SAN JOSÉ CITY COLLEGE FACILITIES MASTER PLAN

Draft Environmental Impact Report

SCH# 2020100536

Prepared for
San José Evergreen Community College District

May 2021

ESA

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EXECUTIVE SUMMARY

ES.1 Introduction

This Draft Environmental Impact Report (EIR) assesses the potentially significant environmental effects of implementation of the proposed San José City College Vision 2030 Facilities Master Plan (SJCC FMP). The SJCC FMP is prepared based on the San José Evergreen Community College District (District) analysis for the growth and projections explained in its San Jose City College Educational Master Plan (SJCC EMP).

This EIR provides a program-level analysis of the environmental impacts that could result from the development as envisioned in the SJCC FMP and explained in this EIR. The program EIR establishes a framework for tiered or project-level environmental documents that would be prepared in the future in accordance with the overall program. The program-level analysis addresses the effects of the maximum growth and development under this plan. This EIR also provides project-level analysis of specific projects and activities identified in the SJCC FMP, based on the level of information available at the time of preparation of this EIR. The EIR identifies mitigation measures to reduce potential significant effects of the SJCC FMP.

The District is the "lead agency" for the environmental review of the SJCC FMP and for the implementation of the development program as considered under this EIR.

This summary highlights the major areas of importance in the environmental analysis for the proposed FMP, as required by Section 15123 of the *Guidelines for Implementing the California Environmental Quality Act* (CEQA Guidelines). It provides a brief description of the development program based on the SJCC FMP, the project objectives, the significant and unavoidable environmental effects, alternatives to the SJCC FMP, and any potential areas of controversy known to the District. Additionally, this chapter summarizes (1) the potential environmental impacts that would occur as the result of implementation of the SJCC FMP; (2) the recommended mitigation measures that would avoid or reduce significant environmental impacts; and (3) the level of impact significance after mitigation measures are implemented.

ES.2 Project Location and Surrounding Uses

The SJCC campus is located at 2100 Moorpark Avenue in central San José in Santa Clara County, approximately 3 miles west of Downtown San José. The SJCC campus is immediately south of Interstate 280 (I-280) and is bounded by Moorpark Avenue to the north; Rexford Way, Mansfield Drive, Kingman Avenue, Fruitdale Avenue to the south; Laswell Avenue, and South Bascom Avenue to the west; and Leigh Avenue to the east.

The approximately 58-acre campus is in the midst of an urban setting and is currently developed with several buildings-both educational and administrative to house several programs, a library, sports facilities, parking and access ways, and other ancillary facilities.

The SJCC campus is surrounded by a variety of land uses, including commercial uses and Santa Clara Valley Medical Center to the west; a residential neighborhood, senior housing, a San José Fire Department fire station, and a church to the east; a mixed single- and multi-family residential neighborhood to the south; and single-family residential uses to the north across I-280.

With the presence of the SJCC campus and Santa Clara Valley Medical Center, there is a variety of commercial uses (medical related) and retail (fast food) uses along the west edge of the campus on South Bascom Avenue.

ES.3 Project Description

The SJCC is a currently operating community college campus built with approximately 634,700 gross square feet (GSF) of built space. The District proposes facilities improvements as envisioned in the SJCC FMP and funded by Bond Measures G and X. Facility improvements contained in the SJCC FMP to meet the future program needs include demolition and removal of certain existing buildings on the campus; the construction of certain new buildings and the renovation of certain existing buildings and facilities; improvements to vehicular and pedestrian access and circulation systems; expansion of parking facilities and capacity; and open space improvements.

Overall, the SJCC FMP proposes demolition of approximately 108,800 GSF and remodeling and renovations of approximately 257,100 GSF of existing built spaces, plus a net increase of 7,500 GSF. There would be new construction of approximately 415,000 GSF of built spaces. These proposed facilities would be supported with related improvement to the existing circulation network; with the addition of one new vehicular access point, drop-off areas, parking and open space landscape improvements.

New Construction: The SJCC FMP proposes construction of six (6) new buildings and partial new addition to an existing building. Overall, there would be new construction of approximately 415,000 GSF and a net addition of approximately 370,100 GSF. These new buildings are the following:

1. General Education/Business Complex for approximately 104,500 GSF
2. Career Technical Education Building (CTE Building) for approximately 85,000 GSF
3. Child Development Center for approximately 15,000 GSF
4. Aquatics Center for approximately 11,000 GSF
5. Maintenance and Operations/Reprographics for approximately 15,000 GSF
6. Drama + Theater Arts Building (D+TH), partial addition of net approximate 25,600 GSF

Renovations/Repurpose of Existing Buildings: The proposed SJCC FMP identifies certain existing buildings for renovations and repurposing to accommodate educational programs, sports facilities, and expansion of central plant. These existing buildings and facilities are:

1. CTE 200 Building, renovations of approximately 41,800 GSF
2. Reprographics and Cosmetology Building, partial renovations approximately 30,600 GSF
3. Technology Center, partial renovations of approximately 80,000 GSF
4. Jaguar Student Development and Multi-Cultural Center, renovations of approximately 35,400 GSF
5. Student Center, partial renovation of approximately 69,000 GSF
6. Central Plant, interior equipment upgrades of approximately 7,700 GSF
7. Track and Field replacement, an outdoor sports facility improvements/replacements

Demolition: The SJCC FMP identified seven buildings for demolition and partial removal, to eliminate non-functioning space and replace the oldest and most aged facilities with new facilities:

1. Business Building, demolish approximately 25,300 GSF
2. General Education Buildings, demolish approximately 43,700 GSF
3. CTE 300 Building, currently in the process of demolition
4. CTE 100 Building, demolish approximately 37,000 GSF
5. Applied Sciences Building D, currently in the process of demolition
6. D +TH, partial demolition of approximately 10,000 GSF
7. Former Child Development Center, previously demolished

Site Access, Parking, and Circulation: The SJCC FMP proposes improvement to the existing circulation network; with the addition of one new vehicular access point, drop-off areas, automobile and bicycle parking, and pedestrian access and circulation. These improvements include:

- Reconfiguration of the primary entrance to the SJCC campus at Leigh Avenue
- Vehicular gateways at all new and existing access points to the campus; including the entrance at Laswell Avenue
- Creation of an internal perimeter loop to improve student and service access and circulation
- Additional and improved pedestrian drop-offs in the SJCC campus
- Series of north-south pedestrian walkways (or spines)
- Automobile and bicycle parking

Open Space and Landscaping: The SJCC FMP proposes development of a hierarchy of open spaces, ranging from large, active, formal and informal gathering spaces to smaller, intimate, and purpose-built spaces.

Utilities: The SJCC FMC also includes installation of dry utilities such as fiber optics for internet services, telephone and computer hookups are closely related to provision of higher education on campus and as on-line distance learning for the new construction as well as all renovations/ repurposing of existing buildings. Similarly, the heating, ventilation, air conditioning, water, sewer and storm drain utilities to these facilities is part of the proposed SJCC FMP.

ES.4 Project Objectives

CEQA Guidelines Section 15124(b) requires the description of the project in an EIR to state the objectives sought by the project.

> *A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.*

The proposed SJCC FMP aims to achieve the goals and objectives discussed in its FMP and the SJCC EMP, as follows:

- Update and expand SJCC facilities to accommodate projected expansion in demand for community college education and programs resulting from the population growth within the District’s service area for year 2030
- Create a functional and usable space/facilities plan based on the SJCC EMP that updates the facility needs to match the projected needs
- Link the SJCC EMP’s goals, strategies, and desired productivity to space quantification that balances the current and future curriculum, instructional delivery modes, effective learning environment, and necessary support structures
- Match space needs and utilization with the curriculum, create modern teaching facilities and learning environments, and provide modern support services sufficient to serve student’s needs
- Reuse some existing buildings that are in good condition and have adequate space for educational and administrative functions
- Assist the District in meeting its SJCC EMP goals and objectives, particularly those related to provision of educational programs and supportive needs
- Implement a well-conceived and well-justified plan for capital outlay projects that are an outcome of a sound master planning process
- Provide an optimal educational and supportive services to the students of the San José City College

ES.5 Proposed Project Impacts: Significant and Unavoidable Environmental Effects

Throughout this EIR, significant environmental impacts are identified, and mitigation measures are described that would eliminate the impacts or decrease them to a less-than significant level. Similarly, many impacts are identified that would be less-than-significant without the need for mitigation measures. There are, however, a number of impacts that are identified that cannot be eliminated or cannot be decreased to a level of insignificance even with the implementation of feasible mitigation measures. The unavoidable significant environmental impacts of the SJCC FMP are listed in **Table ES-1**.

TABLE ES-1
SIGNIFICANT AND UNAVOIDABLE IMPACTS OF THE PROPOSED SJCC FMP

Impacts
3.5 Noise and Vibration
Impact 3.5-1: Construction activities associated with the implementation of the SJCC FMP could result in temporary increases in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies.
Cumulative Impacts
Impact C-3.5-5: Construction activities associated with the SJCC FMP combined with cumulative construction noise in the vicinity of the SJCC campus would result in a substantial temporary or periodic increase in ambient noise levels in excess of standards established in the City of San José General Plan or Noise Ordinance.

ES.6 Alternatives to the Proposed SJCC FMP

Chapter 4, *Alternatives,* analyzes a range of reasonable alternatives to the proposed project, including the No Project - Implement SJCC 2025 Updated FMP Alternative (Alternative 1), the Reduced Project Alternative (Alternative 2), and the Renovations Only Alternative (Alternative 3). A number of other possible alternatives were also considered but were rejected from further evaluation because the offered no clear environmental benefits or did not meet the District’s goals and objectives for the SJCC as described in their Educational and Facilities Master Plans. These included an alternative site, shift the growth to the Evergreen Valley College campus, and a no project - no development alternative.

Chapter 4 discusses the alternatives, and provides a comparative analysis of these alternatives to the proposed SJCC FMP. Chapter 4 also provides a summary of impact levels within all environmental topic areas for the three alternatives.

The ***No Project - Implement SJCC 2025 Updated FMP Alternative*** (***Alternative 1***) would not implement the renovation, demolition, or new construction included in the proposed SJCC FMP. Instead this alternative would continue to implement the SJCC 2025 Updated FMP, the existing facility master plan for the SJCC campus. This alternative would meet the District’s objectives of expanding the capacity of campus facilities to meet projected future demand within the SJCC service area and modernizing a number of aged facilities across the campus. Relative to the proposed SJCC FMP, the No Project - Implement SJCC 2025 Updated FMP Alternative would be less effective in achieving the District's objectives related to provision of structures and programming that supports the District's desired academic program offerings and current desires regarding campus layout and function.

The ***Reduced Project Alternative*** (***Alternative 2***) would implement portions of the development program proposed under the SJCC FMP such as a new CTE Building at the site of the demolished CTE Building 300 Building, and a new Child Development Center-Phase I on the site of the former Child Development Center. It also assumes the demolition of the existing Business and General Education Buildings, to be replaced with a new General Education/Business Complex, as proposed under the SJCC FMP. This alternative would slightly lessen some of the SJCC FMP's less-than-significant effects, but would not fully meet the project objectives.

The ***Renovations Only Alternative*** (***Alternative 3***) assumes only the campus buildings and facilities that are proposed for renovation under the SJCC FMP would be implemented, rather than the full suite of demolition and new construction assumed under the SJCC FMP, with the exception of CTE Building 300 and Applied Sciences Building D (which were previously approved by the District for demolition and slated for demolition in 2021). There would also be no construction of new buildings at the campus that are proposed under the SJCC FMP (i.e., no General Education/Business Complex, Aquatics Center or Parking Structure). This alternative would be the environmentally superior alternative. This alternative would avoid the two significant and unavoidable construction noise impacts that could occur under the proposed SJCC FMP, as well reduce the level or severity of other significant but mitigable impacts that could occur under the proposed SJCC FMP. However, this alternative would fail to fully achieve a number of the project objectives of the SJCC FMP, including expanding student capacity to accommodate anticipated future demand for community college services within the area traditionally served by the SJCC.

ES.7 Comments on Initial Study and Notice of Preparation

The District previously circulated a Notice of Preparation (NOP) / Draft Initial Study (IS) for the SJCC FMP (State Clearinghouse No. 2020100536). The NOP/IS public review and comment period was October 27, 2020 through November 27, 2020. Based on responses and comments received on the NOP/IS, the District determined that an EIR would be required for the SJCC FMP. The NOP/IS is included in **Appendix A** of this EIR. The comments received on the NOP/IS are included in **Appendix G**.

The District sent the NOP/IS to agencies with statutory responsibilities in connection with the project with the request for input on the scope and content of the environmental information that should be addressed in the EIR. The District received three written comment letters in response to the NOP/IS.

- Native American Heritage Commission, letter dated October 29, 2020
- County of Santa Clara Roads and Airport Department, letter dated November 30, 2020
- Santa Clara Valley Water District, email dated December 1, 2020

An additional letter from County of Santa Clara Roads and Airport Department dated February 22, 2021 was received after the NOP comment period.

ES.8 Summary of Impacts and Mitigation Measures

Table ES-2 summarizes the impacts of the proposed SJCC FMP, identifies the significance determination of each impact, and presents the full text of the identified mitigation measures and presents the full text of the applicable mitigation measures and improvement measures for the proposed project.

TABLE ES-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.1 Air Quality			
Impact 3.1-1: SJCC FMP construction and operation could conflict with or obstruct implementation of the applicable air quality plan.	S	Implement Mitigation Measure 3.1-2**:** Best Management Practices for Controlling Particulate Emissions during Construction, Mitigation Measure 3.1-3: Construction Health Risk Reduction Plan, and Mitigation Measure 3.4-1e, Electric Vehicle Charging in Section 3.4, Greenhouse Gas Emissions.	LTS
Impact 3.1-2: Construction activities associated with the SJCC FMP could result in a cumulatively considerable increase in emissions for which the SFBAAB is non-attainment under an applicable federal or State ambient air quality standard**.**	S	**Mitigation Measure 3.1-2: Best Management Practices for Controlling Particulate Emissions during Construction** To reduce impacts from fugitive dust emissions during SJCC FMP construction, construction contractors shall be required to implement the following BMPs recommended by the BAAQMD for all projects. These measures will reduce particulate emissions primarily during soil movement, grading and demolition activities but also during vehicle and equipment movement on unpaved project sites: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 mph. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.	LTS

LTS = less than significant; NA = not applicable; NI = No Impact; S = significant; SU = significant and unavoidable.

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.1 Air Quality (cont.)			
Impact 3.1-3: Operation of campus facilities and buildings developed under the SJCC FMP could result in a cumulatively considerable increase in emissions for which the SFBAAB is non-attainment under an applicable federal or State ambient air quality standard.	LTS	None required.	NA
Impact 3.1-4: Construction activities associated with the SJCC FMP could lead to health risks from exposure of sensitive receptors to substantial concentrations of TACs.	S	**Mitigation Measure 3.1-3: Construction Health Risk Reduction Plan** SJCC shall require construction contractors to implement a Construction Health Risk Reduction Plan that includes the following measures. These measures shall be included as part of contract specifications: a. Construction contractors shall be required to demonstrate that all heavy-duty off-road construction equipment with engines greater than 25 horsepower used for construction activities shall be equipped with the most effective Verified Diesel Emissions Control Strategies (VDECS) available for the engine type. In this case, the best available VDECS would be implementation of Tier 4F engines as certified by CARB and U.S. EPA. This adherence shall be verified through submittal of an equipment inventory and Certification Statement to the BAAQMD. The Certification Statement must state that each contractor agrees to compliance and acknowledges that a significant violation of this requirement shall constitute a material breach of the contractor's agreement and/or the general contract with the project applicant. b. Use alternative fuels as commercially available, such as renewable diesel, biodiesel, natural gas, propane, and electric equipment, to the extent feasible. Portable equipment shall be powered by grid electricity or alternative, non-fossil fuels (i.e., not diesel) instead of by diesel generators. c. Idling times on all diesel-fueled commercial vehicles weighing more than 10,000 pounds shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to two minutes. This limit is more restrictive than the five-minute limit required by the California airborne toxics control measure (California Code of Regulations Title 13, Section 2485s). Clear signage to this effect shall be provided for construction workers at all access points. d. Idling times on all diesel-fueled off-road equipment exceeding 25 horsepower shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to two minutes. Fleet operators must develop a written policy as required by California Code of Regulations Title 23, Section 2449 ("California Air Resources Board Off-Road Diesel Regulations").	LTS
Impact 3.1-5: The proposed SJCC FMP could lead to increased health risks from exposure of sensitive receptors to substantial concentrations of criteria air pollutants.	LTS	None required.	NA

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.1 Air Quality (cont.)			
Cumulative Impacts			
Impact C-3.1-6: Implementation of the SJCC FMP combined with cumulative development in the vicinity would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.	S	Implement Mitigation Measure 3.1-2.	LTS
Impact C-3.1-7: Implementation of the SJCC FMP could contribute considerably to cumulative emissions of TACs and $PM_{2.5}$ that could expose sensitive receptors to substantial pollutant concentrations or health risks.	S	Implement Mitigation Measure 3.1-3.	LTS
EIR Section 3.2 Cultural (Historic) Resources			
Impact 3.2-1: Implementation of the SJCC FMP would demolish historic architectural resources, but would not result in a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.	NI	None required.	NA
Cumulative Impacts			
Impact C-3.2-2: Implementation of the SJCC FMP would result in cumulatively considerable impacts on historic architectural resources, in combination with past, present and reasonably foreseeable future projects in the vicinity of the SJCC campus site.	NI	None required.	NA

LTS = less than significant; NA = not applicable; NI = No Impact; S = significant; SU = significant and unavoidable.

