site where the new building space or facilities could or should be built. Given that the LRDP is only a planning document that plans for but does not cause enrollment growth, if the proposed 2020 LRDP is not approved, enrollment and employment at UC Merced would continue to grow as currently projected, and campus development would be guided by the previously approved 2009 LRDP, as amended in 2013 and 2017.

**Table 5.0-1  
Development Program and On-Campus Population under Study Alternatives**

Program/ Population	Proposed Project/ No Project			Reduced Development Alternative			Distributed Employment Location Alternative		
	By 2020	By 2030	Projected Increase 2020-2030	By 2020	By 2030	Projected Increase 2020-2030	By 2020	By 2030	Projected Increase 2020-2030
<b>Development Program</b>									
Building Space (million gross square feet; gsf)	2.46	4.29	1.83	2.46	3.47	1.01	2.46	4.29	1.83 (1.79 million gsf on campus; 45,000 gsf off campus)
On-campus beds	4,800	7,200	2,400	4,800	6,000	1,200	4,800	7,200	2,400
Acres to be developed	171	274	103	171	228	57	171	273	99
<b>On-Campus Population</b>									
Commuting Students	4,900	7,800	2,900	4,900	6,500	1,600	4,900	7,800	2,900
Resident Student	4,800	7,200	2,400	4,800	6,000	1,200	4,800	7,200	2,400
Subtotal	9,700	15,000	5,300	9,700	12,500	2,800	9,700	15,000	5,300
Faculty	440	786	346	440	655	215	440	786	346
Staff (on-campus)	840	1,625	785	840	1,359	519	840	1,358	518 (267 employees off campus)
Subtotal	1,280	2,411	1,131	1,280	2,014	734	1,280	1,886	606
<b>Total Population</b>	<b>10,980</b>	<b>17,411</b>	<b>6,431</b>	<b>10,980</b>	<b>14,514</b>	<b>3,534</b>	<b>10,980</b>	<b>16,886</b>	<b>5,906</b>

Source: Impact Sciences and Barati Consulting 2019

### Building Program

As the campus growth under the No Project Alternative would be the same as that analyzed for the 2020 LRDP, the building program would be comparable, and about 1.83 million gross square feet (gsf) of new building space, including 2,400 student beds, would be added to the campus between 2020 and 2030.

### Campus Population

For reasons presented above, under the No Project Alternative, campus enrollment would grow to 15,000 students by 2030, with an increase in faculty and staff of about 1,131 employees.

