

4.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

Introduction

This section of the Recirculated Draft Subsequent Environmental Impact Report (SEIR) presents potential environmental impacts of the proposed UC Merced 2020 LRDP project (2020 LRDP or proposed project). To assist the reader in understanding the manner in which the impact analysis has been conducted in **Sections 4.1 through 4.11**, this introductory section presents the definitions of key terms used in the SEIR and key attributes of the analytical approach to impact assessment.

Levels of Significance

The SEIR uses a variety of terms to describe the levels of significance of adverse impacts identified during the course of the environmental analysis. The following are definitions of terms used in this document:

- **Significant and Unavoidable Impact.** Impacts that exceed the defined standards of significance and cannot be eliminated or reduced to a less than significant level through the implementation of feasible mitigation measures. These can include significant impacts that are unavoidable because available mitigation is not adequate to reduce the impact fully. These can also include significant impacts that are unavoidable because the mitigation measures are within the responsibility and jurisdiction of another public agency, and the University cannot assure the timely implementation of the mitigation measure.
- **Significant Impact.** Impacts that exceed the defined standards of significance and that can be eliminated or reduced to a less than significant level through the implementation of feasible mitigation measures.
- **Potentially Significant Impact.** Potentially Significant Impacts are impacts about which there is not enough information to draw a firm conclusion; however, for the purpose of this SEIR, they are considered significant. Such impacts are equivalent to Significant Impacts and require the identification of feasible mitigation measures.
- **Less Than Significant Impact.** Impacts that are adverse but that do not exceed the specified standards of significance.
- **No Impact.** The project would not create an impact.

Relationship to Previous Environmental Documents

As noted in **Section 1.0, Introduction**, in March 2009, the Board of Regents of the University of California (The Regents) certified a joint EIS/EIR (State Clearinghouse No. 2008041009) that analyzed and disclosed the impacts from the implementation of a LRDP for the UC Merced campus, and adopted the UC Merced

2009 LRDP as a guide for physical development to accommodate growth projected through 2030 and beyond. Now, the University has revised its enrollment projections through 2030 down substantially and has also acquired more land for the campus. UC Merced also anticipates accommodating the projected enrollment growth on a smaller development footprint than previously identified in the 2009 LRDP. As a result of these changes, UC Merced has developed a revised land use plan for the campus site, which is included in the proposed 2020 LRDP. As noted in **Section 1.0**, the current EIR is a subsequent EIR (SEIR) as defined by CEQA. As a SEIR, it incorporates all applicable analysis contained in the 2009 LRDP EIS/EIR, as amended by addenda prepared by UC Merced since 2009, and updates the previous analysis as necessary in light of the revised project and/or due to new information of substantial importance that has become available since the certification of the previous EIR.

Definition of Baseline

CEQA requires a clear identification of the baseline against which environmental impacts of the proposed project must be evaluated. The CEQA baseline is defined by conditions that exist at a point in time. Section 15125 of the *State CEQA Guidelines* requires EIRs to include a description of the physical environmental conditions in the area of a project that exist at the time that the Notice of Preparation (NOP) is circulated. These environmental conditions normally constitute the baseline physical conditions relative to which the CEQA lead agency evaluates the change in conditions that would result from project implementation. The NOP for this SEIR was issued on April 2, 2018. Therefore, environmental conditions as of 2018 represent the baseline for CEQA purposes for all resources except transportation. For transportation and transportation-related environmental impacts, 2017 is used as the baseline year because traffic counts were conducted in late 2017.