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.3 Energy			
Impact 3.3-1: The SJCC FMP would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.	LTS	None required.	NA
Impact 3.3-2: Energy use associated with the implementation of the proposed SJCC FMP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	S	Implement Mitigation Measures 3.4-1a through 3.4-1j in Section 3.4, Greenhouse Gas Emissions.	LTS
Cumulative Impacts			
Impact C-3.3-3: Energy use associated with the implementation of the SJCC FMP would not result in a cumulatively considerable contribution to a significant energy impact.	S	Implement Mitigation Measures 3.1-1a, 3.1-1b, and 3.1-1c in Section 3.1, Air Quality, and Mitigation Measures 3.4-1a through 3.4-1j in Section 3.4, Greenhouse Gas Emissions.	LTS
EIR Section 3.4 Greenhouse Gas Emissions			
Impact 3.4-1: Construction and operation of development proposed under the SJCC FMP could generate GHG emissions, either directly or indirectly, that could conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs and lead to a significant impact on the environment.	S	**Mitigation Measure 3.4-1a:** Carbon-free Electricity. To the extent feasible, electricity used at the campus shall be from renewable carbon-free energy sources (San José Clean Energy provides the option to choose the TotalGreen program that includes electricity generated entirely from renewable, carbon-free sources like solar and wind. **Mitigation Measure 3.4-1b:** As feasible, construct new buildings as Zero Net Energy with no natural gas infrastructure and relying entirely on carbon-free renewable electricity either purchased (see Mitigation Measure 3.4-1a) or generated onsite (see Mitigation Measure 3.4-1c). **Mitigation Measure 3.4-1c:** As feasible, install on-site photovoltaic systems on building rooftops and parking lots to reduce the total energy needs of the proposed new buildings. **Mitigation Measure 3.4-1d:** As feasible, zero emission vehicles shall constitute at least 25 percent of the operation and maintenance vehicle fleet at the campus by 2025 and increased to 50 percent of the fleet by 2030. **Mitigation Measure 3.4-1e:** Electric Vehicle Charging. As feasible, as part of project design, allocate at least 10 percent of all parking spaces to be equipped with electric vehicle (EV) charging equipment to promote the use of zero-emission vehicles and plug-in electric passenger vehicles.	LTS

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.4 Greenhouse Gas Emissions (cont.)			
Impact 3.4-1 (cont.)		**Mitigation Measure 3.4-1f:** LEED Certification. As feasible, new buildings and major renovations shall be constructed to achieve LEED Silver or equivalent rating. **Mitigation Measure 3.4-1g:** Solid Waste Reduction Plan. The District shall develop and implement a Solid Waste Reduction Plan that evaluates and quantifies current solid waste generation levels at the campus and proposes measures to reduce waste generation. The Solid Waste Reduction Plan shall aim to divert 90 percent of waste from landfills by 2030. **Mitigation Measure 3.4-1h:** Use of Sustainable products and methods. Maximize use of sustainable products and services in construction and operation of the campus. The design team (architect/engineer) shall recommend building materials and methods with life cycles (manufacture, installation, maintenance, repair, and replacement) of reduced environmental impacts. Considerations shall also include energy efficiency, energy required in the manufacturing process, life cycle duration, and maintenance and replacement costs. **Mitigation Measure 3.4-1i:** Water Conservation Measures. Project design shall implement measures to conserve water, including such measures to install controls to optimize irrigation water, reduce water usage in restrooms and showers, and promote the use of reclaimed water. The use of decorative fountains shall be minimized. If feasible, campus uses shall use recycled water for all non-potable demands identified such as toilet flushing, irrigation, and cooling. Irrigation water use for landscaping shall be minimized by using plant species that have low water requirements and are well adapted to San Jose's Mediterranean climate. To the extent feasible, storm water shall be reused for beneficial uses on-campus. **Mitigation Measure 3.4-1j:** Implement Transportation Demand Management measures to reduce automobile trips to the campus by encouraging the use of alternative modes of transportation. As feasible, the TDM measures may include, but are not limited to, the following: • Make available transit passes to staff and students to make transit an attractive, affordable mode of travel. • Provide pre-tax commuter benefits for staff to exclude their transit or vanpooling expenses from taxable income or an alternate commuter benefit option consistent with the MTC/BAAQMD Commuter Benefits Program required for employers with 50 or more full-time employees. • Use technology-based information, encouragement, and trip coordination services to encourage carpooling, transit, walking, and biking by staff and students. These can include third-party apps to distribute incentives to people who choose to use these modes. • Provide dedicated parking for carpool and vanpool vehicles near building and garage entrances. • Provide secure and convenient bicycle parking, such as lockers or secured bicycle rooms. • Provide assistance in rideshare coordination, such as implementation of the 511 Regional Rideshare Program or equivalent, as recommended by the 2017 CAP. • Dedicate curbside areas for passenger pickup by ride-hailing services, to minimize traffic intrusion and double-parking by rideshare vehicles.	

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.5 Noise			
Impact 3.5-1: Construction activities associated with the implementation of the SJCC FMP could result in temporary increases in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies.	S	**Mitigation Measure 3.5-1: Construction Noise Reduction Plan** The District shall prepare a Construction Noise Reduction Plan, to be implemented as development occurs throughout the campus to address noise from demolition, renovation and construction of buildings within 500 feet of residential uses (construction of the Child Development Center, the CTE building, the Aquatic Center, and the parking Structure, demolition of CTE 100 building, renovation of CTE 200 building and the Central Plant). This Construction Noise Reduction Plan shall include, at a minimum, the following noise reduction measures: 1. **Construction Schedule:** Construction hours shall be limited to between 7 a.m. and 7 p.m., Monday through Friday. No construction activities shall take place on weekends at sites within 500 feet of a residence. Beyond 500 feet of residential uses, weekend construction shall be limited to the hours to 10 a.m. to 6 p.m. Extreme noise generating activities such as pile driving (if required) and other activities with the potential to create extreme noise levels exceeding 90 dBA shall be conducted only between 10 a.m. and 4 p.m. The loudest construction activities, such as demolition and pile driving, shall be considered for scheduling during academic breaks when fewer people would be present on campus and be disturbed by construction noise. 2. **Site Perimeter Barrier:** To reduce noise levels from construction occurring within 500 feet of residential uses, a noise barrier shall be constructed along the perimeter of the construction site facing the receptor(s). Barriers shall be constructed either with two layers of 0.5-inch-thick plywood (joints staggered) and K-rail or other support, or with a limp mass barrier material weighing 2 pounds per square foot. If commercial barriers are employed, such barriers shall be constructed of materials with a Sound Transmission Class rating of 25 or greater. 3. **Stationary Equipment:** Stationary noise sources, such as generators and air compressors, shall be located as far from onsite receptors and adjacent properties as possible. These noise sources shall be muffled and enclosed within temporary sheds, or shall incorporate insulation barriers to provide additional noise reduction. For stationary equipment that will operate for more than one week within 500 feet of a noise-sensitive land use, additional localized barriers around such equipment shall be incorporated, that break the line of sight[1] to neighboring receptors. 4. T**emporary Power:** Temporary power poles shall be used instead of generators, where feasible. 5. **Construction Equipment:** All internal combustion–driven equipment shall be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment. Exhaust mufflers shall be provided on pneumatic tools when in operation for more than one week within 500 feet of a noise-sensitive land use. All equipment shall be properly maintained. 6. **Truck Traffic:** Individual truck idling shall be restricted to no more than two consecutive minutes per trip end. Trucks shall load and unload materials in the construction areas, rather than idling on local streets. If truck staging is required, to the extent possible, the staging areas shall be located along major roadways with higher traffic noise levels or away from the noise-sensitive receivers.	SU

1 If a barrier does not block the line of sight between the source and the observer, the barrier will provide little or no attenuation (U.S. Department of Housing and Urban Development, *The Noise Guidebook*, prepared by The Environmental Planning Division, Office of Environment and Energy, March 2009, p. 24).

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.5 Noise			
Impact 3.5-1 (cont.)		7. **Methods:** The construction contractor(s) shall consider alternative, less noise generating equipment and methods wherever feasible. Utilize "quiet" air compressors and other stationary noise sources where technology exists. Consider alternative methods of pile installation, such as drilling, if pile installation is required. Piles could be pre-drilled, as practicable, and a wood block placed between the hammer and pile to reduce metal-to-metal contact noise and "ringing" of the pile. Unnecessary idling of internal combustion engines shall be prohibited. 8. **Signals:** The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety and warning purposes only. Noise from public address loudspeakers, two-way radio, or music system used during construction shall not be audible at any adjacent noise-sensitive receptor except for emergency uses. 9. **Notification Requirements:** Businesses and residents within 500 feet shall be notified by mail at least one month before the start of construction activities. The notification shall include, at a minimum, the estimated duration of the construction, construction hours, and contact information. The same information shall be posted at construction site boundaries. Onsite academic and administrative uses shall be notified at least a week ahead of construction activities scheduled nearby. 10. **Complaint Protocol and Noise Complaint Liaison:** Protocols shall be implemented for receiving, responding to, and tracking received complaints. A noise complaint liaison shall be identified to field complaints regarding construction noise and interface with the SJCC FMP construction team. The liaison shall determine the cause of the noise complaint and require that measures to correct the problem be implemented. Signage that includes the community liaison's telephone number shall be posted at the construction site and the liaison's contact information shall be included in the notice sent to neighboring businesses and residents regarding the construction schedule.	
Impact 3.5-2: Stationary sources associated with operation of the proposed SJCC FMP could result in generation of a permanent increase in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies.	S	**Mitigation Measure 3.5-2a: Operational Noise Performance Standard for Stationary Sources** The District shall ensure that all mechanical equipment is selected and designed to reduce impacts on surrounding uses by limiting noise from stationary sources such as mechanical equipment, loading docks, and the Central Plant to 55 dBA and 60 dBA at the property lines of residential and commercial, receivers, respectively. Methods of achieving these standards include using low-noise-emitting HVAC equipment, locating HVAC and other mechanical equipment within a rooftop mechanical penthouse, and using shields and parapets to reduce noise levels to adjacent land uses. For emergency generators, industrial-grade silencers can reduce exhaust noise by 12 to 18 dBA, and residential-grade silencers can reduce such noise by 18 to 25 dBA (American Society of Heating, 2006). Acoustical screening can also be applied to exterior noise sources of the Central Plant which can achieve up to 15 dBA of noise reduction (Environmental Noise Control, 2014). An acoustical study shall be prepared by a qualified acoustical engineer during final building design to evaluate the potential noise generated by building mechanical equipment and to identify the necessary design measures to be incorporated to meet the City's standards at adjacent offsite receptors.	LTS

LTS = less than significant; NA = not applicable; NI = No Impact; S = significant; SU = significant and unavoidable.

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.5 Noise (cont.)			
Impact 3.5-2 (cont.)		**Mitigation Measure 3.5-2b: Noise Reduction Measures for the Aquatic Center** The District shall incorporate the following measures in the final design of the aquatic center to reduce noise impacts to offsite receptors: • The line of sight between the pool and the residences to the east of Leigh Avenue shall be blocked either by structures associated with the Aquatic Center or a noise barrier along the eastern boundary of the proposed Aquatic Center. • Placement of speakers shall be adjusted such that the line of sight from the speakers to neighbors to the east is obstructed by the wall. • The audio system shall be designed to direct speakers away from the offsite neighbors to the east. • Use of narrow coverage directional speakers shall be considered to direct sound primarily towards the spectators.	
Impact 3.5-3: SJCC FMP-generated traffic noise would result in permanent increases in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies.	LTS	None required.	NA

Impact 3.5-4: Construction activities associated with the implementation of the SJCC FMP could result in the generation of excessive groundborne vibration or groundborne noise levels.	S	**Mitigation Measure 3.5-3: Construction Vibration Avoidance and Reduction Plan**
		The District shall incorporate the following measures to reduce vibration impacts to onsite receptors:
		• Pile driving activities associated with the proposed parking structure shall be scheduled to occur on weekends or during periods when instruction is not occurring on the campus, if feasible.
		• If pile driving activities are scheduled to occur during periods when instruction is occurring on the campus, a notice shall be posted in the vicinity of the affected classroom buildings notifying the campus community of the upcoming construction activities.
		• Vibration from pile driving shall be minimized using the following measures:
		  - Foundation pile holes shall be pre-drilled to minimize the impacts required to seat the pile.
		  - Piles shall be jetted[2] or partially jetted into place to minimize the number of impacts required to seat the piles.
			LTS

2 "Pile jetting" is a technique that is frequently used in conjunction with, or separate from, pile driving equipment for pile placement. Pile jetting uses a carefully directed and pressurized flow of water to assist in pile placement. This greatly decreases the bearing capacity of the soils below the pile tip, causing the pile to descend toward its final tip elevation with much less soil resistance, largely under its own weight.

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.5 Noise (cont.)			
Impact 3.5-4 (cont.)		- A construction vibration monitoring plan shall be implemented to document conditions before, during, and after pile driving. All plan tasks shall be undertaken under the direction of a Professional Structural Engineer licensed in the State of California, in accordance with industry-accepted standard methods. The construction vibration monitoring plan shall include the following tasks: ▪ Identify the sensitivity of nearby structures to groundborne vibration. A vibration survey (generally described below) would need to be performed. ▪ Perform a pre-construction photo survey, elevation survey, and crack monitoring survey for each of these structures. Surveys shall be performed before any pile driving activity, at regular intervals during pile driving, and after completion. The surveys shall include monitoring for internal and external cracks in structures, settlement, and distress, and shall document the condition of foundations, walls, and other structural elements in the interior and exterior of the structures. ▪ Develop a vibration monitoring and construction contingency plan. The plan shall identify structures where monitoring is to be conducted, establish a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document conditions before and after pile driving. ▪ Identify alternative construction methods for when vibration levels approach the limits stated in the General Plan, such as in Policy EC-2.3. ▪ If vibration levels approach the limits, suspend construction and implement alternative construction methods to either lower vibration levels or secure the affected structures. ▪ Conduct a post-construction survey on structures where either monitoring has indicated high vibration levels or complaints have been received regarding damage. Make appropriate repairs where damage has resulted from construction activities.	
Cumulative Impacts			
Impact C-3.5-5: Construction activities associated with the SJCC FMP combined with cumulative construction noise in the vicinity of the SJCC campus would result in a substantial temporary or periodic increase in ambient noise levels in excess of standards established in the City of San José General Plan or Noise Ordinance.	S	Implement Mitigation Measure 3.5-1, Master Construction Noise Reduction Plan.	SU

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.5 Noise (cont.)			
Cumulative Impacts (cont.)			
Impact C-3.5-6: Operation of the SJCC FMP when considered with other cumulative development would cause a substantial permanent increase in ambient noise levels in excess of standards established in the City of San José General Plan or Noise Ordinance.	LTS	None required.	NA
EIR Section 3.6 Transportation			
Impact 3.6-1: Implementation of the SJCC FMP could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	NI	None required.	NA
Impact 3.6-2: Implementation of the SJCC FMP could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivisions (b).	LTS	None required.	NA
Impact 3.6-3: Implementation of the SJCC FMP could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LTS	None required.	NA
Impact 3.6-4: Implementation of the SJCC FMP could result in inadequate emergency access.	LTS	None required.	NA