## Land Use Diagram

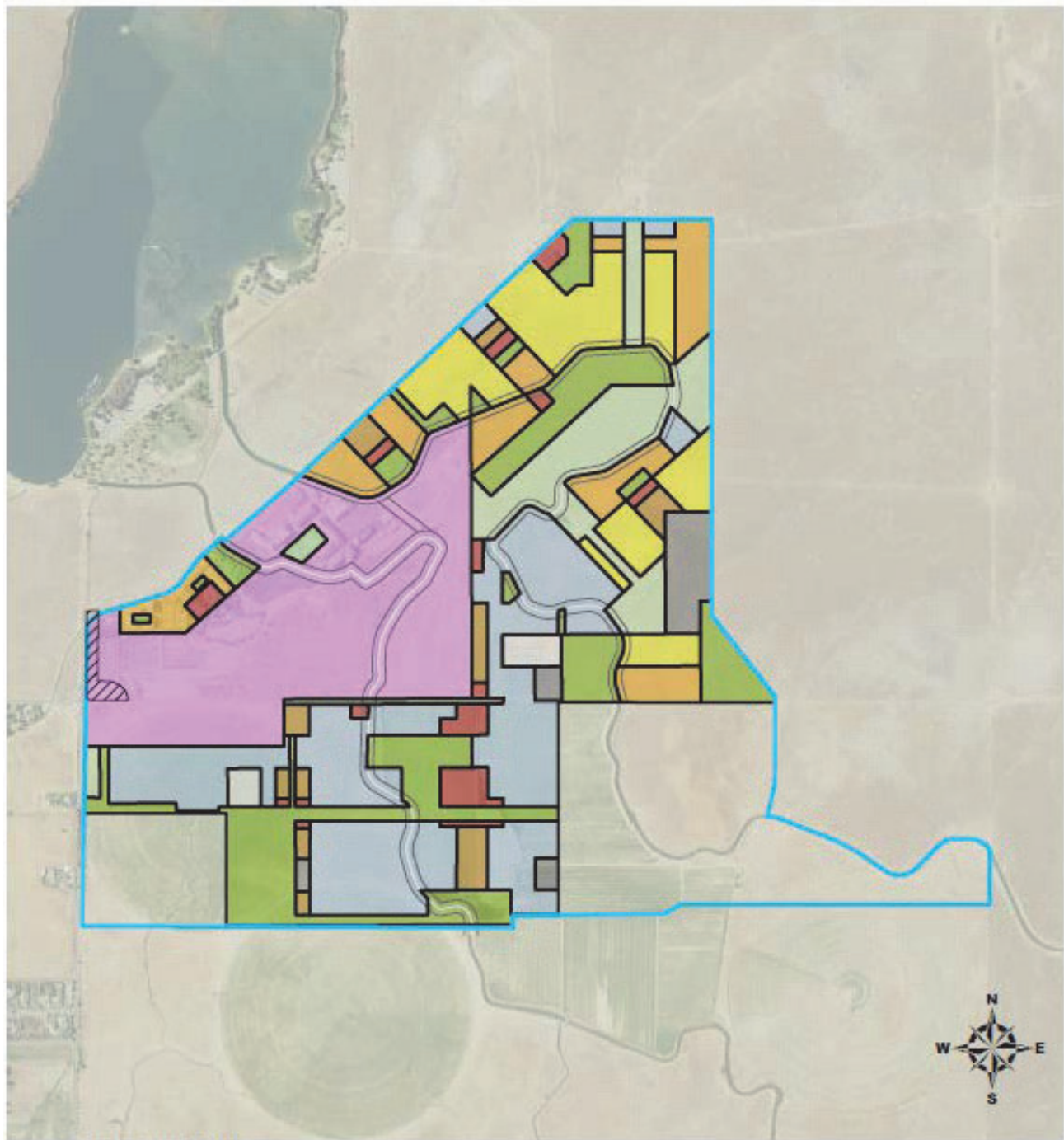
**Figure 5.0-1, No Project Alternative Land Use Plan**, shows the areas that would be developed with campus facilities under the No Project Alternative. The 2009 LRDP, as amended in 2013 and 2017, includes a land use plan for the 815-acre site but does not include 211 acres that are now a part of the campus. As there is no land use plan to guide the development of new facilities on the newly added 211 acres, projects within the 211-acre area would be developed without the benefit of a land use plan as the University Community Plan is for the development of a mixed-use community on the University Community North site and is not applicable or relevant to campus development. Compared to the 2020 LRDP which limits the siting of new campus buildings to an approximately 274-acre area designated CMU, this alternative would allow campus buildings to be located on all lands except those designated Passive Open Space, and a dispersed and less dense development would likely result under this alternative.

In summary, under the No Project Alternative, the same amount of building space would be constructed on the campus site as under the proposed project, and the campus would continue to grow at a rate similar to the rate of enrollment and employment growth analyzed for the proposed 2020 LRDP. However, the new facilities would be dispersed and would not reflect an efficient use of the land.











## *Environmental Impacts*

### **Air Quality**

As the No Project Alternative would involve the same amount of campus development as the proposed project, it would accommodate the same enrollment and employment increase as the proposed project. Therefore, it would result in the same significant air quality impacts as the proposed project. As with the proposed project, the two significant impacts associated with operational emissions would not be fully mitigated and the alternative would also result in the same significant and unavoidable impacts.



**LEGEND**

	Campus Mixed Use	200 ac.		Low Density Residential	84 ac.
	Academic/Laboratory	179 ac.		Medium Density Residential	67 ac.
	Student Services	24 ac.		High Density Residential	26 ac.
	Campus Services	23 ac.		Athletics/Recreation	132 ac.
	Parking	10 ac.		Passive Open Space	70 ac.