However, UC Merced is currently constructing the previously approved 2020 Project, which was fully evaluated in the 2009 LRDP EIS/EIR. The 2020 Project will add approximately 1.19 million square feet of new building space and amenities, including 1,700 new beds to accommodate additional students, faculty and staff such that by 2020, UC Merced will be able to accommodate approximately 10,000 students and associated faculty and staff. The proposed 2020 LRDP would guide the development of the campus after the 2020 Project is completed, essentially between 2020 and 2030. Therefore, this SEIR analyzes the change in conditions between 2020 and 2030 that could result from the implementation of 2020 LRDP. Note that although the 2020 Project will provide facilities for about 10,000 students, based on projected enrollment growth, it is now anticipated that the campus enrollment would increase to approximately 9,700 students by 2020, and this SEIR analyzes the environmental effects from the development of facilities that would

accommodate the enrollment increasing from approximately 9,700 students in 2020 to 15,000 students by 2030.¹

Format of Resource Topic Sections

Each resource topic considered in this section of the SEIR is addressed under seven primary subsections: Introduction; Environmental Setting; Regulatory Considerations; Impacts and Mitigation Measures, which include Significance Criteria, Methodology, Impact Analysis, Cumulative Impacts, and References. An overview of the information included in these sections is provided below.

Introduction

The introduction section describes the topic to be analyzed and the contents of the analysis. It also provides the sources used to evaluate the potential impacts of the project.

Environmental Setting

This section describes the existing conditions on and in the vicinity of the campus.

Regulatory Considerations

This section presents relevant federal, state, and local laws, regulations, plans, and policies. Only those laws, regulations, and policies that are pertinent to the impact analysis are included.

Impacts and Mitigation Measures

This section sets forth the significance criteria used in this SEIR to evaluate impacts, along with the analytical methods, project impacts, and mitigation measures.

Significance Criteria

This subsection presents the significance criteria used in this SEIR to evaluate impacts. This SEIR uses significance criteria derived from Appendix G of the *State CEQA Guidelines* regarding the determination of environmental consequences to identify impacts and underlying statutory authority to the extent applicable.

Methodology

This subsection summarizes the methodology used to evaluate effects. Impacts are evaluated quantitatively where possible and qualitatively where quantification is not feasible.

¹ At the time that the analysis in this SEIR was commenced, UC Merced was projecting an enrollment level of 9,700 students by 2020. However, based on Fall 2019 enrollment, the Campus is now expected to have an enrollment of 9,400 students in 2020. This does not affect the 2030 enrollment projection which UC Merced still projects will be 15,000 students. That number is used in the SEIR for all impact analysis.

LRDP Impacts and Mitigation Measures

This subsection presents the environmental effects from the implementation of the proposed LRDP, using the Appendix G CEQA checklist to identify each impact.

All impacts are numbered (for instance, LRDP Impact AQ-1 refers to the first impact under **Air Quality**) and shown in bold type. For each impact, a summary statement of the impact is presented along with a conclusion with respect to the impact's significance before mitigation and its significance after mitigation (in ***bold italics***). Mitigation measures are numbered to correspond to the impact. Impacts and mitigation measures are numbered consecutively within each topic. In the analysis that follows, the significance of each impact from the development of the campus is determined after taking into account existing environmental commitments made by UC Merced and regulatory permits and approvals already granted to UC Merced.

Cumulative Impacts and Mitigation Measures

This section presents the cumulative impacts of the 2020 LRDP in conjunction with past, present, and reasonably foreseeable future development in the project area. The approach to the analysis of cumulative impacts is described in detail below.

References

This section lists the references used to prepare the environmental setting and impact analysis for each section of the SEIR.

Approach to Cumulative Impact Analysis

CEQA Guidance Regarding Cumulative Impact Analysis

CEQA requires that EIRs disclose the cumulative impacts of a proposed project, and that the analysis reflect the severity of the impacts and the likelihood of their occurrence. Section 15355 of the *State CEQA Guidelines* provides a definition of cumulative impacts:

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) *The individual effects may be changes resulting from a single project or a number of separate projects;*
- (b) *The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future project. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

Section 15130 of the *State CEQA Guidelines* provides direction regarding cumulative impact analysis as follows:

- A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts.
- An EIR should not discuss cumulative impacts that do not result, in part, from the proposed project.
- A lead agency may determine a project's incremental effect is not cumulatively considerable and, therefore, is not significant and shall briefly describe in the EIR the basis of its determination.
- A lead agency may determine a project's cumulatively considerable contribution to a significant cumulative impact may be rendered less than cumulatively considerable and, therefore, residually not significant, if the project implements or funds its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
- The analysis of cumulative impacts should "be guided by the standards of practicality and reasonableness." The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone.