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.6 Transportation (cont.)			
Impact 3.6-5: Construction activities under the SJCC FMP could temporarily impact travel conditions along sidewalks and roadways serving the SJCC site.	S	**Mitigation Measure 3.6-1: Construction Coordination and Monitoring Measures** a) **Construction Traffic Control Plan** – In order to reduce potential conflicts between construction activities and pedestrians, transit and autos during construction activities at the SJCC campus, the District shall require construction contractor(s) to prepare a traffic control plan for major phases of project construction (e.g., demolition, construction, or renovation of individual buildings). The District and their construction contractor(s) will meet with relevant City and County agencies to coordinate feasible measures to reduce traffic congestion and potential traffic and transit disruption and pedestrian circulation effects during major phases of construction of the SJCC FMP projects. b) **Reduce Drive Alone Mode Share for Construction Workers** – In order to minimize parking demand and vehicle trips associated with construction workers, the District shall require the construction contractor to include in the Construction Traffic Control Plan methods to encourage walking, bicycling, carpooling, and transit access to the campus site by construction workers. c) **Project Construction Updates for Adjacent Residents and Businesses** – In order to minimize construction impacts on access for nearby residences, institutions, and businesses, the District shall provide nearby residences and businesses with regularly-updated information regarding project construction, including construction activities, peak construction vehicle activities (e.g., concrete pours, excavation),and travel lane closures via a newsletter, website, and/or construction update meetings with neighbors.	LTS
Cumulative Impacts			
Impact C-3.6-6: Implementation of the SJCC FMP, in combination with other development, could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivisions (b).	LTS	None required.	NA
Impact C-3.6-7: Implementation of the SJCC FMP, in combination with other development, could result in inadequate emergency access. (Less than Significant Cumulative Impact)	LTS	None required.	NA
Impact C-3.6-8: The proposed SJCC FMP would cause construction-related traffic impacts that would be cumulatively considerable under cumulative conditions.	Cumulatively Significant; Less than Cumulatively Considerable	Implement Mitigation Measure 3.6-2: Construction Coordination and Monitoring Measures	LTS

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.7 Utilities and Service Systems			
Impact 3.7-1: The SJCC FMP would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.	LTS	None required.	NA
Impact 3.7-2: Sufficient water supplies would be available to serve the SJCC FMP and reasonably foreseeable future development during normal, dry, and multiple dry years.	LTS	None required.	NA
Impact 3.7-3: The proposed SJCC FMP 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 SJCC FMP's projected demand in addition to the provider's existing commitments.	LTS	None required.	NA
Impact 3.7-4: Implementation of the SJCC FMP would not generate waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair attainment of solid waste reduction goals; and would comply with federal, State, or local management and reduction statutes and regulations related to solid waste.	LTS	None required.	NA

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
EIR Section 3.7 Utilities and Service Systems (cont.)			
Cumulative Impacts			
Impact C-3.7-5: Implementation of the SJCC FMP in combination with past, present, and reasonably foreseeable future projects, would not substantially contribute to cumulative impacts related to utilities and service systems	LTS	None required.	NA
Initial Study: Aesthetics			
Impact I.d: Would the project create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	S	**Mitigation Measure AES-1: Minimize Spillover Light and Nighttime Glare.** All new exterior lighting for future projects on the SJCC campus shall incorporate downward-directed lighting or cutoff-type lighting, and/or other design measures as appropriate, in order to minimize light spill and nighttime glare. The District also proposes to work with stadium lighting professionals as needed, to review any potential adjustments to existing stadium lighting that may be required, and incorporate appropriate recommendations and/or design features to ensure these improvements would not increase light spill or glare at off-site locations.	LTS
Initial Study: Biological Resources			
Impact IV.a: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	S	**Mitigation Measure BIO-1 Avoidance and Minimization Measures for Nesting Birds** • No preconstruction surveys or avoidance measures are required for construction activities that would be completed entirely during the non-nesting season (September 1 to January 31). • For all construction activities scheduled to occur during the nesting season (February 1 to August 31), a qualified biologist (i.e., experienced with the nesting behavior of bird species of the region) shall conduct a preconstruction avian nesting survey no more than 14 days prior to the start of staging, site clearing, and/or ground disturbance. • If there is a break of 14 days or more in construction activities during the breeding season, a new nesting bird survey shall be conducted before reinitiating construction. • The surveying biologist shall be capable of determining the species and nesting stage without causing intrusive disturbance. The surveys shall cover all potential nesting sites within 500 feet of the project area for raptors and within 300 feet for other birds. If active nests are found in the proposed project area or vicinity, a no-disturbance buffer shall be created around the active nests, as determined by a qualified biologist. The buffer distance can be reduced in coordination with CDFW if construction activities would not cause an adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young. If the nest(s) are found in an area where ground disturbance is scheduled to occur, ground disturbance shall be delayed until after the birds have fledged.	LTS

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Initial Study: Biological Resources (cont.)			
Impact IV.a (cont.)		If work must occur within the established buffers, nests shall be continuously surveyed for the first 24 hours prior to any construction related activities to establish a behavioral baseline and, once work commences, all nests shall be continuously monitored to detect any behavioral changes as a result of the project, if feasible. If behavioral changes are observed, work causing the change shall cease and CDFW shall be consulted for additional avoidance and minimization measures. The avoidance and minimization measures shall ensure that the construction activities do not cause the adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young.	
Impact IV.d: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	S	Implement Mitigation measure BIO-1.	LTS
Impact IV.f: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	S	**Mitigation Measure BIO-2 Mitigation for Nitrogen Deposition** The SJECCD shall provide a one-time payment of $5.31 per new vehicle trip associated with implementation of the project to the Santa Clara Valley Habitat Agency for use in acquiring and managing land consistent with the adopted Santa Clara Valley HCP/NCCP.	LTS
Initial Study: Cultural Resources			
Impact V.b: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	S	**Mitigation Measure CUL-1. Accidental Discovery of Cultural Resources** If prehistoric or historic-period archaeological resources are encountered, all construction activities within 100 feet shall halt and the SJECCD shall be notified. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include deposits of metal, glass, and/or ceramic refuse. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the SJECCD. Treatment of unique archaeological	LTS

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Initial Study: Cultural Resources (cont.)			
Impact V.b (cont.)		resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.	
Impact V.c: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	S	**Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains** If potential human remains are encountered, all work will halt within 100 feet of the find and the on-site construction crew will immediately contact the SJECCD. The SJECCD will contact the Santa Clara County coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission (NAHC). As provided in PRC Section 5097.98, the NAHC will identify the person or persons believed most likely to be descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.	LTS
Initial Study: Geology and Soils			
Impact VII.f: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	S	**Mitigation Measure GEO-1: Preconstruction Training, and Treatment, Salvage, and Curation of Paleontological Resources.** Prior to construction, a qualified paleontologist meeting the standards of the Society of Vertebrate Paleontology (SVP) (SVP, 2010) with expertise in California paleontology and on-site construction worker training. The qualified paleontologist shall complete an institutional record and literature search and shall develop a paleontological resources training program for all construction personnel and field personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, the proper notification procedures should fossils be encountered, and the laws and regulations protecting paleontological resources. If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, all earthwork or other types of ground disturbance within 25 feet of the find shall stop immediately and the monitor shall notify the SJECCD. Work shall not resume until a qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The qualified paleontologist may also propose modifications to the stop-work radius and the monitoring level of effort based on the nature of the find, site geology, and the activities occurring on the site, and in consultation with the SJECCD.	LTS

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Initial Study: Geology and Soils (cont.)			
Impact VII.f (cont.)		If treatment and salvage is required, recommendations shall be consistent with the SVP 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, and currently accepted scientific practice, and shall be subject to review and approval by the SJECCD. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection (e.g., the University of California Museum of Paleontology), and may also include preparation of a report for publication describing the finds. Upon receipt of the fossil collection, a signed repository receipt form shall be obtained and provided to the SJECCD. The qualified paleontologist shall prepare a paleontological resources report documenting the treatment, salvage, and, if applicable, curation of the paleontological resources. The SJECCD shall be responsible for the costs necessary to prepare and identify collected fossils, and for any curation fees charged by the paleontological repository. The SJECCD shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.	
Initial Study: Tribal Cultural Resources			
Impact XVIII.ai: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object 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).	S	Implement Mitigation Measure CUL-1. Accidental Discovery of Cultural Resources; and Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains.	LTS

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TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Initial Study: Tribal Cultural Resources			
Impact XVIII.aii: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	S	Implement Mitigation Measure CUL-1. Accidental Discovery of Cultural Resources; and Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains.	LTS

LTS = less than significant; NA = not applicable; NI = No Impact; S = significant; SU = significant and unavoidable.

CHAPTER 1
Introduction

This Draft Environmental Impact Report (EIR) assesses the potentially significant environmental effects of implementation of the proposed San José City College Vision 2030 Facilities Master Plan (SJCC FMP). The SJCC FMP is prepared based on the San José Evergreen Community College District (District) analysis for the growth and projections explained in its San Jose City College Educational Master Plan (SJCC EMP). The relationship between the student-educational needs and the facilities updates and planning for growth is crucial to the District's mission.

As a brief background, the District is one of the oldest community college districts in the Bay area, operating out of two main campuses; one located close to Downtown San José (SJCC) and the more recent campus in the Evergreen community in southeast San José (Evergreen Valley College, or EVC). The SJCC campus has been offering community college level education since establishment 1921, and opening of the San Jose campus in 1953 in career and technical education program.

The SJCC FMP provides a framework for campus development to support the current and future academic spaces and buildings, administration spaces, sports facilities, support services space, and overall college/campus core amenity improvements. As a planning document for an existing operational college, it provides a roadmap for the physical improvements on the SJCC campus. These are:

- Reallocation of spaces for educational programs
- Use of existing buildings through strategic renovations and re-use of existing buildings
- Identifies need for new buildings and other facilities improvements
- Improves traffic circulation and pedestrian way-finding with a goal of enhancing student access and student safety
- Provides well-conceived and well-justified plan for capital outlay projects

The SJCC FMP includes space projections and as a companion document to the SJCC EMP provides linkages to the SJCC EMP for projected educational programs that will grow and need facility space. The SJCC FMP also outlines the proposed Building/Facilities Program for phased construction/sequencing through the year 2030.

As part of the proposed project, the SJCC FMP provides for development of approximately net new 459,000 square feet of new building space, demolition of approximately 109,000 square feet of existing built space, and repurposing/re-use of about 257,000 square feet of renovations/reuse of existing buildings. No changes are envisioned for approximately 223,000 square feet of existing built space.

Three Proposition 39 general obligation bond measures; Measure G (2010) and Measure X (2016) provide the funding for the repairs, upgrades, demolition, and construction of new facilities. These bond measures will help the District meet the facilities, safety, technology, programs and services needs for the SJCC and EVC campuses.

As required by the California Environmental Quality Act (CEQA), this EIR: (1) assesses the potentially significant direct and indirect environmental impacts, as well as the potentially significant cumulative impacts, associated with implementation of the SJCC FMP; (2) identifies feasible means of avoiding or substantially lessening significant adverse impacts; and (3) evaluates a range of reasonable alternatives to the proposed project, including the required No Project Alternative.

The District is the Lead Agency for the environmental review of the implementation of the SJCC FMP in compliance with the California Code of Regulations, Title 5, Division 6, Section 57121. Specifically, the CEQA Guidelines are expressly adopted as part of the regulations promulgated to implement the Community College Construction Act of 1980.

With the District's approval of the Final EIR, the EIR, and the SJCC FMP will guide the development of the college campus through 2030.

1.1 Purpose of the Draft Environmental Impact Report

The District has prepared this EIR on the SJCC FMP for the following purposes:

- To inform the general public, the local community, and responsible, trustee and federal public agencies of the nature of the SJCC FMP, its potentially significant environmental effects, feasible measures to mitigate those effects, as well as reasonable and feasible alternatives;
- To enable the District to consider the environmental consequences of implementing the SJCC FMP;
- To enable responsible agencies to consider the environmental consequences of those SJCC FMP for which they have a role in approving or issuing permits; and
- To satisfy CEQA requirements.

As described in CEQA and the CEQA Guidelines, public agencies cannot approve projects that may cause a significant environmental impact without adopting mitigation measures or alternatives to avoid or substantially lessen those significant environmental effects, where feasible. In discharging this duty, a public agency has an obligation to balance the project's significant effects on the environment with its benefits, including economic, social, technological, legal and other benefits. This EIR is an informational document, the purpose of which is to identify the potentially significant environmental effects of implementing the SJCC FMP, and to indicate the manner in which those significant effects can be avoided or significantly lessened. The EIR also identifies any significant and unavoidable adverse impacts that cannot be mitigated to a less-than-significant level. Reasonable and feasible alternatives to the SJCC FMP are identified that would avoid or substantially lessen any significant adverse environmental effects of the SJCC FMP.

The District is required to consider the information in the EIR, along with any other relevant information, in making its decision to approve the SJCC FMP. Although the EIR does not determine the ultimate decision that the District Board of Trustees (BOT) will be made regarding implementing the SJCC FMP or any individual project, CEQA requires the District to consider the information in the EIR and make findings regarding each significant effect identified in the EIR. If the District BOT determines the EIR to be adequate and comply with CEQA, it will certify the Final EIR prior to authorizing the implementation of the SJCC FMP.

1.2 Environmental Review Process

1.2.1 Notice of Preparation

In accordance with Section 15082 of the CEQA Guidelines, the District published a Notice of Preparation (NOP), including an Initial Study, for this EIR. The NOP was circulated to local, State, and federal agencies on October 27, 2020. A copy of the NOP/Initial Study is included in **Appendix A**. The standard 30-day comment period concluded on November 27, 2020.

The NOP provided a general description of the proposed project and identified possible environmental impacts that could result from implementation of the SJCC FMP.

Pursuant to Section 15063 of the CEQA Guidelines, an Initial Study is a preliminary environmental analysis that may be used by the lead agency to focus an EIR on the environmental effects resulting from a proposed project that may be significant. The Initial Study prepared for the SJCC FMP identified activities proposed that would clearly result in no impact or result in a less-than-significant impact under the CEQA significance criteria. No further analysis beyond that provided in the Initial Study is necessary for those activities and environmental topics.

The Initial Study also identified potential environmental effects that require detailed study in the EIR. As discussed in the Initial Study, these effects consist of less-than-significant impacts that were included in this EIR in order to provide a more comprehensive analysis; impacts for which further analysis is necessary or desirable before determinations about significance could be made; impacts that were potentially significant but may be reduced to less-than-significant levels with the adoption of mitigation measures; and impacts that may be significant and unavoidable.

1.2.2 Draft EIR

Publication of this Draft EIR will mark the beginning of a 45-day public review period. During this period, the Draft EIR will be available to the public and local, State, and federal agencies for review and comment.

This Draft EIR, including supporting technical appendices and reference materials, can be found at http://cboc.sjebond.com/program-documents/. The District encourages agencies and interested parties to submit written comments on the Draft EIR electronically. Notice of the availability and completion of this Draft EIR will be sent directly to every agency, person, and organization that commented on the NOP, as well as the Office of Planning and Research. Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

Terrance S. DeGray
Associate Vice Chancellor, Physical Plant Development and Operations
San José Evergreen Community College District
40 S. Market Street
San José, CA 95113
(408) 270-6401
Terrance.DeGray@sjeccd.edu

1.2.3 Comments and Responses

Following the close of the public and agency comment period on this Draft EIR, the District will prepare responses to all written and oral comments received during the public review that raise CEQA-related environmental issues regarding the SJCC FMP and the analysis in this EIR. The responses will be published in the Final EIR.

1.2.4 Final EIR

The Final EIR (consisting of the Draft EIR and Comments and Responses) will be considered by the District BOT in a public meeting and certified if it is determined to be in compliance with CEQA. Upon certification of the Final EIR, the District will consider approval of any individual projects under the EIR that are brought forth at that time.

1.2.5 Mitigation Monitoring and Reporting Program

Throughout this Draft EIR, mitigation measures have been described in language that will facilitate establishment of a Mitigation Monitoring and Reporting Program (MMRP). As required under CEQA (see CEQA Guidelines, Section 15097), an MMRP will be prepared and presented to the District at the time of certification of the Final EIR for the proposed FMP and will identify the specific timing and roles and responsibilities for implementation of adopted mitigation measures.

1.3 Uses of the SJCC FMP EIR

The SJCC FMP EIR will be used by the District to evaluate the environmental implications of implementing the proposed SJCC FMP.

The District has prepared a program EIR for the SJCC FMP pursuant to CEQA Guidelines Section 15168. The program EIR establishes a framework for tiered or project-level environmental documents that would be prepared in the future in accordance with the overall program. The program-level analysis addresses the effects of the maximum growth and development under this plan. A program EIR is appropriate for a series of actions that can be characterized as one large project and are either: (1) related geographically, (2) logical parts in a chain of contemplated actions, (3) connected as part of a continuing program, or (4) carried out under the same authorizing statute or regulatory authority and have similar environmental impacts that can be mitigated in similar ways (CEQA Guidelines Section 15168). This EIR also provides project-level analysis of specific projects and activities identified in the SJCC FMP, based on the level of information available at the time of preparation of this EIR.

For projects for which details are not yet known, each project would be reviewed in light of the SJCC FMP Final EIR to determine the appropriate level of additional environmental review, if any, needed before approval and implementation of the particular project. If no new significant impacts would occur, all significant effects have been adequately addressed, and no new mitigation measures would be required, such projects could rely on the environmental analysis provided in the program EIR, and no additional analysis would be required; otherwise additional environmental analysis must be prepared. The additional analysis may rely on the program EIR as appropriate, but would be tiered to allow the analysis to focus on more project- and site specific impacts, as needed.