	UC Merced Property
	Transportation Buffer

SOURCE: UC Merced, 2019

FIGURE 5.0-1

No Project Alternative Land Use Plan

*This page intentionally left blank*

### **Biological Resources**

This alternative would have the potential to result in substantially greater impacts on biological resources than the proposed project. As opposed to the proposed project which would limit the campus's development to the CMU area, under this alternative campus facilities could be located over a larger area and therefore this alternative could result in greater impacts on special-status plants, burrowing owls, CTS, and nesting birds. However, because the loss of habitat from the development of all of the campus lands has already been mitigated by the conservation of Tier 1 and Tier 2 lands and because permits are in place that allow UC Merced to develop all of the campus lands, the impacts under this alternative would also be less than significant. As with the proposed project, this alternative would also result in potentially significant adverse impacts on Crotch bumble bee, special-status bird species, and non-special-status migratory birds and raptors. However, the impacts would be reduced to a less than significant level with the same mitigation measures set forth for the proposed project.

### **Greenhouse Gas Emissions**

As the same amount of building space would be built and the same enrollment and employment growth would be accommodated under the No Project Alternative, the alternative would result in the same significant GHG impacts as the proposed project and the same mitigation measures would be required to reduce the impacts to a less than significant level.

### **Hydrology and Water Quality**

As the same amount of building space and impervious surfaces would be built and the same enrollment and employment growth would be accommodated under the No Project Alternative, the alternative would result in the same significant cumulative impact related to depletion of groundwater, as the proposed project. The same mitigation measure would be required but, as with the proposed project, the impact would not be reduced to a less than significant level with mitigation. All other impacts of the alternative would be less than significant.

### **Noise**

As with the proposed project, construction on the campus under the No Project Alternative would also have the potential to expose existing off-site and future on-site noise-sensitive receptors to elevated noise levels and result in a potentially significant impact and the same mitigation measure would be required. As with the proposed project, all other noise impacts would be less than significant.

**Population and Housing**

As the No Project Alternative would involve the same amount of campus development as the proposed project, it would accommodate the same enrollment and employment increase as the proposed project. Consequently, it would result in the same less than significant impact on population and housing in the study area as the proposed project.

**Public Services and Recreation**

As the No Project Alternative would accommodate the same enrollment and employment increase as the proposed project, it would result in the same potentially significant impact on Lake Yosemite Regional Park as the proposed project, and the same mitigation measure would apply and would reduce the impact to a less than significant level.

**Transportation**

As the No Project Alternative would accommodate the same enrollment and employment increase as the proposed project, it would generate the same number of additional daily and peak hour vehicle trips and would result in the same significant impacts related to transportation as the proposed project under 2030 and 2035 conditions. As with the proposed project, both impacts would remain significant and unavoidable with mitigation.

**Tribal Cultural Resources**

Although campus development under the 2009 LRDP as amended, would likely affect larger area within the campus site, all development under that plan would also be subject to the mitigation measures set forth in the 2009 LRDP EIS/EIR for the protection of previously unknown cultural resources, including human remains, encountered during construction. Therefore, campus development under the No Project Alternative would also not result in any significant impacts on TCRs.

**Utilities and Service Systems**

As the No Project Alternative would involve the same amount of building space and enrollment and employment growth as the proposed project, it would result in the same utility demand as the proposed project. As with the proposed project, the impacts of the No Project Alternative on utilities would be less than significant.



## Energy

Energy use under the No Project Alternative would be comparable to that under the proposed project. As with the proposed project, although the No Project Alternative would increase energy demand compared to existing conditions, it would not result in a wasteful, inefficient or unnecessary consumption of energy resources, and the energy impacts of the No Project Alternative would be less than significant.

### *Conclusion and Relationship to Project Objectives*

The No Project Alternative would result in the same potentially significant and significant impacts as the proposed project, and the same mitigation measures would be required. For reasons presented above, the No Project Alternative would have the potential to result in greater impacts on biological resources. None of the significant and unavoidable impacts of the proposed project would be reduced or avoided by the No Project Alternative.

The alternative would not achieve many of the key objectives of the proposed project, including the objective to reduce the costs of the next phase of campus development by planning for a compact, pedestrian-oriented campus that reduces the need for new infrastructure and the objective to provide opportunities for on-campus academic field research. It would also not be as effective as the proposed project in meeting the objective to plan and develop the campus with sustainable design by incorporating energy efficiency, water conservation, protection of biological resources, waste reduction and minimization, on-site stormwater management, and reduced dependence on automobiles.