Year for Cumulative Analysis

The proposed project is the 2020 LRDP, a land use plan that will guide the physical development of the campus over the course of 10 years, from 2020 to 2030. To provide a complete and conservative analysis, the impacts of the project are analyzed at full campus development by 2030 under this proposed LRDP. Cumulative impacts are assessed up to year 2035. This represents about 20 years of growth in the project area which is typically the time period for which cumulative impacts are analyzed. It is also the farthest year for which traffic, population, and housing data are available.

Although the 2020 LRDP is designed to accommodate campus growth through 2030, and at this time, UC Merced does not have growth projections for the years after 2030, for purposes of the cumulative impact analysis in this SEIR, it is assumed that the campus would continue to grow between 2030 and 2035 at the same rate as between 2020 and 2030, and that new facilities would be developed to accommodate an additional 2,500 students, and associated faculty and staff, for an enrollment level of 17,500 students by 2035.

Past, Present and Reasonably Foreseeable Cumulative Projects

State CEQA Guidelines Section 15130(b) provides two alternate approaches as to how other current and reasonably foreseeable future projects may be identified for purposes of a cumulative impact analysis in a CEQA document. Either of the following approaches may be used:

- A list of past, present, and reasonably foreseeable projects; or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified, which describes or evaluates regional or area-wide conditions contributing to cumulative impacts.

UC Merced considered using a summary of projections approach as the proposed project is a plan and not a specific development project. However, given that the plan extends over just 10 years, a list-based approach was determined to be useful. UC Merced contacted both the County of Merced and City of Merced to obtain a list of projects that are on file, either as approved projects or as applications for future land development.

The County informed UC Merced that about 105 residential units would likely be developed by 2030 within the Bellevue corridor area which is the area bound by Bellevue Road and Old Lake Road, between G Street and Lake Road, and that an additional 27 units would likely be developed in the same area by 2035.

The City provided a tentative subdivision projects list dated September 2016, a list of current projects dated August 2017, and a homebuilder activity list dated August 2017. These projects included in these lists are presented in **Table 4.0-1** and **Figure 4.0-1, City of Merced Current Projects**. In addition, the City noted that the cumulative traffic analysis must take into account the full scope of the City's adopted Vision 2030 General Plan. To avoid double counting, the lists were used to develop growth projections through 2035.

The City also noted that Virginia Smith Trust (VST) was in discussions with the City for possible annexation and development of VST lands to the south of the campus with urban uses. However, as of the preparation of the Draft SEIR, there is no application on file with the City for development of the VST lands. Therefore, development of that area is not included in the SEIR cumulative analysis.²

Campus Parkway has been approved between Highway 99 and Yosemite Avenue, but not north of Yosemite Avenue. The approved portion of that project has been taken into account in the cumulative traffic analysis.

² In its letter on the previously circulated Draft SEIR, VST stated that it is currently preparing a Specific Plan in accordance with the previously adopted University Community Plan (UCP) for development of UCP North, the first phase of the UCP. The first and second phases of the Specific Plan for UCP North consist of the development of 200 acres closest to Lake Road. At the time of recirculation of this SEIR, VST has not yet submitted this plan or its development application to Merced County.