1.4 Scope of this EIR

As indicated above, the SJECCD prepared an Initial Study to describe the SJCC FMP and identify any potentially significant project-specific or cumulative environmental effects, as well as, identify any mitigation measures or alternatives that may avoid or mitigate the identified effects, if any, to a less-than-significant level. Based on the findings of the Initial Study, that the District determined the following topics could have potentially significant impacts:

- Air Quality
- Cultural (Historical) Resources
- Energy
- Greenhouse Gas Emissions
- Noise
- Transportation
- Utilities and Service Systems

This Draft EIR describes and evaluates these subjects and further evaluates project alternatives that may reduce or avoid any identified significant adverse impacts of the SJCC FMP.

Unless new information is presented during the environmental process, the following topics are found to have less-than-significant impacts as discussed in the Initial Study: aesthetics; archaeological resources; agriculture and forestry resources; biological resources; geology and soils; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; population and housing; public services; recreation; tribal cultural resources; and wildfire.

1.5 Report Organization

Executive Summary, summarizes the environmental impacts that would result from implementation of the proposed SJCC FMP, lists proposed mitigation measures and indicates the level of significance of impacts after mitigation. A summary of the alternatives to the SJCC FMP, and the environmentally superior alternative, is also provided.

Chapter 1, ***Introduction***, provides an introduction and overview of the SJCC FMP; describes the intended uses of the EIR, including the review and certification process; and discusses the organization of the EIR.

Chapter 2, ***Project Description***, provides a detailed description of the proposed facilities improvements based on the SJCC FMP, a discussion of project need and objectives, a description of proposed physical development and growth at the SJCC campus site under the SJCC FMP and the Bond Program.

Chapter 3, ***Environmental Analysis**,* provides with respect to each environmental impact category an introduction to environmental analysis, describes the environmental setting, includes a regulatory framework, discusses the methodology used; provides a project-level impact analysis of the implementation of the SJCC FMP, and analysis of cumulative impacts; and identifies mitigation measures that would reduce or avoid those impacts as presented.

Chapter 4, ***Alternatives***, describes the alternatives to the proposed SJCC FMP that could avoid or substantially lessen significant effects and evaluates their environmental effects in comparison to the proposed FMP.

Chapter 5, ***Other CEQA Considerations***, summarizes significant and unavoidable impacts, significant irreversible environmental changes, and any growth-inducing impacts.

Chapter 6, ***Acronyms and Other Abbreviations***, lists the acronyms used in this Draft EIR in alphabetical order.

Chapter 7, ***Report Preparers, and Persons and Organizations Consulted***, identifies the persons who prepared the EIR, and those who were consulted during its preparation.

Appendices. The appendices include the NOP and Initial Study, and various supporting technical information for the Draft EIR.

1.6 Potential Implications of COVID-19

The current Coronavirus disease 2019 (COVID-19) pandemic has introduced a substantial amount of uncertainty in human lives. The pandemic has directly affected human behavior, requiring people to shelter in place, implement social distancing, and make other changes to the manner in which they live. Indirectly it has affected the economy resulting in reduced consumer spending, business closures, and widespread unemployment. While some of these trends are considered short-term and are expected to reverse, it is likely that there could be more permanent changes in the ways humans live and behave in the post pandemic world. As with humans, public agencies such as the District are also expected to make changes to the manner in which they operate. However, the net effect of the pandemic at the SJCC campus site development and operations cannot be predicted at this point in time without speculation.

CHAPTER 2
Project Description

2.1 Background

The San José City College (SJCC), located in the central part of the City of San José, is known for its career and technical education program since its establishment in 1921 and opening of the campus in 1953. It serves up to 24 zip codes surrounding the campus with broad community college-level education with approximately 8,706 students in 2019 and 8,773 students in 2020. In order to serve and plan for on-going and future educational needs for projected 10,735 students by 2030, the San José Evergreen Community College District (District) prepares several plans, including educational and facilities plans. The recent San Jose City College Educational Master Plan (SJCC EMP)[1] for the campus examines college-wide and discipline-specific projections out to 2030 for student instructional contact hours.

The SJCC Vision 2030 Facilities Master Plan (SJCC FMP), developed on the basis of the projections of future growth from the SJCC EMP, provides a comprehensive plan for the campus's physical development. The SJCC FMP is an update to the prior SJCC FMP as well. The SJCC FMP also provides an assessment of the current physical conditions of the facilities and options for future development scenarios, and is the basis for the proposed project description.

General obligation bond measures, Measure G (2010) and Measure X (2016) provide funding to upgrade the college facilities, construct energy-efficient technology-driven classrooms and laboratories, upgrade electric, plumbing, heating/ventilation systems and the physical infrastructure at the SJCC campus.

This program EIR is prepared in accordance with CEQA Statute and Guidelines to analyze potential environmental impacts that could result from the approval and implementation of projects identified in the SJCC FMP and funded by Bond Measures G and X. The District is the Lead Agency under CEQA for the proposed implementation of the SJCC FMP as funded by these bond measures and further described and discussed in this EIR. Pursuant to CEQA Guidelines Section 15168, the program-level analysis addresses the effects of the maximum growth and development under this plan. This EIR also provides project-level analysis of specific projects and activities identified in the SJCC FMP, based on the level of information available at the time of preparation of this EIR.

1 San Jose City College Educational Master Plan (SJCC EMP), available at https://www.sjcc.edu/AcademicAffairs/Documents/SJCC%20EMP%20Final%20Plan%20111315b.pdf.

2.2 Need for Project

The SJCC FMP, in alignment with the 2030 EMP, provides scenarios and options regarding future development of the educational, administrative facilities, parking, circulation, way-finding signage and retrofit of some existing facilities. The FMP plans for growth based on trends in higher education, service area population, and economic opportunities for future. Based on the EMP and FMP, projections for additional instructional spaces are identified for the Business and Workforce Development Division, Humanities and Social Science Division, Language Arts Division, and Math and Science Division.

2.3 Project Area

2.3.1 Project Location

The SJCC campus is located at 2100 Moorpark Avenue in central San José in Santa Clara County, approximately three (3) miles west of Downtown San José. **Figure 2-1** (Regional Location) shows the location of the campus within Santa Clara County and the City of San José. The SJCC campus currently encompasses approximately 58 acres.

The SJCC campus is immediately south of Interstate 280 (I-280) and is bounded by Moorpark Avenue to the north; Rexford Way, Mansfield Drive, Kingman Avenue, Fruitdale Avenue to the south; Laswell Avenue, and South Bascom Avenue to the west; and Leigh Avenue to the east.

2.3.2 Existing Land Uses and Development

As seen in **Figure 2-2** (SJCC Campus and Surrounding Land Uses), the SJCC campus is located in an urban setting and is currently developed with several buildings-both educational and administrative to house several programs, a library, sports facilities, parking and access ways, and other ancillary facilities.

The SJCC campus is designated *Public/Quasi-Public (P/QP)* in the Envision San José 2040 General Plan, with an urban village along the western boundary on South Bascom Avenue, designated *Urban Village Commercial (UVC)*.[2] The campus encompasses multiple City of San José land use zoning designations: Single-Family Residential (R-1-8), Multiple Residence District (R-M), Commercial Pedestrian (CP), and Planned Development (PD).

The existing SJCC campus was established at this site in 1953 with initial buildings built in the 1950s. The buildings are primarily concentrated in the northern portion of the campus along Moorpark Avenue, with Cesar Chavez Library providing visual presence. Other existing buildings are aligned in the central and western portions of the campus site. Existing sports facilities are located mainly in the central and eastern central portions of the campus, and include the softball field, football/track field, practice field, and soccer field.

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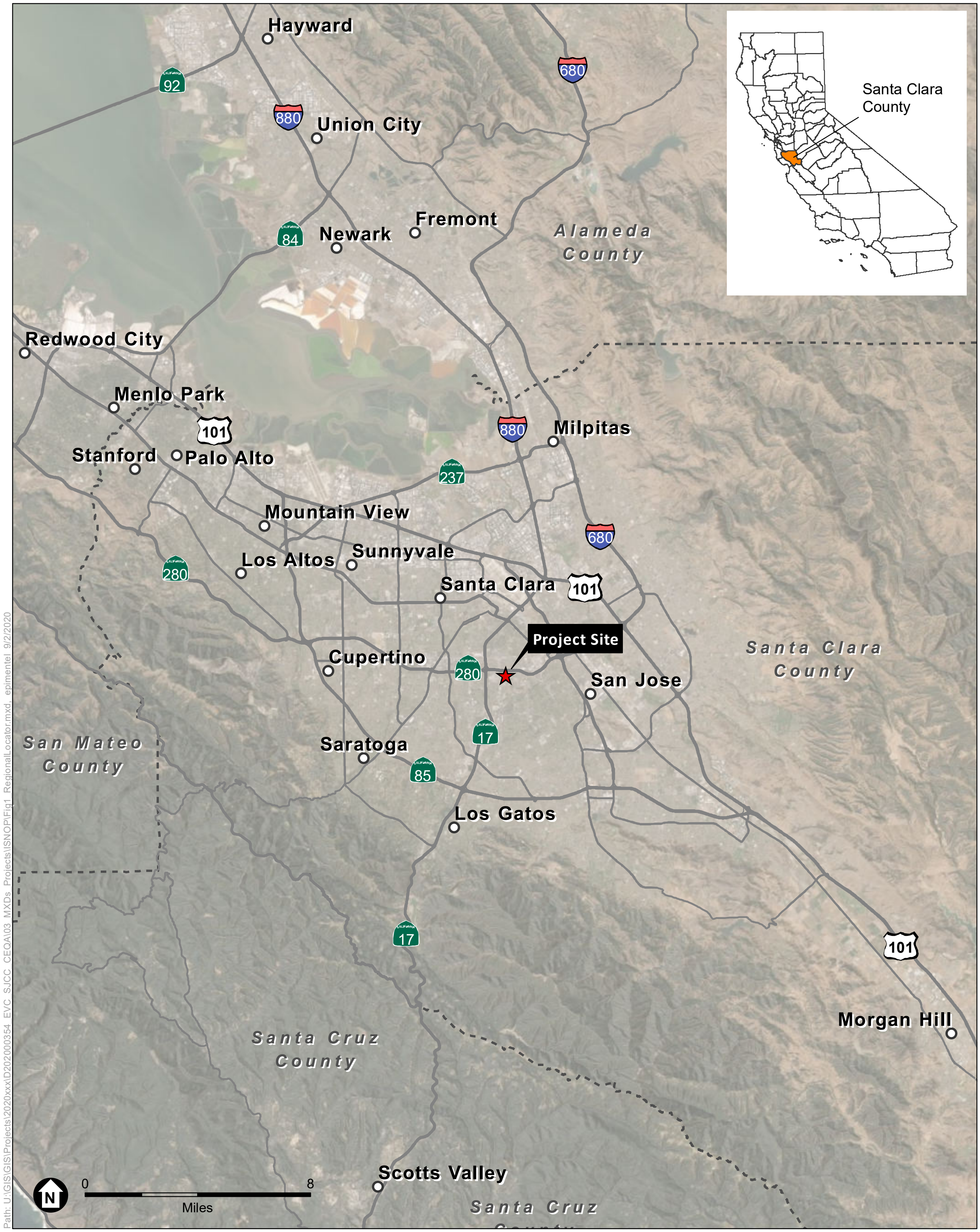
2 Urban Villages are established by the Envision San José General Plan to create areas with framework to direct growth within a walkable and bike friendly areas of the City that have a good access to transit and other urban infrastructure and facilities.

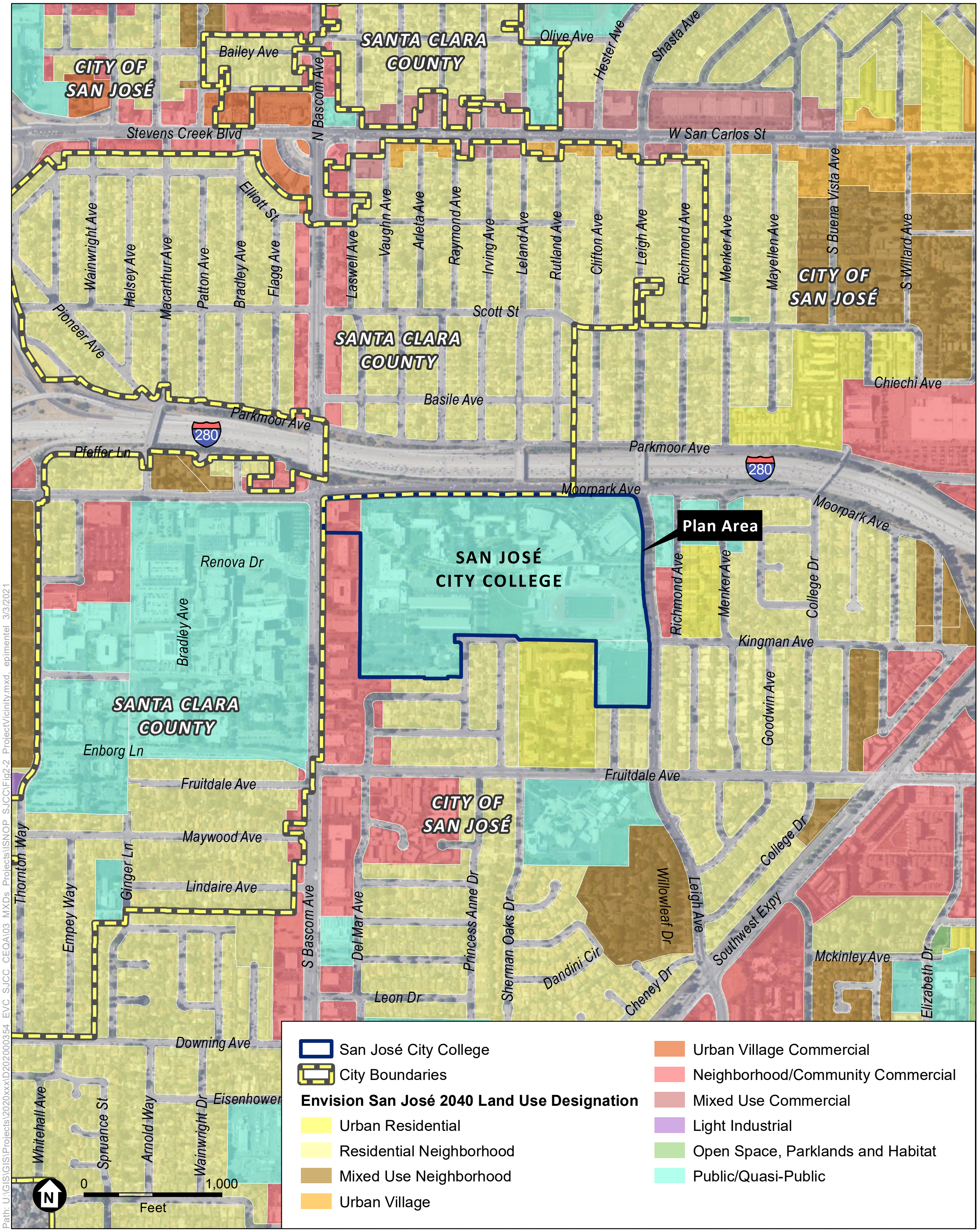


SOURCE: Esri, 2012; ESA, 2020

San José City College Facilities Master Plan - San José Evergreen Community College District

Figure 2-1
Regional Location

ESA



SOURCE: Esri, 2012; Santa Clara County, 2019; ESA, 2021

San José City College Facilities Master Plan - San José Evergreen Community College District

Figure 2-2
SJCC Campus and Surrounding Land Uses

ESA

According to the SJCC FMP, past Bond measures in 1998, 2004 and 2010 have supported facilities construction for the Cesar Chavez Library, Parking Garage, Career Technology, Technology Center, Multi-Disciplinary, Carmen Castellano Fine Arts Center, Student Center, Science/Math Buildings and renovations of the Business, Cosmetology, Reprographics buildings, and ongoing landscaping throughout the campus.

2.3.3 Existing Campus Layout

The SJCC campus is organized with the north part of the campus along the Moorpark Avenue. **Figure 2-3** (Existing San José City College Campus) shows locations of the various academic programs, administrative, and sports facilities. The Technology Center located at the South Bascom Avenue/Moorpark Avenue corner, anchors the northwest part of the campus by a curved promenade to the Student Parking Structure at the northeast corner of the campus along Leigh/ Moorpark Avenue. The Student Services is located immediately west of the Student Parking Structure and east of the Library.