## 5.6.2 Alternative 2: Reduced Development Alternative

### *Description of Alternative*

The Reduced Development Alternative was developed in order to evaluate the potential to reduce the increase in vehicle trips to the campus and transportation-related impacts of the proposed project. Under this alternative, a smaller building program would be planned which would accommodate 12,500 students and related faculty and staff by 2030 compared to 15,000 students and related faculty and staff under the proposed project.

### **Building Program**

The 2020 LRDP plans building space to accommodate the projected growth in enrollment between 2020 and 2030, after the completion of the 2020 Project. This alternative also plans for campus development between 2020 and 2030 but includes a building program that is about 45 percent less than analyzed for the 2020 LRDP. Therefore, instead of the addition of about 1.83 million gsf of new building space, under

this alternative, UC Merced would add approximately 1.01 million gsf of new building space between 2020 and 2030.

### **Campus Population**

Under this alternative, the reduction in physical development would accommodate fewer students. Therefore, it is assumed that enrollment would increase from 9,700 students in 2020 to 12,500 students in 2030, an increase of about 2,800 new students. Similar to the proposed project, it is assumed that slightly more than half of the new students would be housed on the campus and the rest of the new students would live off-campus.

Assuming that the same student to faculty/staff ratio is maintained under this alternative as is represented by the proposed project, approximately 734 new on-campus employees would be added under this alternative. Therefore, under this alternative a total of 3,534 new students and employees would be added to the campus between 2020 and 2030. The increase in on-campus population under this alternative is presented in **Table 5.0-1**, above.

The campus population increase would be about 45 percent less than the increase of 6,431 new students and employees analyzed for the 2020 LRDP. The total on-campus population by 2030 under this alternative (that is, existing population plus projected growth) would be approximately 14,514 persons, which is about 17 percent lower than the 2030 population of about 17,411 persons analyzed for the 2020 LRDP.

### **Land Use Diagram**

With regard to the land use diagram, it is assumed that the diagram under this alternative would be the same as the land use diagram under the proposed 2020 LRDP. As with the proposed 2020 LRDP, the new facilities would be built within the 274-acre area designated CMU. With the building program reduced by about 45 percent under this alternative compared to the proposed project, less acreage within the CMU area would be developed with new facilities under this alternative.

## ***Environmental Impacts***

### **Air Quality**

The Reduced Development Alternative would involve a substantially smaller (45 percent less) amount of building space development than the proposed project, accommodate fewer students, and the employment increase would also be smaller than that under the proposed project. Therefore, it would result in reduced air quality impacts compared to the proposed project. Due to lower enrollment and

employment growth, this alternative would result in reduced operational emissions of ROG that would not exceed the significance threshold. Emissions of NO<sub>x</sub> would also be lower but would still be over the applicable threshold and would not be reduced to a less than significant level with mitigation. Therefore, as with the proposed project, two air quality impacts associated with operational emissions of NO<sub>x</sub> would not be fully mitigated and the alternative would result in reduced but still significant and unavoidable air quality impacts.

### **Biological Resources**

As noted above, under this alternative the land use diagram would be the same as under the proposed 2020 LRDP and the new facilities would be built within the 274-acre area designated CMU. With the building program reduced by about 45 percent under this alternative, less acreage within the CMU area would be developed with new facilities under this alternative. Therefore, the biological resource impacts would be reduced. As with the proposed project, this alternative would also result in potentially significant adverse impacts on Crotch bumble bee, special-status bird species, and non-special-status migratory birds and raptors. However, the impacts would be reduced to a less than significant level with the same mitigation measures set forth for the proposed project.

### **Greenhouse Gas Emissions**

As about 45 percent less building space would be built and a smaller enrollment and employment growth would be accommodated under the Reduced Development Alternative, the alternative would result in lower total and per capita GHG emissions compared to the proposed project. However, the total campus emissions would still exceed the 2030 emissions target for the campus and all three GHG impacts would be significant. The same mitigation measures would be required to reduce the impacts to a less than significant level.

### **Hydrology and Water Quality**

As about 45 percent less building space would be built and a smaller enrollment and employment growth would be accommodated under the Reduced Development Alternative, compared to the proposed project, this alternative would result in a smaller contribution to the significant cumulative impact related to depletion of groundwater. However, the contribution would still be considered considerable and the same mitigation measure would be required. As with the proposed project, the impact would not be reduced to a less than significant level with mitigation. All other impacts of the alternative on hydrology and water quality would be less than significant.