**Table 4.0-1
Cumulative Projects List**

Project ID	Project Name	Land Use Type	Size	Units
1	Bellevue Ranch West Village 12	Residential - SF	242	DU
2	Regency Court Apartments	Residential - MF	180	DU
3	Compass Pointe II Apartments	Residential - MF	136	DU
4	Mansionette Estates Unit 5	Residential - SF	20	DU
5	University Village Merced Annexation	Mixed Use (MF)	330	DU
5	University Village Merced Annexation	Mixed Use (Retail)	40	KSF
6	Bianchi/Norcal Cajun Annexation	Retail	42	KSF
8	Yosemite & McKee Commercial Center	Retail	62	KSF
9	University Village Merced - Lake ("Merced Station")	Mixed Use (MF)	225	DU
9	University Village Merced - Lake ("Merced Station")	Mixed Use (Retail)	6.6	KSF
10	Prime Shine	Auto Shop	5.5	KSF
11	Pro Lube	Auto Shop	15.7	KSF
12	Gas Station/Conv. Market/Car Wash - Carol Ave	Gas Station/Conv. Market/Retail	6.4	KSF
13	Towne Place Suites	Hotel	87	Rooms
14	Childs and Parsons (Old Bowling Alley)	Gas Station/Conv. Market/Retail	12	KSF
15	Merced Gateway Center	Mixed Use (MF)	178	DU
15	Merced Gateway Center	Mixed Use (Retail)	523	KSF
16	Super Shop	Auto Shop	15	KSF
17	Mainzer Theater	Retail	11.2	KSF
18	El Capitan Hotel	Mixed Use (Hotel)	100	Rooms
18	El Capitan Hotel	Mixed Use (Retail)	74	KSF
19	Advanced Chemical Transportation (ACT)	Industrial	21	KSF
20	Bellevue Ranch East Village 15 (Remaining Lots)	Residential - SF	65	DU
21	Bellevue Ranch East Village 7 (Remaining Lots)	Residential - SF	134	DU
22	Bellevue Ranch East Lot Q (Remaining Lots)	Residential - SF	100	DU
23	Bellevue Ranch West Village 1	Residential - SF	67	DU
24	Campus Vista Unit 2 (Remaining Lots)	Residential - SF	61	DU
25	Lantana Estates South (Phase 1)	Residential - SF	60	DU
26	The Meadows Subdivision (Remaining Lots)	Residential - SF	58	DU
27	Mission Ranch (Remaining Lots)	Residential - SF	134	DU
28	Golden Valley Health Centers (Part of Northview)	Medical Office	27	KSF
29	Northview Medical Offices	Medical Office	66.45	KSF
30	PG&E Regional Utility Center	Industrial	48	KSF

**Table 4.0-1
Cumulative Projects List**

Project ID	Project Name	Land Use Type	Size	Units
31	Merced Mall Expansion	Mixed Use (Theater)	7	Screens
31	Merced Mall Expansion	Mixed Use (Retail)	50	KSF
32	Stoneridge South Subdivision	Residential - SF	160	DU
32	Stoneridge South Subdivision	Residential - MF	100	DU
33	Bellevue Ranch East Village 16 (Remaining Lots)	Residential - SF	71	DU
34	Bellevue Ranch East Village 8 (Remaining Lots)	Residential - SF	37	DU
35	University Park II, Phase 2 Subdivision (Remaining Lots)	Residential - SF	125	DU
36	Sierra Vista Units 2 and 3 (Remaining Lots)	Residential - SF	44	DU
37	Bellevue Ranch East Village 14 (Remaining Lots)	Residential - SF	48	DU
38	Moraga Subdivision Phase 1 (Remaining Lots)	Residential - SF	249	DU
39	Cypress Terrace East (Remaining Lots)	Residential - SF	101	DU
40	Sandcastle Phase 2 & 3 Subdivision (Remaining Lots)	Residential - SF	144	DU
41	Cypress Terrace East Phase 4 (Remaining Lots)	Residential - SF	101	DU
42	Tuscany East Subdivision (Remaining Lots)	Residential - SF	47	DU
43	Shadow Creek at Compass Point (Remaining Lots)	Residential - SF	293	DU
44	County Housing Project	Residential - SF	127	DU
45	County Housing Project	Residential - SF	25	DU
46	UC Merced Admin Building	Office	300	Emp