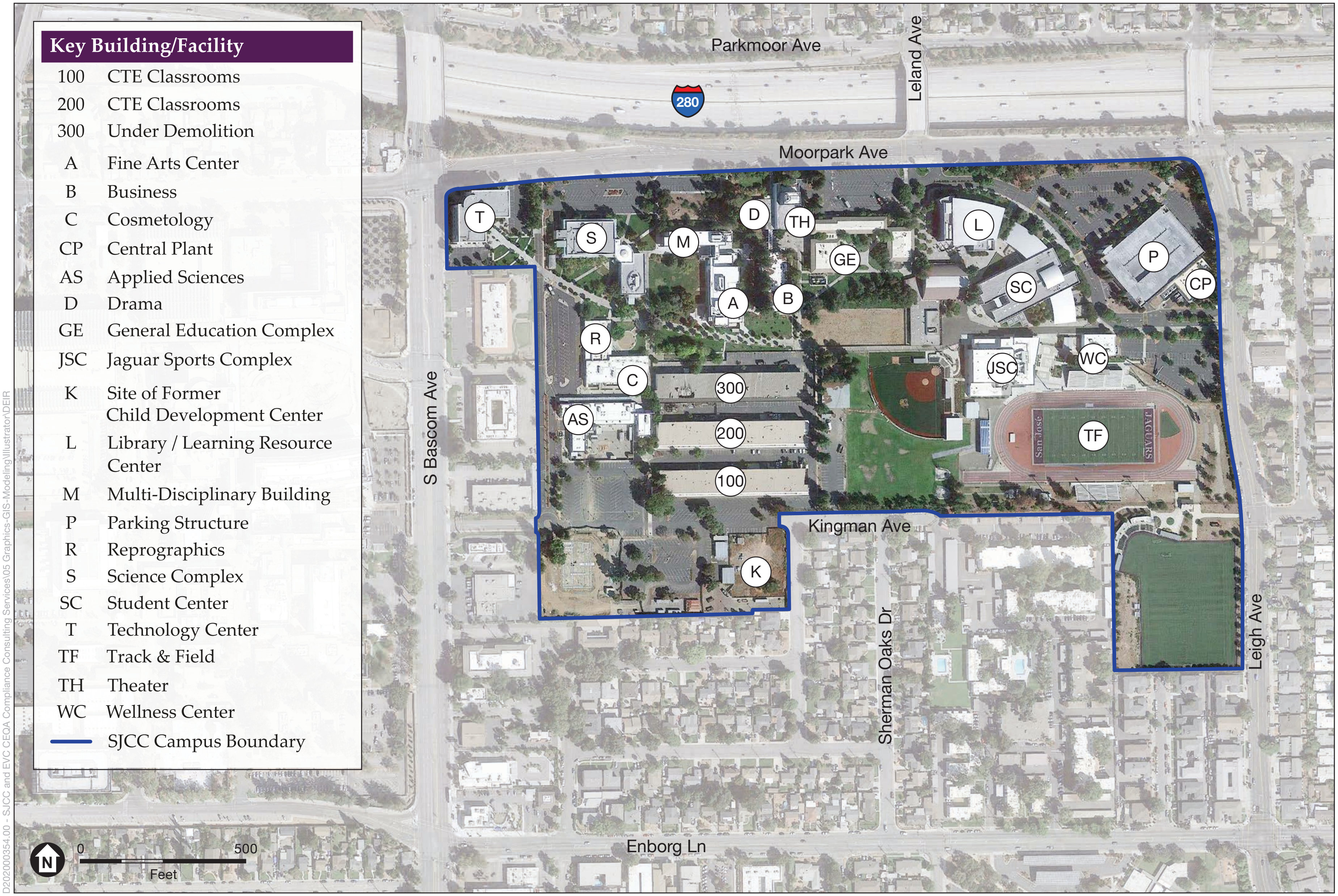
The Library/LRC is strategically located almost at the center of the campus, adjacent to the ceremonial entry from Moorpark at Leland Avenue. Immediately west to the library are the General Education buildings. The Science, Drama and Theater, and Business Buildings flank the Multidisciplinary and Fine Arts Center Buildings, all aligned along the campus boundary adjoining Moorpark Avenue. The entrance from Laswell Avenue to the center of the campus leads to Cosmetology, Reprographics and Career Technology Education Buildings (CTE Buildings 100, 200, and 300), in addition to a large instruction building (Applied Sciences).

The athletic and sports facilities are clustered in the southeast portion of the campus. The existing wellness and sports related facilities include the Jaguar Gymnasium (also referred to as the Main Gym) and the two buildings constituting the Jaguar Sports Complex, south off the driveway from Leigh Avenue. Multi-use play field, and the Track and Field facilities are located in the far southeast corner of the campus fronting on Leigh Avenue and abutting residential neighborhoods to the west and south of the campus.

The existing CTE Buildings 100, 200, and 300 are located south of the central quad (open space in front of General Education) and the “smile path” surrounded by surface parking. The Child Development program was formerly housed in a building located at the far south-east portion of the campus adjacent to the residential neighborhoods to the west and south of the campus. As illustrated in Figure 2-3, pedestrian walkways, landscaped open spaces surrounding the buildings provide the connection between the campus buildings.

2.3.4 Surrounding Land Uses and Development

The SJCC campus is in an urbanized part of the City, southeast of I-280 and Highway 17 flanked by the neighborhoods of Parkmoor, Buena Vista, Fruitdale, and commercial areas along main transportation corridors.



SOURCE: San José Evergreen Community College District, FMP, 2019; Google; 2021; ESA, 2021

Figure 2-3
Existing San José City College Campus

The SJCC campus is surrounded by a variety of land uses, including commercial uses and Santa Clara Valley Medical Center to the west; a residential neighborhood, senior housing, a San José Fire Department fire station, and a church to the east; a mixed single- and multi-family residential neighborhood to the south; and single-family residential uses to the north across I-280.

With the presence of the SJCC campus and Santa Clara Valley Medical Center, there is a variety of commercial uses (medical related) and retail (fast food) uses along the west edge of the campus on South Bascom Avenue.

2.3.5 Existing Access, Circulation, Parking

As seen above in Figure 2-3 (Existing San José City College Campus), Moorpark Avenue and South Bascom Avenue are major arterials that border the SJCC campus on the north and west, respectively. Leigh Avenue is a local connector. South Bascom Avenue has an overpass over I-280, and there are on- and off-ramps to/from I-280 on Parkmoor and Moorpark Avenues.

The main entrance to the campus is from a signalized intersection at Leland Avenue and Moorpark Avenue, with a drop-off at the Cesar Chavez Library/Learning Resource Center (LRC). There are three secondary vehicular access points, one each from Moorpark Avenue (at Laswell Avenue), from South Bascom Avenue (at Kingman Avenue), and from Leigh Avenue. None of these secondary access points are signalized. All three secondary entry points have immediate access to surface or structured parking lots.

A four-level parking structure is located in the northeasterly portion of the campus along Leigh Avenue. Otherwise, the majority of surface parking is located along the perimeter of the campus and generally concentrated at the southwest and northeast ends of the campus. There are currently 1,846 parking spaces serving the SJCC campus. The existing campus does not have any bicycle paths.

2.4 Project Objectives

CEQA Guidelines Section 15124, requires the EIR contain a statement of the objectives for the proposed project. The proposed SJCC FMP aims to achieve the goals and objectives discussed in its FMP and the SJCC EMP, as follows:

- Update and expand SJCC facilities to accommodate projected expansion in demand for community college education and programs resulting from the population growth within the District’s service area for year 2030
- Create a functional and usable space/facilities plan based on the SJCC EMP that updates the facility needs to match the projected needs
- Link the SJCC EMP’s goals, strategies, and desired productivity to space quantification that balances the current and future curriculum, instructional delivery modes, effective learning environment, and necessary support structures
- Match space needs and utilization with the curriculum, create modern teaching facilities and learning environments, and provide modern support services sufficient to serve student’s needs

- Reuse some existing buildings that are in good condition and have adequate space for educational and administrative functions
- Assist the District in meeting its SJCC EMP goals and objectives, particularly those related to provision of educational programs and supportive needs
- Implement a well-conceived and well-justified plan for capital outlay projects that are an outcome of a sound master planning process
- Provide an optimal educational and supportive services to the students of the San José City College

2.5 Proposed Project Characteristics

The proposed project is based on the facilities improvements as envisioned in the SJCC FMP and funded by Bond Measures G and X. The SJCC FMP is based on the SJCC EMP to meet the on-going and future facilities' needs to meet the provision of educational and administration functions of the District.

Facility improvements contained in the SJCC FMP to meet the future program needs include demolition and removal of certain existing buildings on the campus; the construction of certain new buildings and the renovation of certain existing buildings and facilities; improvements to vehicular and pedestrian access and circulation systems; expansion of parking facilities and capacity; and open space improvements, also enumerated in **Table 2-1** below. The SJCC FMP is operationalized with an analysis of existing educational space to match with the concurrent requirements. As part of this analysis, several buildings would be re-purposed for a different use, some buildings would be demolished, and new buildings and facilities are proposed for the identified needs.

As seen in **Figure 2-4** (Proposed Site Plan - San José City College Campus) and listed in Table 2-1, the proposed SJCC FMP includes several activities ranging for demolition, partial renovations, to new construction and upgrades to related sports facilities and other ancillary improvements. A description of each of these project elements is provided below.

2.5.1 Proposed New Buildings

The proposed SJCC FMP includes construction of six (6) new buildings and partial new addition to an existing building. These are the following:

General Education/Business Complex

Based on projected growth in the number of classrooms, laboratories, and offices to serve the SJCC General Education and Business programs, the SJCC FMP proposes a new General Education/Business Complex. This complex would comprise of two (2) buildings, each three to four-stories high, and encompass approximately 104,500 GSF.

NEW CONSTRUCTION

GE General Education / Business Complex
CTE New Career Technology Education Building
CDC Child Development Center
AC Aquatic Center
MO Maintenance & Operations/ Reprographics Building
D + TH Drama + Theater
P Proposed Parking Structure

INTERIOR RENOVATIONS/REUSE OF EXISTING BUILDINGS

CTE 200 CTE 200 Building
D + TH Drama + Theater
R + C Reprographics and Cosmetology
T Technology Center
JMC Jaguar Student Development and Multi-cultural Center (formerly Jaguar Gym)
SC Student Center
CP Central Plant
TF Track and Field Replacement

EXISTING BUILDINGS TO REMAIN

M Multi-Disciplinary Building
A Fine Arts Center
S Science Complex
L Library
JSC Jaguar Sports Complex
AS Applied Science
WC Wellness Center
SJCC Campus Boundary

Not to Scale

D202000354.00 - SJCC and EVC CEQA Compliance Consulting Services\05 Graphics-GIS-Modeling\Illustrator\DEIR

SOURCE: San Jose Evergreen Community College District, 2021

San José City College Facilities Master Plan - San José Evergreen Community College District

Figure 2-4
Proposed Site Plan - San José City College Campus

ESA

TABLE 2-1
SJCC FACILITIES MASTER PLAN BUILDING PROGRAM

Key	Facility	Physical Change Proposed	Existing Building Gross Square Feet (GSF)*	Proposed Building Gross Square Feet (GSF)	Net Change (GSF)
New Construction/Buildings					
GE	General Education / Business Complex	New Building	NA	104,461	104,461
CTE	Career Technology Education Building	New Building	NA	85,000	85,000
CD	Child Development Center	New Building	NA	15,000	15,000
AC	Aquatic Center	New Facility	NA	11,000	11,000
MO	Maintenance & Operations, and Reprographics (MO) Building	Assumed Constructed	15,000	15,000	0
D+TH	Drama + Theater	Part New Additions	30,403	56,033	25,630
P	Parking Structure	New Facility	NA	129,000**	129,000
		Subtotal	***45,403***	***415,494***	***370,091***
Interior Renovations/Reuse of Existing Buildings					
CTE 200	CTE 200 Building	Renovation (Interior)	41,820	41,820	NA
R+C	Reprographics and Cosmetology	Partial Renovation	30,648	30,648	NA
T	Technology Center	Partial Renovation	80,000	80,000	NA
JMC	Jaguar Student Development and Multi-cultural Center (formerly Jaguar Gym)	Renovation	27,863	35,363	7,500
SC	Student Center	Partial Renovation	69,044	69,044	NA
CP	Central Plant	Interior Equipment Upgrades	7,700	7,700	NA
TF	Track and Field Replacement	Outdoor Sports			
		Subtotal	***257,075***	***264,575***	***7,500***
Demolition					
B	Business Building	Demolish	25,272		-25,272
GE	General Education	Demolish	43,668		-43,668
CTE 300	*CTE 300 Building*	*In the process of demolition****			
CTE 100	CTE 100 Building	Demolish	36,996		-36,996
D	Applied Sciences Building D	In the process of demolition	2,825		-2,825
D+TH	Drama + Theater	Partial Demolition	10,000***		
K	*Former Child Development Center*	*Previously demolished**			
		Subtotal	***108,761***	***NA***	***-108,761***
No Changes					
M+A	Multi-Disciplinary Arts Building	None	41,870	41,870	NA
S	Science Complex	None	52,209	52,209	NA
L	Library	None	63,110	63,110	NA
JSC	Jaguar Sports Complex	None	39,304	39,304	NA

TABLE 2-1 (CONTINUED)
SJCC FACILITIES MASTER PLAN BUILDING PROGRAM

Key	Facility	Physical Change Proposed	Existing Building Gross Square Feet (GSF)*	Proposed Building Gross Square Feet (GSF)	Net Change (GSF)
No Changes (cont.)					
WC	Wellness Center	None	6,802	6,802	NA
AS	Applied Sciences	None	20,159	20,159	NA
		Subtotal	***223,454***	***223,454***	
TOTAL EXISTING SQUARE FOOTAGE		**634,693**			
TOTAL WITH NEW CONSTRUCTION [LESS DEMOLITION]		**903,523**			

NOTES:
* Gross square feet (GSF) comprises the building's total footprint
** Parking Structure proposed for 645 spaces is less than the conservative assumption of 900 parking spaces for 180,000 GSF used in the EIR
*** Assumption for Demolition within the existing Drama and Theater Buildings
**** Demolition considered as part of the prior EIR

SOURCE: SJECCD, 2021

Demolition and removal of the existing General Education/Business Complex would create space for the development of a quad at the center of campus (described under *Open Space*, below). It would also improve circulation, allow for an expanded drop-off area at the Leland Avenue entry to the SJCC campus, and the expansion and improvement of parking facilities with the continuation of the proposed perimeter loop (described below under *Vehicular Access, Circulation, and Parking Improvements*, below).

Career Technical Education Building (CTE Building)

The District proposes a new CTE Building at the site of the current CTE Building 300, which is currently being demolished. The proposed new CTE building would be a four-story structure and would include space for classrooms and lab functions vacated by demolition of CTE 300 Building. The estimated size of the new CTE building would be approximately 85,000 GSF.

This building would meet the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED®) standards for Platinum certification (LEED® v4) and Zero Net Energy. The new building would be designed to be all-electric with no use of natural gas.

Child Development Center (CDC)

The SJCC FMP proposes to construct a new Child Development Center (CDC) located in the eastern portion of the South Parking Lot, at the site of the former Child Development Center.

The proposed new CDC would be built in two phases: Phase 1 would include development of a permanent play yard for up to 100 children, short-term parking, parent access and site improvements, and portable structures to house classrooms and support spaces for up to 75 students. The estimated size for Phase 1 is 7,500 GSF.

Phase 2 would include the construction of the new CDC in the location of temporary parking, east of the play yard. The facility would house classrooms, observation areas, and operations space to support up to 100 children. Once constructed, the existing portables at this location would be removed, allowing space for parking and site improvements to be made. The estimated size for the completed CDC would be approximately 15,000 GSF.

Aquatics Center (AC)

The SJCC FMP proposes a new Aquatics Center located east of the Wellness Center. The Aquatics Center would include a six-lane (minimum) competitive lap pool with a depth to support water polo and other aquatic-based sports. An Adaptive Physical Education (PE) pool with a depth greater than 1.5 meters would be connected to and in support of the competitive pool.

The proposed Aquatics Center would also include support facilities, including lockers, showers, restrooms, office space, storage, and a pool equipment facility. The estimated size of the Aquatics Center support facilities would be approximately 11,000 GSF.

Maintenance, Operations, and Reprographics Building (MO Building)

The SJCC FMP proposes a new two-story Maintenance and Operations/Reprographics Building (MO Building) at the southwest corner of the campus, south of the Kingman Avenue entrance from South Bascom Avenue. The approximately 15,000 GSF proposed building would provide a consolidated location for the school’s maintenance and operations. It would also provide for space vacated by the demolition of CTE 300 Building and allow for relocation of the existing reprographics facilities from space targeted for expansion of the Cosmetology program (described below).

The MO building was the subject of a prior District approval, and its construction is currently under way; consequently, development of the MO Building is not subject to, and excluded from, this analysis.

New Addition to the Theater Arts Building (TH Building)

The existing Theater Arts Building is anticipated to undergo renovations and remodeling as discussed below under 2.5.2. In addition to these renovations, a new addition to the east side of the Theater Arts Building is envisioned to provide a new lobby and entrance from the central quad. The new addition would be approximately 25,600 GSF.

New Parking Structure

The SJCC FMP includes a new parking structure in the southwest quadrant of the campus on the site of the existing CTE 100 Building. Currently planned for 645 automobile spaces, this 5-level parking structure would be approximately 129,000 GSF. It should be noted that the technical analysis in this EIR conservatively assumes a parking structure with 900 parking spaces and approximately 180,000 GSF.