## Noise

Although the total amount of construction would be less than that under the 2020 LRDP, construction on the campus under the Reduced Development Alternative would also have the potential to expose existing off-site and future on-site noise-sensitive receptors to elevated noise levels and result in a potentially significant impact and the same mitigation measure would be required. As with the proposed project, all other noise impacts would be less than significant.

## Population and Housing

As the Reduced Development Alternative would involve a smaller amount of campus development than the proposed project, it would accommodate a smaller enrollment and employment increase by 2030 compared to the proposed project. Consequently, it would result a lower impact on population and housing in the study area. As with the proposed project, the impact would be less than significant.

## Public Services and Recreation

As the Reduced Development Alternative would accommodate a smaller enrollment and employment increase by 2030 compared to the proposed project, it would result in a reduced but still potentially significant impact on Lake Yosemite Regional Park, and the same mitigation measure would apply and would reduce the impact to a less than significant level.

## Transportation

As the Reduced Development Alternative would accommodate a smaller enrollment and employment increase by 2030 and 2035 compared to the proposed project, it would generate a smaller number of new daily and peak hour vehicle trips. The peak hour trips under this alternative would be reduced by 38 percent under 2030 conditions and by 42 percent under 2035 conditions. As a result of the reduction in peak hour trips, under 2030 conditions this alternative would result in significant impacts at five intersections compared to nine intersections that would be significantly affected under the proposed project. Significant impacts at intersections # 1, 7, 13, and 14 would be avoided. Under 2035 cumulative conditions, this alternative would result in significant impacts at 14 intersections compared to 15 intersections that would be significantly affected by campus-related traffic. The significant impact at intersection # 11 would be avoided. Similar to the proposed project, with the improvements listed in **Table 4.8-9**, traffic operations at the affected intersections would be restored to acceptable levels of service. However, because the implementation of the improvements at the affected intersections is not within University control and depends on the responsible agencies, the impacts, although reduced under this alternative, would remain significant and unavoidable with mitigation.

### **Tribal Cultural Resources**

Campus development under this alternative would occur within a smaller portion of CMU lands than under the proposed project. As with the proposed project, all development under this alternative would also be subject to the mitigation measures set forth in the 2009 LRDP EIS/EIR for the protection of previously unknown cultural resources, including human remains, encountered during construction. Therefore, campus development under the Reduced Development Alternative would also not result in any significant impacts on TCRs.

### **Utilities and Service Systems**

As the Reduced Development Alternative would involve a smaller amount of building space and lower enrollment and employment growth than the proposed project, it would result in utility demands that would be proportionally reduced compared to those associated with the proposed project. As with the proposed project, the impacts of the Reduced Development Alternative on utilities would be less than significant.

### **Energy**

Energy use under the Reduced Development Alternative would be reduced compared to that under the proposed project. As with the proposed project, although the Reduced Development Alternative would increase energy demand compared to existing conditions, it would not result in a wasteful, inefficient or unnecessary consumption of energy resources, and the energy impacts of this alternative would also be less than significant.

### ***Conclusion and Relationship to Project Objectives***

The Reduced Development Alternative would result in several of the same potentially significant and significant impacts as the proposed project, and the same mitigation measures would be required. However, due to smaller amount of new building space and population, the alternative's impacts on air quality, transportation, and groundwater would be reduced compared to the proposed project. Although significant impacts at four intersections under 2030 conditions and one intersection under 2035 cumulative conditions would be avoided under this alternative, the Reduced Development Alternative would still result in significant and unavoidable transportation impacts.

The alternative would not achieve the key objective of the proposed project, which is to provide the physical planning framework to guide development that would be needed to accommodate anticipated increases in enrollment demand for the University of California system, both short-term and long-term.

### 5.6.3 Alternative 3: Distributed Employment Location Alternative

#### *Description of Alternative*

The Distributed Employment Location Alternative was developed to evaluate the potential to reduce the increase in the number of daily and peak hour vehicle trips to the campus and transportation-related impacts. Under this alternative, about 35 percent of the new staff employees would be located off campus.

#### **Building Program**

As a result of locating some of the new staff off campus under this alternative, the building program on the campus would be slightly reduced compared to that analyzed for the 2020 LRDP. Therefore, instead of the addition of about 1.83 million gsf of new building space to the campus, UC Merced would add approximately 1.79 million gsf of new building space on the campus and would lease or construct about 45,000<sup>1</sup> gsf of building space in Merced to house the 267 new employees who would be located off campus.