Source: City of Merced 2017

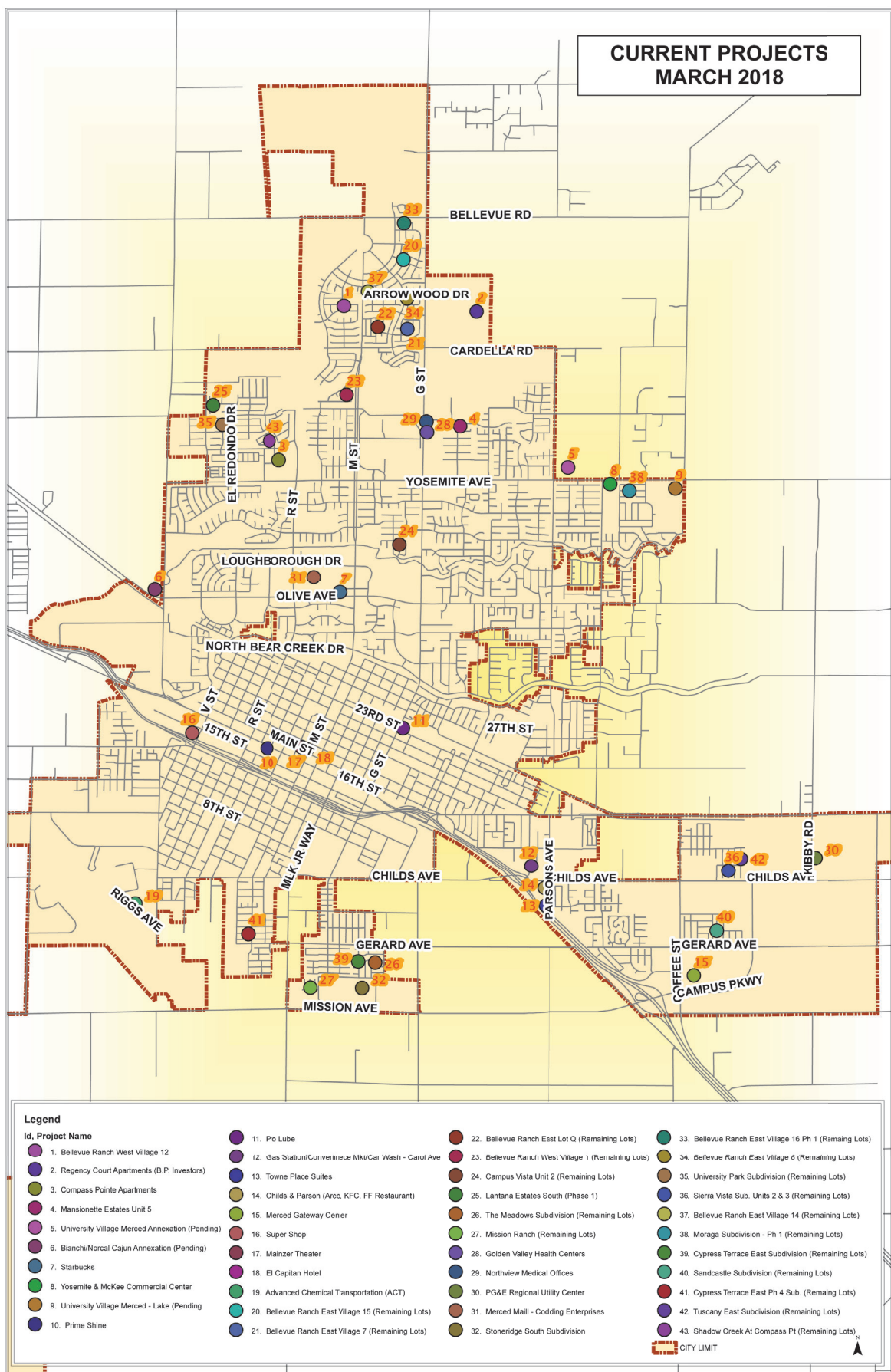
DU = dwelling unit

Emp = employees

KSF = thousand square feet

SF = Single-family

MF = Multi-family



SOURCE: City of Merced Planning Department, 2018

FIGURE 4.0-1

City of Merced Current Projects

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