Additional parking would be required to accommodate current and planned enrollment growth. Given the density of existing campus development, the SJCC FMP recommends spaces be added both by reconfiguring existing surface lots to maximize parking and by the provision of a structured parking, and surface parking as further described below.

2.5.2 Renovated and Repurposed Buildings

The proposed SJCC FMP identifies certain existing buildings for renovations and repurposing to accommodate educational programs, sports facilities, and expansion of central plant.

CTE 200 Building

The SJCC FMP includes modernization of the CTE 200 Building, which is an existing structure with high-bay industrial labs facing north and classrooms facing south.

The proposed modernization would include window replacement (except on North Elevation), new interior walls, flooring, mechanical equipment, light fixtures, and new paint and finishes. This space would accommodate the shop and high-bay functions that cannot be moved into the New CTE Building.

Reprographics and Cosmetology Building (R+C Building)

The SJCC FMP includes partial renovation of the Reprographics and Cosmetology Building (R+C Building). The SJCC FMP proposes that the reprographics facilities, currently residing in the R+C Building be relocated to the proposed new MO Building (described above).

The relocation of reprographics facilities to the MO Building would make space available for other uses in the R+C Building, including an opportunity to expand the SJCC Cosmetology program and introduce an Independent Esthetician program. A portion of the vacated space in the existing R+C Building would also be repurposed to support Adaptive PE[3] needs

The estimated square footage to be remodeled within the R+C Building would be approximately 5,600 assignable square feet (ASF), although the overall approximate 30,600 GSF of the R+C Building would remain the same after the renovations.

Technology Center Renovation

The proposed project includes the renovation of the Technology Center interior. The SJCC FMP proposes the relocation of the SJCC Emergency Medical Services (EMS) program from the fifth floor of the existing Technology Center to the proposed new CTE Building.

The relocation would allow for the expansion of space in the Technology Center for the SJCC Dental Assistant and Medical Assisting programs. The estimated size for the portion of the Technology Center building to be remodeled would be approximately 2,200 ASF. The overall total size of the Technology Center building (approximately 80,000 GSF) would not change under the proposed SJCC FMP.

[3] Adaptive physical education is specifically designed curriculum of developmental activities, sports, games, and rhythms suitable to the interest, capabilities, and limitations of students with disabilities.

Jaguar Student Development and Multi-Cultural Center

The SJCC FMP proposes the former gym at the center of campus be renovated and repurposed as the Jaguar Student Development and Multi-Cultural Center, with lounge, recreation, and office/meeting space. A separate restroom and office building may be constructed next to the Jaguar Student Development and Multi-Cultural Center to house restrooms and offices. The size of this space would be approximately 4,000 GSF.

The total estimated size of the remodeled facility would be approximately 35,400 GSF, an additional 7,500 GSF to the existing approximate 27,900 GSF.

Theater Arts Building (New Drama Wing and Lobby)

As discussed above, the SJCC FMP recommends renovation of the existing Theater Arts Building to support current instructional needs. The adjacent instructional wing (West Wing) is in poor condition, and would be demolished and replaced with a larger structure serving an expanded instructional program, including new drama and dance labs, a black box theater, lecture hall, and offices.

The SJCC FMP also proposes an addition to the east side of the Theater Arts Building to provide a new lobby/entrance point off the proposed central quad (described below under *Open Space*). The estimated size of the renovated Theater Arts Building would be approximately 56,000 GSF.

Central Plant Expansion

The SJCC FMP includes expansion of capacity of the Central Plant. In order for the chilled water systems to meet future anticipated load of buildout pursuant to the SJCC FMP, the District would add up to three (3) 375-ton chillers to the Central Plant.

This proposed expansion would also include enhancement of the heating hot water system for the campus, with additional of one heat recovery chiller to the Central Plant. Other improvements in the Central Plant could potentially include installation of earthquake valves and a gas sub meter. The existing Central Plant structure is of sufficient size to accommodate the proposed expansion of capacity, and consequently, no alteration to the building footprint is proposed.

Track and Field Replacement Project

As part of the Track and Field replacement project, the proposed project would widen the existing field to accommodate a full-size soccer pitch. The field would expand toward the southern end. This would require demolition of the spectator/visitor’s bleachers and reconstruction at the southern boundary of the track field. It is also likely that some track events would be relocated during the construction. This modification may require minor adjustments of the existing stadium lighting to ensure full coverage across the widened playing field; however, no new stadium lighting is proposed to be installed. The District would work with stadium lighting professionals as needed and incorporate appropriate design considerations and/or features to ensure any proposed adjustments to existing stadium lighting would not increase light spill or glare at off-site locations.

Student Center [SC]

The existing Student Center is proposed to be renovated internally to create a student resource and drop-in center. This project requires renovation of existing office spaces on the second floor of the Student Center to provide a welcoming, student-owned area for students accessing student services.

2.5.3 Buildings to be Demolished

The SJCC FMP identified six buildings for demolition and removal, to eliminate non-functioning space and replace the oldest and most aged facilities with new facilities:

1. Business Building (B),
2. General Education Buildings (GE),
3. CTE 300 Building,
4. CTE 100 Building,
5. Applied Sciences Building D, and
6. Former Child Development Center

The Business and General Education Buildings would be demolished to make way for the development of a new General Education/Business Complex (described above); while the specific timing for demolition of these buildings are not yet defined, their removal is conservatively included within the scope of this analysis.

The CTE 100 Building would be demolished to make way for the development of a new parking structure; while the specific timing for demolition of this building is not yet defined, its removal is conservatively included within the scope of this analysis.

The demolition of Applied Sciences Building D is required in order to accommodate a new fire lane in the vicinity of CTE 200 Building and proposed New CTE Building that would conform to current code requirements. This would increase the pedestrian accessibility and safety throughout the south entrance area by widening the main south walkway. The demolition of this building is scheduled to take place during the summer of 2021.

Demolition of both the CTE 300 Building and the former Child Development Center were the subject of prior District approvals. The former Child Development Center has since been demolished, and the CTE 300 Building is in the process of being demolished as of the release of this Initial Study. Accordingly, these activities are not subject to, and excluded from, this analysis.

In summary, the existing campus has approximately 634,700 GSF of built space. The SJCC FMP proposes demolition of approximately 108,800 GSF, and remodeling and renovations of approximately 257,100 square feet of existing built spaces, plus a net increase of 7,500 GSF. There would also be new construction of approximately 415,000 GSF (a net addition of approximately 370,100 GSF). Table 2-1 provides the scope of the building program under the SJCC FMP, including estimated square footage of the facilities to be demolished, constructed, or renovated.

2.5.4 Site Access, Parking, and Circulation

Vehicular Access

The SJCC FMP proposes improvement to the existing circulation network; with the addition of one new vehicular access point, drop-off areas, and parking as seen in **Figure 2-5** (Project Site Access and Circulation). The proposed improvements and additions are described below.

Leigh Avenue at Moorpark Avenue

The SJCC FMP determined that reconfiguration of the primary entrance to the SJCC campus at Leigh Avenue, the Moorpark Avenue and Leland Avenue intersection, and the Leigh Avenue segment crossing I-280 between Moorpark Avenue and Parkmoor Avenue could improve access to and egress from the campus.

Accordingly, the SJCC FMP proposes the reconfiguration of the entrance, roadway, and intersection to provide a three-way signalized intersection that would allow westbound traffic on Parkmoor Avenue to turn left onto Leigh Avenue and move directly into the SJCC campus. The reconfiguration would also allow traffic exiting the campus at this location to cross Moorpark Avenue and continue westbound on Parkmoor Avenue.

Additional Access Improvements

The SJCC FMP proposes that all new and existing vehicular access points to the campus, including the entrance at Laswell Avenue to parking on the north edge of campus, should be designed as vehicular gateways that would include a formalized hierarchy of appropriate signage and a unified identifiable landscape and entrance character.

Perimeter Loop

The SJCC FMP proposes the creation of an internal perimeter loop to improve service access and student vehicular movement between SJCC parking areas. The internal perimeter loop would include a bicycle lane to create a dedicated path for bicyclists to access all parts of the campus. Creation of the perimeter loop would include the following actions:

- Creation of the north segment of the perimeter loop by linking the existing parking lots along Moorpark Avenue.
- Creation of the south and east segments of the perimeter loop by opening and extending Kingman Avenue on campus east to Leigh Avenue, skirting the residential neighborhood to the south by utilizing the existing utility easement south of the SJCC football stadium. The SJCC FMP proposes that this segment include an on-campus link, parallel to Leigh Avenue, through the current parking area east of the football stadium to connect with the current Leigh Avenue entrance to the campus, and provide access to the central plant and surface and structured parking in the north east quadrant of the campus.
- Develop the west segment of the perimeter loop by converting portions of Laswell Avenue to pedestrian, service, and emergency access only. To eliminate pedestrian-vehicular conflict, the SJCC FMP proposes that Laswell Avenue should be blockaded at the Technology Center-

Science Complex parking lots north of the primary east-west pedestrian walkway on the campus (referred to as the “smile path”) and at the limited parking area south of the smile path.

- The SJCC FMP proposes to improve the Laswell Avenue segment north of Kingman Avenue and south of the smile path to serve, in addition to service and emergency vehicle access, as a north-south pedestrian connection between student parking in the southwest quadrant and the core of the campus.

Student Drop-Offs

The SJCC FMP proposes the following additional and improved pedestrian drop-offs in the SJCC campus.

- New pedestrian drop-offs would be provided at the Laswell Avenue entrance to the SJCC campus north of the Science Complex; and at the east terminus of an improved pedestrian spine south of the Student Center and north of the Wellness Center.
- The SJCC FMP also proposes creation of expanded pedestrian drop-off at the Leland Avenue entrance to the SJCC campus. This drop-off would serve as a pedestrian gateway into campus, as well as a drop-off area for events in the Drama and Theatre, and public access to the Library.

As with vehicular entries and pedestrian gateways, the pedestrian drop-offs would also include landscaped characteristics to create unified entrance identity of the SJCC campus.

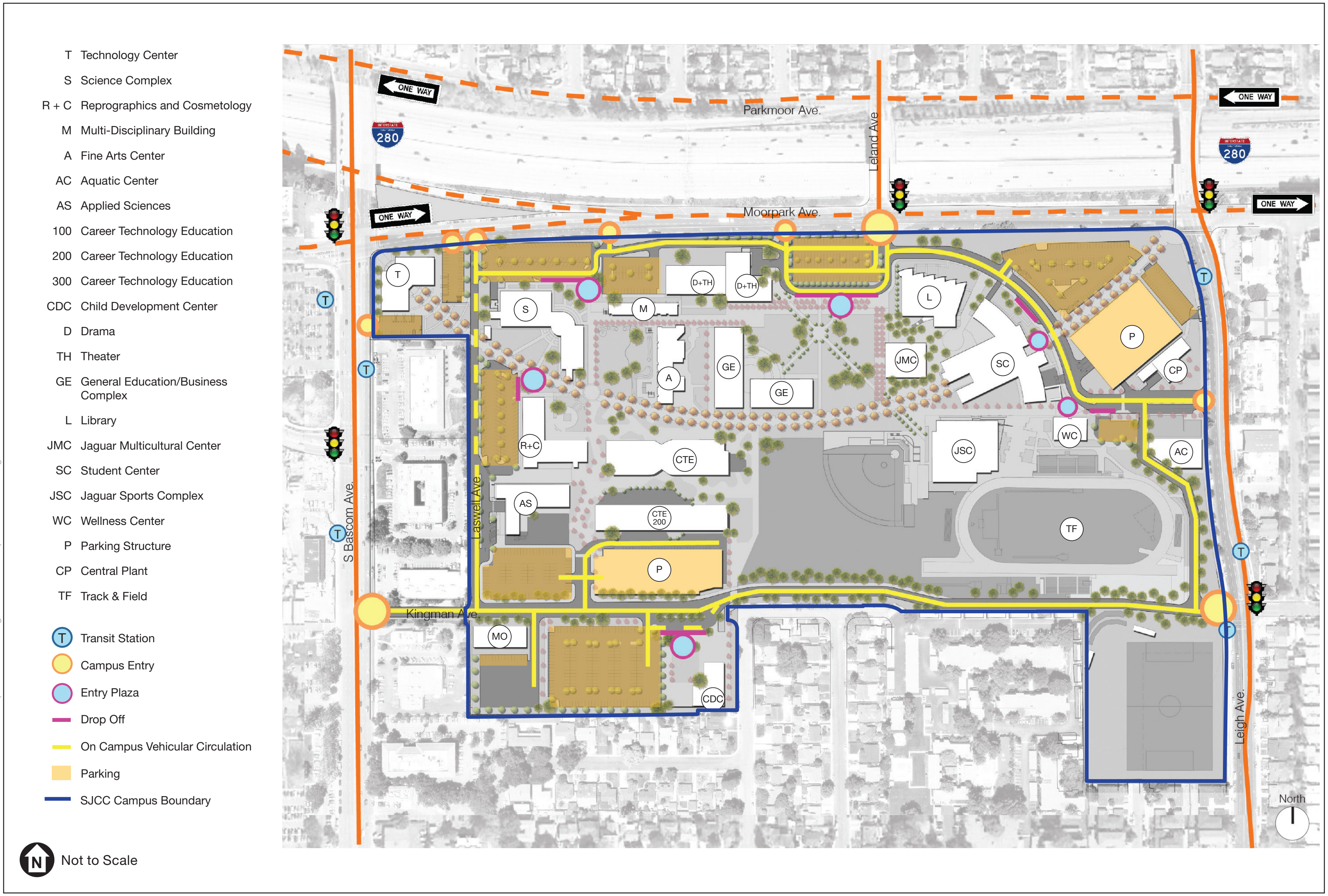
Automobile and Bicycle Parking

The SJCC FMP proposes to increase the total number of parking spaces serving the campus from 1,846 parking spaces to 2,200 spaces by 2030. To meet projected parking demand, the SJCC FMP proposes the following parking facility additions and improvements.

- Reconfiguration of the existing south parking lot.
- Reconfiguration and expansion of the north parking lot on the north end of the proposed central quad (described below under *Open Space*). A portion of this lot would be designated for short-term visitor parking to facilitate access to administration and for new students familiarizing themselves with the campus.
- Addition of the parking structure in the location of CTE 100 Building

The SJCC FMP also proposes addition of bicycle parking, particularly near the new buildings and facilities with high volume student interactions. The bicycle facilities are intended to increase accessibility to campus throughout the south entrance area by widening the main south walkway. It is expected that this facility will promote greater use of the south entrance which connects to the existing bicycle lane on South Bascom Avenue.

- Most of the bicycle racks would be located near high-use buildings such as the Technology Center and the Student Center.
- All new buildings proposed under the 2030 FMP would include bicycle racks, including the new Career Education Complex.



SOURCE: San Jose Evergreen Community College District, 2021

San José City College Facilities Master Plan - San José Evergreen Community College District

Figure 2-5
Project Site Access and Circulation

2.5.5 Pedestrian Access and Circulation Improvements

Pedestrian access and circulation improvements proposed in the SJCC FMP are described below. The SJCC FMP proposes the creation of a series of north-south pedestrian walkways (or spines) linking student parking at the south edge of campus with the core of the campus and facilities on the north edge of the smile path. The proposed north-south pedestrian circulation improvements include the following.

- As described above under Perimeter Loop, develop the west segment of the perimeter loop by converting portions of Laswell Avenue to pedestrian, service, and emergency access only. To eliminate pedestrian-vehicular conflict, the SJCC FMP proposes that Laswell Avenue be blockaded at the Technology Center-Science Complex parking lots north of the pedestrian smile path and at the limited parking area south of the smile path. The SJCC FMP proposes to improve the Laswell Avenue segment north of Kingman Avenue and south of the smile path to serve, in addition to service and emergency vehicle access, as a north-south pedestrian connection between student parking in the southwest quadrant and the core of the campus.

2.5.6 Open Space and Landscaping

The SJCC FMP proposes development of a hierarchy of open spaces, ranging from large, active, formal and informal gathering spaces to smaller, intimate, and purpose-built spaces. Open space features proposed in the SJCC FMP are described below.

Central Quad

The proposed Central Quad is intended to serve as an active space at the heart of the SJCC campus for meeting, dining, study, and socialization. The Central Quad would serve as an exterior extension of activities and spaces housed in the proposed Jaguar Student Development and Multi-Cultural Center (described above under *Building Facilities Program*). Creation of the quad would require demolition and replacement of the General Education/Business Complex (described above under *Building Facilities Program*).

Pedestrian Nodes and Plazas

The SJCC FMP recommends creation of pedestrian nodes or plazas at the intersections of campus walkways and paths. These spaces are intended allow for the placement of campus maps to assist in wayfinding and, together with seating, opportunities for informal meeting and gathering.