#### **Campus Population**

Under this alternative, enrollment at the campus would increase at the same rate as analyzed for the 2020 LRDP such that there would be 15,000 students by 2030, an increment of 5,300 students between 2020 and 2030. On-campus resident students would be the same as analyzed for the 2020 LRDP. The increase in faculty and staff would also be the same, with 346 new faculty and 785 new staff added between 2020 and 2030. However, while all of the additional faculty would be located on the campus, 65 percent of the new staff (518 new staff) would be located on the campus and 35 percent or about 267 of the new staff would be located off campus. The increase in on-campus population under this alternative is presented in **Table 5.0-1**, above.

#### **Land Use Diagram**

With regard to the land use diagram, it is assumed that the diagram under this alternative would be the same as the land use diagram under the proposed 2020 LRDP. With the building program reduced by about 2 percent under this alternative compared to the proposed project, slightly less area within the 274-acre CMU area would be developed with new facilities under this alternative.

---

<sup>1</sup> Calculated based on a rate of 165 sq feet per employee. The rate was derived from the Downtown Center, which is a 75,000 gsf building for about 454 employees.

## ***Environmental Impacts***

### **Air Quality**

The Distributed Employment Location Alternative would accommodate the same number of students, and the employment increase would also be the same as under the proposed project, and almost the same amount of building space would be constructed on campus, with a small amount of space either constructed or leased off campus. Therefore, this alternative would result in substantially the same amount of air emissions both during construction and operations as the proposed project, such that it would have the same significant air quality impacts as the proposed project, and two air quality impacts would remain significant and unavoidable even with mitigation.

### **Biological Resources**

As noted above, under this alternative the land use diagram would be the same as under the proposed 2020 LRDP and the new facilities would be built within the 274-acre area designated CMU. With the building program reduced by just 2 percent under this alternative, a comparable acreage within the CMU area would be developed with new facilities under this alternative. Therefore, the biological resource impacts would be comparable to those of the proposed project. As with the proposed project, this alternative would also result in potentially significant adverse impacts on Crotch bumble bee, special-status bird species, and non-special-status migratory birds and raptors. However, the impacts would be reduced to a less than significant level with the same mitigation measures set forth for the proposed project.

### **Greenhouse Gas Emissions**

As approximately the same amount of building space would be built or built and leased, and the same enrollment and employment growth would be accommodated under the Distributed Employment Location Alternative, the alternative would result in the same significant GHG impacts as the proposed project and the same mitigation measures would be required to reduce the impacts to a less than significant level.

### **Hydrology and Water Quality**

As approximately the same amount of building space would be built and the same enrollment and employment growth would be accommodated under the Distributed Employment Location Alternative, the alternative would result in the same significant cumulative impact related to groundwater depletion as the proposed project and the same mitigation measure would be required. As with the proposed

project, the impact would not be reduced to a less than significant level with mitigation. All other impacts of the alternative on hydrology and water quality would be less than significant.

### **Noise**

Although the total amount of construction on the campus would be slightly less than that under the 2020 LRDP, construction on the campus under the Distributed Employment Location Alternative would also have the potential to expose existing off-site and future on-site noise-sensitive receptors to elevated noise levels and result in a potentially significant impact and the same mitigation measure would be required. In addition, as this alternative could involve the construction of an office building off-campus, potentially in downtown Merced, construction at that additional site would have the potential to affect nearby receptors. The same or more stringent mitigation measures might be required. In the event that existing space is leased, a construction-phase noise impact on downtown receptors would not occur under this alternative. As with the proposed project, all other noise impacts of this alternative would be less than significant.

### **Population and Housing**

As the Distributed Employment Location Alternative would involve the same amount of campus development as the proposed project, it would accommodate the same enrollment and employment increase as the proposed project, with just one difference that some of the new employees would be located off campus. Consequently, it would result in the same less than significant impact on population and housing in the study area as the proposed project.