"Smile Path"

The SJCC FMP describes the "smile" path as the primary east-west pedestrian path that runs from the Technology Center on the northwest corner of the campus, down through the center of campus and on through the Student Services Building to the northeast corner at Moorpark and Leigh. Portions of this path are well defined, well landscaped, and lighted.

2.5.7 Utilities

SJCC Campus includes the heating, ventilation, air condition, water and sewer services to the building. Dry utilities such as fiber optics for internet services, telephone and computer hookups are closely related to provision of higher education on campus and as on-line distance learning.

2.6 Implementation and Phasing Schedule

The program of campus development under the SJCC FMP includes the following development sequence. **Table 2-2** SJCC Facilities Master Plan Implementation and Phasing Schedule lists the proposed demolition, renovations, and new construction.

TABLE 2-2
SJCC FACILITIES MASTER PLAN IMPLEMENTATION AND PHASING SCHEDULE

Project	Action	Anticipated Construction Period
2021-2024		
Student Center (SC)	Renovation	May 2021 – August 2021
Central Plant (CP)	Renovation	2021 – 2022
CTE 200 Building (200)	Renovation	May 2021 – September 2022
Career Technology Building (CTE)	New Construction	October 2022 – June 2024
Jaguar Student Center and Multi-cultural Center (JMC)	Renovation	2022 - 2024
Reprographics and Cosmetology (RC)	Renovation	June 2024 – December 2024
2025		
CTE 100 Building	Demolition	Anticipated after 2025
Technology Center (T)	Renovation	February 2025 – November 2025
Drama & Theater	Expansion	Anticipated after 2025 (After 2018)
General Education/Business Complex	Demolition and New Construction	Anticipated after 2025
Aquatic Center	New Construction	Anticipated after 2025
Parking Structure	New Construction	Anticipated after 2025
Child Development Center (CD)	New Construction	Anticipated after 2025

Mid 2021-End 2024: The renovation of the existing Student Center, and the proposed Central Plant upgrades, are planned to commence mid-year 2021. Concurrently, the CTE 200 Building would also commence renovations in May2021 and is anticipated to be completed by September 2022.

The Jaguar Student Center and Multicultural Center would be renovated starting in 2022 for anticipated completion in 2024. Following this completion, the Reprographics and Cosmetology Building would start renovations in June 2024 for completion by December 2024.

The only new construction proposed in this time period is the new CTE Building on the site of the demolished CTE 300 Building.

Early 2025 through 2030: This phase of implementation focuses on new construction of the Aquatics Center, Parking Structure, and the CDC. The Technology Center building would undergo renovations starting in early 2025 aimed to complete by end of 2025.

The Drama and Theater Building would also under expansion in 2025. The existing General Education and Business Buildings would be demolished and the site cleared for a new complex housing the General Education/Business programs after 2025.

2.6.1 Project Construction

Site preparation for new facilities under the SJCC FMP would include the demolition of certain existing landscaped and paved areas, which would be cleared from the footprints of proposed new structures. The earlier part of the project implementation focuses on the renovations of some of the existing buildings, as discussed above in Implementation and Phasing Schedule.

Structures scheduled to be renovated would be subject to partial demolition in areas planned for renovation, which may include full demolition of a section of those structures or internal demolition of existing features.

Construction of the proposed new structures would include site clearing and grading, excavation, pouring of new building foundations, and erection of structures; installation of utilities, building interior finishing, and exterior hardscaping and landscaping improvements. Construction staging would occur within the campus site. Impact pile-driving may occur if found necessary for construction of building foundations such as the proposed Parking Structure. Pile foundation is not likely to be needed for all remaining proposed activities

2.7 Required Permits and Approvals

This EIR would provide decision-makers in the District (the CEQA Lead Agency), responsible agencies, and the general public with relevant environmental information to use in considering the SJCC FMP. The District anticipates that there are no discretionary approvals by the City of San José and County of Santa Clara, including but not limited to the following, will be required to implement the SJCC FMP:

- Demolition permits, as needed
- City of San José Public Works Permit for Street Access/Driveway Improvements/Temporary Construction Staging, as needed
- County of Santa Clara Roads and Airports Department for Street Access/Driveway Improvements/Temporary Construction Staging, as needed

The District, anticipates that discretionary approvals by responsible agencies, including but not limited to the following, may be required to implement the proposed SJCC FMP:

- Division of State Architect (DSA)
- San Francisco Bay Regional Water Quality Control Board
- Bay Area Air Quality Management District
- City of San José Fire Department
- Santa Clara Valley Water District

Adoption of the SJCC FMP is anticipated to require, but may not be limited to, the following District actions:

- Certification of the Final EIR for compliance with the requirements of CEQA;
- Adoption of a Mitigation Monitoring and Reporting Plan (MMRP), which specifies the methods for monitoring mitigation measures required to eliminate or reduce the SJCC FMP's significant effects on the environment;
- Adoption of Findings of Fact, and for any impacts determined to be significant and unavoidable, a Statement of Overriding Considerations.

CHAPTER 3
Environmental Analysis

3.0 Introduction to the Environmental Analysis

This chapter describes the environmental setting, assess impacts, and identifies measures that would avoid or lessen the severity of the significant impacts of the proposed SJCC FMP. This section, Section 3.0, Introduction to the Environmental Analysis, outlines the issues analyzed in this chapter, describes the overall approach to the impact analysis, explains the significant determinations and terminology used in the impact analysis, and provides for the basic cumulative impact analysis.

3.0.1 Definition of Terms Used in the EIR

This EIR uses a number of terms that have specific meaning under CEQA. Among the most important of the terms used in the EIR are those that refer to the significance of environmental impacts. The following terms are used to describe environmental effects of the proposed SJCC FMP:

- **Significance Criteria:** The criteria used by the District, as lead agency under CEQA, to determine whether the magnitude of an adverse, physical, environmental impact would be considered significant. In determining the level of significance, the analysis recognizes that the proposed SJCC FMP must comply with relevant and applicable federal, State, regional and/or local regulations and ordinances which are regularly enforced through building codes and standards and/or other means.
- **Significant Impact:** An impact is considered significant if any of the proposed projects implemented by the SJCC FMP *could* result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of a project-related or cumulative physical change from baseline conditions, compared to a specified significance criterion. A significant impact is defined as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the Project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”[1]
- **Less-than-Significant Impact:** An impact is considered less than significant when the impact caused by a proposed project implementing the SJCC FMP would not exceed the applicable significance criterion.
- **Less-than-Significant Impact with Mitigation:** An impact is considered less than significant with mitigation if any of the proposed projects implemented by the SJCC FMP could result in a substantial adverse change when evaluated with respect to one or more

1 CEQA Guidelines Section 15382.

significance criteria, but feasible mitigation is available that would effectively reduce the impact to a less-than-significant level.

- **Significant and Unavoidable Impact:** Significant impacts resulting from implementation of the SJCC FMP that cannot be feasibly avoided or mitigated to a less-than-significant level, that is, to a magnitude below the applicable significance criterion.
- **Cumulative Impact:** Under CEQA, a cumulative impact refers to "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."[2] A significant cumulative impact is one in which the cumulative adverse physical environmental effect would exceed the applicable significance criterion and the contribution of the proposed project would be "cumulatively considerable."[3] If the contribution of the project to a significant cumulative impact is less than considerable, the cumulative impact is considered less than significant.
- **Mitigation Measure:** A mitigation measure is a feasible action that could be taken that would avoid or reduce the magnitude of a significant impact. Section 15370 of the CEQA Guidelines defines mitigation as:

  a) Avoiding the impact altogether by not taking a certain action or parts of an action;

  b) Minimizing impacts by limiting the degree of magnitude of the action and its implementation;

  c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

  d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and

  e) Compensating for the impact by replacing or providing substitute resources or environments.

3.0.2 Scope of Analysis

This Draft EIR for the SJCC FMP discloses the impacts that could result from the approval and implementation of the SJCC FMP. Accordingly, this EIR provides a program-level analysis of the environmental impacts from the facility improvements contained in the SJCC FMP from future scenarios and options regarding future program needs such as demolition and removal of certain buildings on campus; the construction of certain new buildings and the renovation of certain existing buildings and facilities; improvements to vehicular and pedestrian access and circulation systems; expansion of parking facilities and capacity; and open space improvements. To the extent of available project level information, this EIR includes project-level analysis of the SJCC FMP funded by the Bond Program which operationalizes components of the SJCC FMP.

Analytical Horizon

This EIR evaluates the foreseeable impacts under the proposed SJCC FMP through Year 2030, consistent with District's SJCC planning horizon for buildout of development under the proposed SJCC FMP, and based on the existing EMP. In the absence of any specific proposal by SJCC at this time for additional development at the SJCC campus site beyond this planning horizon, 2030

[2] CEQA Guidelines Section 15355.
[3] CEQA Guidelines Section 15130(a).

is considered the longest feasible timeframe for analyzing potential environmental impacts in this EIR with any level of reliability. As such, this EIR does not assess potential environmental impacts beyond 2030.

Effects of the Environment on the Project

In a change since the certification of the SJCC 2025 Updated Facilities Master Plan Final EIR, in 2015 the California Supreme Court held that "CEQA generally does not require an analysis of how existing environmental conditions will impact a project's future users or residents." *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 386. The Supreme Court explained that, where existing hazards exist, an agency is only required to analyze the potential impact of such hazards on future residents if the project would exacerbate those existing environmental hazards or conditions. Thus, with respect to such issues as geologic and seismic hazards, exposure to existing levels of air pollution and noise, and the like, CEQA does not require consideration of the effects of bringing a new population into an area where such hazards exist, as long as the project itself would not increase or otherwise affect the conditions that create those hazards.

Economic and Social Effects

Under CEQA, economic and social effects by themselves are not considered to be significant impacts, and are relevant only insofar as they may serve as a link in a chain of cause and effect that may connect the proposed project with a physical environmental effect, or they may be part of the factors considered in determining the significance of a physical environmental effect.[5] In addition, economic and social factors may be considered in the determination of feasibility of a mitigation measure or an alternative to the proposed project.[6] As such, the potential effect of the SJCC FMP on economic and social issues, in and of themselves, such as tax revenues, crime, the cost of public services, or property values are not part of this EIR. That being said, the District may evaluate a wide range of factors, including social or economic effects, in its consideration of the merits of the proposed SJCC FMP.

3.0.3 Organization of the Impact Analysis

Chapter 3 is organized as follows and focuses on the environmental resource topics listed below:

- 3.1 Air Quality
- 3.2 Cultural Resources
- 3.3 Energy
- 3.4 Greenhouse Gas Emissions
- 3.5 Noise
- 3.6 Transportation
- 3.7 Utilities and Service Systems

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5 CEQA Guidelines Section 15131.
6 CEQA Guidelines Section 15364.

Each environmental topic discussion includes these main subsections:

- *Environmental Setting*, which includes a description of the existing environmental setting
- *Regulatory Setting*, including relevant federal, State, regional, and local laws, regulations, and policies; and
- *Analysis, Impacts, and Mitigation*, which describes the (1) significance criteria; (2) approach analysis, (3) impact analysis; and (4) cumulative impacts.

This EIR identifies all environmental impacts with a numeric designation that corresponds to the section number of the environmental resource topic (e.g., Air Quality impacts are labeled as 3.1, Cultural Resource impacts are labeled as 3.2, etc.). The impact section identifier is followed by a number that indicates the sequence in which the impact statement occurs within the section. For example, "Impact 3.1-1" is the first (i.e., "1") air quality impact identified in the EIR. All impact statements are presented in bold text. The significance of the impacts prior to implementation of mitigation measures is stated in parentheses immediately following the impact statement (further discussed below).

Similarly, each mitigation measure is numbered to correspond with the impact that it addresses. Where multiple mitigation measures address a single impact, each mitigation measure is numbered sequentially. For example, "Mitigation Measure 3.1-1" would be the first mitigation identified to address the first air quality impact (i.e., "Impact 3.1-1"). All mitigation measure statements are presented in bold text.

3.0.4 Section Structure

Each environmental resource section in Chapter 3 follows a set structure, as described below.

Introduction

This subsection summarizes the applicable topic analysis and its relevance to the proposed SJCC FMP.

Environmental Setting

According to Section 15125 of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the Notice of Preparation (NOP) is published. The NOP for the proposed SJCC FMP was published in October 2020, and the baseline conditions contained in this SJCC FMP EIR are generally taken from this time period. However, the CEQA Guidelines and applicable case law recognize that the date for establishing an environmental baseline cannot always be rigid.

Physical environmental conditions may vary over a range of time periods; thus the use of environmental baselines that differ from the date of the NOP may be reasonable and appropriate when conducting the environmental analyses. Some sections rely on a variety of data to establish an applicable baseline, as described in those sections.

Regulatory Framework

The regulatory setting presents relevant information about federal, State, regional, and/or local laws, regulations, ordinances, plans, policies and standards that pertain to the environmental resources addressed in each section.

Significance Criteria

According to CEQA Guidelines Section 15382, a significant effect on the environment means "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project." Significance criteria are identified for each environmental issue area in each resource section. The environmental criteria and considerations applied to determine the significance of SJCC FMP-related changes in the environment are based on the CEQA Guidelines Appendix G, as applicable. The significance criteria serve as benchmarks for determining if proposed activities or conditions would result in a significant adverse environmental impact when evaluated against the baseline conditions.

Analysis, Impacts, and Mitigation

Each section describes the significance criteria, approach to analysis and analytical methods used to evaluate effects of the proposed SJCC FMP.

Impacts and Mitigation Measures

The EIR evaluates the environmental consequences and potentially significant impacts that would result from implementation of the proposed SJCC FMP. The impacts identified are compared with predetermined significance criteria (discussed above), and classified according to significance categories discussed above.

To the extent the residual impact may still be significant even after implementation of the conditions, laws and regulations, and applicable mitigation measures are described which would eliminate or substantially reduce the severity of the impact. The effectiveness of a mitigation measure is determined by evaluating the residual impact remaining after its application. Those impacts meeting or exceeding the impact significance criteria after applicable mitigation measures are incorporated are identified as residual impacts that remain significant and unavoidable. Implementation of more than one mitigation measure may be needed to reduce an impact below a level of significance.

Cumulative Impact Analysis

An analysis of cumulative impacts follows the project-specific impacts and mitigation measures evaluation in each section. A cumulative impact consists of an impact that is created as a result of the combination of the impact of the project evaluated in the EIR together with the impacts from other past, present and reasonably foreseeable projects causing related impacts.[7]

As noted above, where a cumulative impact is significant when compared to baseline conditions, the analysis must address whether the project's contribution to the significant cumulative impact

[7] CEQA Guidelines Section 15355.

is "considerable." If the contribution of the project is considerable, then the EIR must identify potentially feasible measures that could avoid or reduce the magnitude of the project's contribution to a less-than-considerable level. If the project's contribution is not considerable, it is considered less than significant and no mitigation for the project's contribution is required.[8]

The geographic scope of the cumulative impact analysis varies depending upon the specific environmental issue area being analyzed. The geographic scope defines the geographic area within which projects may contribute to a specific cumulative impact. Therefore, past, present, and future reasonably foreseeable projects within the defined geographic area for a given cumulative issue must be considered. The cumulative impact analysis in each technical section includes a description of the cumulative analysis methodology and the geographic or temporal context in which the cumulative impact is analyzed (e.g., the San Francisco Bay Area Air Basin, other activity concurrent with SJCC FMP construction, etc.).

Consistent with CEQA Guidelines Section 15130(b), the cumulative impact analysis considers the SJCC FMP's effects in combination with the projections contain within previously approved planning documents and forecasting models, including but not limited to the regional planning documents from the Association of Bay Area Governments (ABAG), Bay Area Air Quality Management District, as well as applicable associated environmental review documents.

In addition, consistent with CEQA Guidelines Section 15130(b), the cumulative impact analysis also considers other known or reasonably foreseeable projects that could combine with potential impacts from implementation of the SJCC FMP within the local geographic area. Please refer to each environmental resource section for the context in the cumulative scenario for the corresponding resource.

8 CEQA Guidelines Section 15130(a)(3).

3.1 Air Quality

This section describes existing air quality in the SJCC campus vicinity and the region, analyzes the proposed SJCC FMP's potential air pollutant emissions and resulting impacts, and identifies mitigation measures to reduce any significant impacts associated with the SJCC FMP. For more information regarding the analysis methods and assumptions, refer to **Appendix B**.

The California Environmental Quality Act (CEQA) requires the analysis of potential adverse effects of a project on the surrounding environment. A CEQA evaluation is generally not required to consider potential effects of the environment on a project's future users or local residents, except when the project may exacerbate existing hazards or existing conditions.[1] The Bay Area Air Quality Management District (BAAQMD) *California Environmental Quality Act Air Quality Guidelines* (BAAQMD CEQA Guidelines) recommend evaluating the potential effects of existing air quality conditions on the project to provide information to decision-makers and the public (BAAQMD, 2017a). As such, this section analyzes both the proposed SJCC FMP's impacts on air quality and the potential adverse effects of existing air pollution on the proposed project and the surrounding community.