### **Public Services and Recreation**

As the Distributed Employment Location Alternative would involve the same amount of campus development as the proposed project, it would accommodate the same enrollment and employment increase as the proposed project, with only a small number of the new employees located off campus. Therefore, the alternative would result in the same potentially significant impact on Lake Yosemite Regional Park as the proposed project, and the same mitigation measure would apply and would reduce the impact to a less than significant level.

### **Transportation**

As the Distributed Employment Location Alternative would involve the same amount of campus development as the proposed project, it would accommodate the same enrollment and employment increase as the proposed project, with a small number of the new employees located off campus. As a result of placing some of the new employees off campus, this alternative would generate a slightly



smaller number of daily and peak hour vehicle trips to the campus. The peak hour trips under this alternative would be reduced by 13 percent under 2030 conditions and by 14 percent under 2035 conditions, compared to the proposed project. As a result of the reduction in peak hour trips, under 2030 conditions, this alternative would result in significant impacts at seven intersections compared to nine intersections under the proposed project. Significant impacts at intersections #13 and 14 would be avoided. Under 2035 cumulative conditions, this alternative would result in significant impacts at all 15 intersections that would be significantly affected under the 2035 Campus Scenario. Similar to the proposed project, with the improvements listed in **Table 4.8-9**, traffic operations at the affected intersections would be restored to acceptable levels of service. However, because the implementation of the improvements is not within University control and depends on the responsible agencies, the impacts, although reduced under this alternative, would remain significant and unavoidable with mitigation.

### **Tribal Cultural Resources**

Campus development under this alternative would occur within a slightly smaller portion of CMU lands than under the proposed project. As with the proposed project, all development under this alternative would also be subject to the mitigation measures set forth in the 2009 LRDP EIS/EIR for the protection of previously unknown cultural resources, including human remains, encountered during construction. Therefore, campus development under the Distributed Employment Location Alternative would also not result in any significant impacts on TCRs.

### **Utilities and Service Systems**

As the Distributed Employment Location Alternative would involve a slightly smaller amount of building space and slightly smaller on-campus population than the proposed project, it would result in utility demands at the campus that would be proportionally reduced compared to those associated with the proposed project. However, utilities would be needed at the downtown location to serve the employees who would be located off campus. As with the proposed project, the impacts of this alternative on utilities would be less than significant.

### **Energy**

Energy use on the campus under the Distributed Employment Location Alternative would be slightly reduced compared to that under the proposed project, although some energy use would occur at the downtown location where some of the new employees would be located. As with the proposed project, although the Distributed Employment Location Alternative would increase energy demand compared to existing conditions, it would not result in a wasteful, inefficient or unnecessary consumption of energy resources, and the energy impacts of this alternative would also be less than significant.

### *Conclusion and Relationship to Project Objectives*

The Distributed Employment Location Alternative would result in the same potentially significant and significant impacts as the proposed project, and the same mitigation measures would be required. The significant and unavoidable air quality and cumulative groundwater impacts of the proposed project would not be avoided by the Distributed Employment Location Alternative, and the significant and unavoidable transportation impacts to study area intersections would be reduced but not avoided.

The alternative would achieve all of the key objectives of the proposed project but would result in a slightly greater overall cost than the project, in the event that the needed space is constructed and not leased in downtown Merced. This would be because economies of scale are not achieved if a small amount of building space is built elsewhere. Also there would be cost associated with acquisition of land. Hence, the alternative would not meet the objective of reducing the costs of the next phase of campus development.

### **5.7 COMPARISON OF ALTERNATIVES/ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

**Table 5.0-2** presents a summary comparison of the alternatives evaluated in detail. The table is designed to allow a reader to compare the impacts of the proposed project with that of the alternatives, so that the reader can determine whether the alternative would result in similar, greater, or lesser environmental impacts than the proposed project.

CEQA requires the identification of the environmentally superior alternative among the alternatives to the proposed project. The environmentally superior alternative must be an alternative to the proposed project that reduces some of the environmental impacts of the proposed project, regardless of the financial costs associated with this alternative. Identification of the environmentally superior alternative is an informational procedure and the alternative identified as the environmentally superior alternative may not be that which best meets the goals or needs of the proposed project.

As the table shows, although impacts on air quality, groundwater, and transportation would still remain significant and unavoidable, the Reduced Development Alternative would reduce all of the significant environmental impacts of the proposed project. This alternative would, therefore, be the environmentally superior alternative. It would not, however, meet the proposed project's objective of accommodating the projected increase in enrollment at UC Merced through 2030.

**Table 5.0-2  
Summary Comparison of Project Alternatives <sup>a</sup>**

Project Impact	Proposed Project (Before and After Mitigation)	Alternative 1	Alternative 2	Alternative 3
		No Project	Reduced Development	Distributed Employment Location
<b>LRDP Impact AQ-2: Campus development under the 2020 LRDP</b> would result in operational emissions that would involve a cumulatively considerable net increase of criteria pollutants for which the air basin is in non-attainment.	<i>S/SU</i>	Similar; <i>S/SU</i>	Reduced; <i>S/SU</i>	Similar; <i>S/SU</i>
<b>Cumulative Impact C-AQ-1:</b> The construction and operation of the campus under the 2020 LRDP, in conjunction with other past, present, and reasonably foreseeable future development in the project area, could hinder air quality attainment and maintenance efforts for criteria pollutants.	<i>S/SU</i>	Similar; <i>S/SU</i>	Reduced; <i>S/SU</i>	Similar; <i>S/SU</i>
<b>LRDP Impact BIO-4:</b> Implementation of the 2020 LRDP would result in a potentially significant adverse impact on nesting and overwintering habitat for Crotch bumble bee.	<i>PS/LTS</i>	Greater; <i>PS/LTS</i>	Reduced; <i>PS/LTS</i>	Similar; <i>PS/LTS</i>
<b>LRDP Impact BIO-9:</b> Implementation of the 2020 LRDP would result in potentially significant adverse impacts on special-status bird species and non-special-status migratory birds and raptors.	<i>PS/LTS</i>	Greater; <i>PS/LTS</i>	Reduced; <i>PS/LTS</i>	Similar; <i>PS/LTS</i>
<b>Cumulative Impact C-HYD-2:</b> Development of the campus under the 2020 LRDP, in conjunction with other past, present, and reasonably foreseeable future development in the project area, would not substantially interfere with groundwater recharge but would deplete groundwater supplies and contribute to an overdraft of the regional groundwater aquifer.	<i>S/SU</i>	Similar; <i>S/SU</i>	Reduced; <i>S/SU</i>	Similar; <i>S/SU</i>
<b>LRDP Impact NOI-3:</b> Construction activities associated with development under the 2020 LRDP could expose existing off-site and future on-site noise-sensitive receptors to elevated noise levels.	<i>PS/LTS</i>	Similar; <i>PS/LTS</i>	Reduced; <i>PS/LTS</i>	Similar; <i>PS/LTS</i>
<b>LRDP Impact NOI-4:</b> Pile driving activities during construction could expose nearby receptors to perceptible levels of groundborne vibration.	<i>PS/LTS</i>	Similar; <i>PS/LTS</i>	Reduced; <i>PS/LTS</i>	Similar; <i>PS/LTS</i>
<b>LRDP Impact PUB-6:</b> Implementation of the 2020 LRDP would increase the use of Lake Yosemite Regional Park which could accelerate physical deterioration of park facilities.	<i>PS/LTS</i>	Similar; <i>PS/LTS</i>	Reduced; <i>PS/LTS</i>	Similar; <i>PS/LTS</i>
<b>LRDP Impact TRANS-1:</b> Implementation of the 2020 LRDP would significantly affect study area intersections during peak commute hours under 2030 plus project conditions.	<i>S/SU</i>	Similar; <i>S/SU</i>	Reduced; <i>S/SU</i>	Similar; <i>S/SU</i>
<b>Cumulative Impact C-TRANS-1:</b> Implementation of the 2020 LRDP would significantly impact study area intersections during peak commute hours under 2035 plus project conditions.	<i>S/SU</i>	Similar; <i>S/SU</i>	Reduced; <i>S/SU</i>	Similar; <i>S/SU</i>

Source: Impact Sciences and Barati Consulting 2019

<sup>a</sup> This table lists only the significant or potentially significant environmental impacts of the proposed project. A less than significant impact of the project is listed only if an alternative would worsen that impact of the project.

*SU* = Significant and unavoidable

*Similar* = Impact similar to proposed project

*S* = Significant impact

*Reduced* = Impact less than proposed project

*PS* = Potentially significant impact

*Greater* = Impact greater than proposed project

*LTS* = Less than significant impact

*This page intentionally left blank*