3.1.1 Environmental Setting

Topography and Climate

Climate and meteorological conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The SJCC campus is located in the city of San José and is within the boundaries of the San Francisco Bay Area Air Basin (SFBAAB or Bay Area). The SFBAAB encompasses the nine-county region including all of Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin, and Napa Counties, and the southern portions of Solano and Sonoma Counties.

The climate of the Bay Area is determined largely by a high-pressure system that is often present over the eastern Pacific Ocean off the west coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing an increased number of storms systems to pass through the region. During summer and early fall, when fewer storms pass through the region, emissions generated in the Bay Area accumulate as a result of the more stable conditions. The combination of abundant sunshine, restraining influences of topography and subsidence inversions creates conditions conducive to the formation of photochemical pollutants, such as ground-level ozone and secondary particulates, including nitrates and sulfates.

Air Pollutants of Concern

Air pollutants of concern within the SFBAAB include certain criteria air pollutants and toxic air contaminants (TACs).

[1] *California Building Industry Association v. Bay Area Air Quality Management District* (December 17, 2015) 62 Cal.4th 369.

Criteria Air Pollutants

Criteria air pollutants are a group of six common air pollutants for which the U.S. Environmental Protection Agency (EPA) has set ambient air quality standards. Criteria air pollutants include ground level ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM), and lead. PM is classified by particle size—PM_{10} consists of particulate matter that is 10 microns[2] or less in diameter, while $PM_{2.5}$ refers to the subset of PM_{10} that is less than 2.5 microns or less in diameter. Most of the criteria air pollutants are directly emitted; however, ozone is a secondary pollutant that is formed in the atmosphere by chemical reactions between nitrogen oxides (NOx), and reactive organic gases (ROG) in the presence of sunlight as discussed below. In addition to the criteria air pollutants identified by the EPA, California has added four criteria air pollutants including visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Carbon Monoxide

CO is an odorless, colorless gas usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicles, which have their highest emissions during low travel speeds, idling, stop-and-go driving, cold starts, and hard acceleration. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the blood's oxygen-carrying capacity. The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness caused by inadequate oxygen delivery to the brain. Short-term exposure to elevated CO may result in reduced oxygen to the heart, accompanied by chest pain, also known as angina (EPA, 2016a). For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (California Air Resources Board [CARB], 2019a).

Ozone

Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving ROG (also referred to by some regulatory agencies as volatile organic compounds [VOCs]) and NO_X in the presence of sunlight. The main sources of ROG and NO_X, often referred to as ozone precursors, are the evaporation of solvents, paints, and fuels and combustion processes (including motor vehicle engines). In the Bay Area, automobiles are the single largest source of ozone precursors. Short-term exposure to ozone can irritate the eyes and constrict the airways. According to the EPA and CARB, besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema; increase frequency of asthma attacks; cause coughing and sore or scratchy throat; make the lungs more susceptible to infection; and cause chronic obstructive pulmonary disease. Exposure to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children (EPA, 2018a; CARB, 2019b). EPA states that the people most at risk from breathing air containing ozone include those with asthma, children, older adults, and people who are active outdoors, especially outdoor workers (EPA, 2018a).

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[2] A micron is one-millionth of a meter.

Nitrogen Dioxide and Oxides of Nitrogen

NO_2 is a major component of the group of gaseous nitrogen compounds commonly referred to as NO_X, which also includes nitric oxide (NO). NO_x is a reddish brown gas produced by fuel combustion in motor vehicles, industrial stationary sources, ships, aircraft, and rail transit. NO is converted to NO_2 when it reacts with ozone or undergoes photochemical reactions in the atmosphere. Therefore, NO_2 emissions from combustion sources are typically evaluated based on the amount of NO_X emitted from the source. Nitrogen dioxide is a concern for air quality because it acts as a respiratory irritant and is a precursor of ozone (EPA, 2016b). Short-term exposures can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms such as coughing, wheezing, or difficulty breathing. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections, requiring hospital admissions and visits to emergency rooms. Infants and children are particularly at risk from exposure to NO_2 because of their more rapid breathing rate for their body weight and their typically greater duration of outdoor exposure. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB, 2019c).

Particulate Matter

Sources of PM, such as wood burning in fireplaces, demolition, and construction activities, are more local, while other sources, such as vehicular traffic, have a more regional effect. As discussed above, PM_{10} and $PM_{2.5}$ represent fractions of PM that can be inhaled into the air passages and lungs causing adverse health effects, particularly at concentrations above the federal and State ambient air quality standards. $PM_{2.5}$ (including diesel exhaust particles) is thought to have greater effects on health because these particles are so small and thus can penetrate to the deepest parts of the lungs. Larger dust particles (diameter greater than 10 microns) settle out of the ambient air rapidly and are filtered by human breathing passages; therefore, this dust is of more concern as a soiling nuisance rather than as a health hazard. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, and acute and chronic respiratory symptoms such as shortness of breath and painful breathing.

Other Criteria Pollutants

SO_2 is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO_2 is also a precursor to the formation of PM, atmospheric sulfate, and atmospheric sulfuric acid formation that could precipitate downwind as acid rain. According to EPA, short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult (EPA, 2018b). It can irritate lung tissue and increase the risk of acute and chronic respiratory disease (BAAQMD, 2017a).

Leaded gasoline (phased out in the United States beginning in 1973), lead based paint (on older houses and cars), smelters (metal refineries), and manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. Lead has a range of adverse neurotoxic health effects, which puts children at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California.

In addition to the above pollutants, California also regulates emissions of hydrogen sulfide, sulfates, visibility-reducing particles, and vinyl chloride; however, these are not considered impactful for this particular project.

Toxic Air Contaminants, $PM_{2.5}$, and Health Risks

In addition to criteria air pollutants, sources from individual projects emit TACs, a diverse group of air pollutants that may cause chronic and acute adverse effects on human health, including birth defects, neurological damage, cancer, and death. TACs are generated from a variety of sources and activities, including gasoline stations, automobiles, dry cleaners, industrial operations, solvent use, and painting operations. In general, mobile sources contribute more substantially than stationary sources to health risks.

There are hundreds of different types of TACs with varying degrees of toxicity. Thus, the health risks of individual TACs vary greatly; at a given level of exposure, one TAC may pose a hazard that is many times greater than another. For the purpose of providing background information, the most recent estimate (2011–2016) of cancer rates from all causes in the SFBAAB, presented by the Cancer Prevention Institute of California, shows cancer rates for males at 428 per 100,000 and for females at 382 per 100,000 (The Greater Bay Area Cancer Registry, 2019). These levels are below the national average annual cancer rate of 442.0 new cases of cancer per 100,000 men and women per year (National Cancer Institute, 2020). This is the *rate* of new cancer cases per year per 100,000 individuals, not the lifetime risk of an individual to develop cancer.

Diesel Particulate Matter

CARB identified diesel particulate matter (DPM) as a TAC in 1998, based primarily on evidence demonstrating cancer effects in humans. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways.

The statewide risk from DPM, as determined by CARB, declined from 750 in 1 million in 1990 to 570 in 1 million in 1995; by 2012, CARB estimated the average statewide cancer risk from DPM at 520 in 1 million (CARB, 2009; CARB, n.d.-a; American Cancer Society, 2020).[3] These rates have declined as a result of better emissions controls, statewide and local regulatory actions, and more fuel-efficient technology.

Naturally Occurring Asbestos

Asbestos is a fibrous mineral that occurs naturally in ultramafic rock (a rock type commonly found in California) and was formerly used as a processed component of building materials. Asbestos is strictly regulated because it has been proven to cause serious adverse health effects, including asbestosis and lung cancer.

[3] This calculated cancer risk value from ambient air exposure in the Bay Area can be compared against the lifetime probability of being diagnosed with cancer in the United States, from all causes, which is approximately 40 percent, or greater than 400,000 in 1 million, according to the American Cancer Society.

Existing Air Quality

Air Monitoring Data

BAAQMD and CARB operate a regional monitoring network that measures the ambient concentrations of the six criteria air pollutants. Criteria air pollutants of concern in the SFBAAB include ozone and particulate matter (PM_{10} and $PM_{2.5}$) as the region is in non-attainment with respect to the federal and State standards for these pollutants. The national ambient air quality standards (NAAQS or "national standards") and California ambient air quality standards (CAAQS or "state standards") are discussed further in Section 3.1.2, *Regulatory Framework*. CO, NO_2, SO_2, lead, visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride in the SFBAAB are not of concern as the project would emit negligible volumes of these pollutants.

The monitoring station closest to the SJCC campus is the San José–Jackson station, approximately 2.9 miles northeast of the campus. The San José–Jackson station monitors ozone NO_2, SO_2, PM_{10}, $PM_{2.5}$, and toxics (CARB, n.d.-b). In addition, the EPA monitors CO at the San José – Jackson Street monitoring station (EPA, 2020). **Table 3.1-1** provides a three-year summary or air pollutant concentration data for ozone, CO, NO_2, PM_{10}, and $PM_{2.5}$ measured at BAAQMD's San José–Jackson monitoring station for the years 2017–2019 along with CO data from the EPA monitoring station. Because of the proximity of the SJCC campus to the San José–Jackson monitoring station, air quality measurements collected at this station are understood to be generally representative of conditions in the SJCC campus vicinity.

As shown in Table 3.1-1, the project area has experienced exceedances of the 1-hour and 8-hour ozone standards, the 24-hour PM_{10} standards, and the 24-hour $PM_{2.5}$ standard.

The main sources of DPM emissions near the SJCC campus are heavy-duty truck activity along Interstates 880 and 280, and State Route 17. BAAQMD permitted stationary sources of TACs near the project site include auto body shops, a coffee roaster, backup generators, and gasoline dispensing facilities. The permitted stationary sources emit of TACs from ROGs in addition to DPM.

Existing Health Risk in the Surrounding Area

As discussed previously, the EPA and CARB recognize that exposure to elevated levels of ground-level ozone and PM can be a cause of respiratory and cardiovascular health effects. Through its Community Air Risk Evaluation (CARE) program, BAAQMD compiled estimates of TAC emissions in the SFBAAB for all major source categories including oil refineries, power plants, landfills, dry cleaners, gasoline stations, on-road vehicles, off-road vehicles and equipment, ships, and trains. BAAQMD's cancer-risk weighted emissions inventory shows that a small subset of TACs account for approximately 95 percent of the total cancer risk from air pollutants in the Bay Area, and that DPM is by far the largest driver of cancer risk from TACs. CARE estimates are based on the cancer risk calculation methods adopted by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) in 2015.

TABLE 3.1-1
SUMMARY OF AIR QUALITY MONITORING DATA (2017–2019)

Pollutant	National / State Standard	2017	2018	2019
Ozone				
Maximum 1-hour concentration, ppm	0.09 [a]	**0.121**	0.078	**0.095**
Days above State 1-Hour standard		3	0	1
Maximum 8-hour concentration, ppm	0.070 / 0.070	**0.098 / 0.099**	0.061 / 0.061	**0.081 / 0.082**
Days above National and State 8-Hour standard		4	0	2
Nitrogen Dioxide (NO_2)				
Annual average concentration, ppm	0.053 / 0.030	NA / NA	NA / 12	NA / 10
Maximum 1-Hour concentration, ppm	0.100 / 0.18	67.5 / 67	86.1 / 86	59.8 / 59
Days above National 1-Hour standard		0	0	0
Days above State 1-Hour standard		0	0	0
Respirable Particulate Matter (PM_{10})				
Annual average concentration, μg/m^3	20 [a]	**21.3**	**23.1**	19.1
Maximum 24-Hour concentration (national/state), μg/m^3	150 / 50	69.4 / **69.8**	115.4 / **121.8**	75.4 / **77.1**
Estimated number of days above National 24-Hour standard[c]		0	0	0
Estimated number of days above State 24-Hour standard[c]		19	12	12
Fine Particulate Matter ($PM_{2.5}$)				
Annual average, μg/m^3	12.0 / 12	9.5 / NA	12.7 / 12.9	9.0 / 9.1
Maximum 24-Hour, μg/m^3	35 [b]	**49.7**	**133.9**	27.6
Estimated days above National 24-Hour standard[c]		6	16	0
Carbon Monoxide (CO)				
Maximum 8-Hour concentration, ppm	9 / 9.0	1.8	2.1	1.3
Number of days above National or State 8-hour standard		0	0	0
Maximum 1-Hour concentration, ppm	35 / 20	2.1	2.5	1.7
Number of days above National or State 1-hour standard		0	0	0

NOTES:
Ozone, NO_2, PM_{10}, and $PM_{2.5}$ monitoring data from Jackson Street Station. The CARB and EPA use different methods to calculate the emissions for certain criteria air pollutants for comparisons to the state and national standards.

Bold values are in excess of applicable standard.
ppm = parts per million; μg/m^3 = micrograms per cubic meter.

a. State standard, not to be exceeded.
b. National standard, not to be exceeded.
c. PM_{10} and $PM_{2.5}$ concentrations are measured once every 3 days. Estimated days exceeded mathematically estimate of the total number of days in a year the standards would be exceeded had each day been monitored.

SOURCES: CARB, 2020; EPA, 2020.

The Bay Area has benefited from dramatic reductions in public exposure to TACs over time. Based on ambient air quality monitoring, the estimated lifetime cancer risk from all TACs for Bay Area residents declined from 4,100 cases per million in 1990 to 690 cases per million people in 2014. This represents an 83 percent decrease between 1990 and 2014. The cancer risk from DPM, which accounts for most of the cancer risk from TACs as discussed above, has declined substantially over the past 15 to 20 years as a result of CARB regulations and BAAQMD programs to reduce emissions from diesel engines. However, DPM still accounts for roughly 82 percent of the total cancer risk related to TACs (BAAQMD, 2017b).

Sensitive Receptors

Air quality does not affect every individual in the population in the same way; some groups are more sensitive to adverse health effects than others. More sensitive population groups include the elderly and the young; those with higher rates of respiratory disease; and those with other environmental or occupational health exposures (e.g., indoor air quality). BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, childcare centers, hospitals, and senior-care facilities. The reasons for greater-than-average sensitivity may include age, pre-existing health problems, proximity to emissions sources, or duration of exposure to air pollutants. Schools, hospitals, and residential care centers are considered relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality–related health problems than the general public. Residences are considered sensitive to poor air quality because people usually are present in their home for many hours per day over extended periods of time, resulting in longer exposure to ambient air. Recreational uses are considered sensitive because of the greater exposure to ambient air, because vigorous exercise places a high demand on the human respiratory system. Workers are not considered sensitive receptors because they have other legal protections; specifically, employers must follow regulations set forth by the Occupational Safety and Health Administration (OSHA) to ensure the health and well-being of their employees (BAAQMD, 2012).

The SJCC campus has sensitive receptors located on all sides of the campus. Buildings of the Santa Clara Valley Medical Center closest to the SJCC campus are located approximately 300 feet to the west across South Bascom Avenue; a residential neighborhood, senior housing, and a church are located across Leigh Avenue to the east; mixed single- and multi-family residential neighborhoods to the south; and single-family residential uses are located to the north across I-280. Figure 2-2 of the *Project Description* shows the land uses in the SJCC campus vicinity. Table 3.5-4 of the *Noise* section identifies the closest sensitive receptors and their approximate distances to the SJCC campus buildings that would undergo either demolition, renovation, or construction under the SJCC FMP.

In addition to residences, a Health Risk Assessment (HRA) prepared in support of this EIR also includes discrete receptors in schools and childcare centers located up to 1,000 feet from the SJCC campus, consistent with the requirement in the BAAQMD guidelines to analyze health risks (BAAQMD, 2017a). The Sherman Oaks Elementary School and Neighborhood Christian Preschool are located within 1,000 feet of the SJCC campus. SJCC currently does not currently provide any on-campus child care services. As discussed in Chapter 2, Project Description, the

SJCC FMP proposes a Child Development Center in the campus in the southeastern corner of the student parking lot E. Future occupants of the Child Development Center are also considered as sensitive receptors in this analysis.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Although offensive odors rarely cause any physical harm, they remain unpleasant and can lead to public distress, generating complaints by residents to local governments. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. Generally, increasing the distance between the receptor and the odor source would mitigate odor impacts.

The BAAQMD CEQA Guidelines recommend considering odor impacts for any new odor sources proposed near existing receptors, and for any new sensitive receptors located near existing odor sources. BAAQMD provides examples of odor sources, which include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. There are no such odor sources at or in the vicinity of the SJCC campus.

3.1.2 Regulatory Setting

Federal

Clean Air Act and National Ambient Air Quality Standards

The federal Clean Air Act (CAA) requires EPA to establish national ambient air quality standards to protect public health and the environment. NAAQS are classified as either primary or secondary. Primary standards are meant to provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

EPA has set NAAQS for several criteria air pollutants: ozone, NO_2, SO_2, CO, PM, and lead. PM includes $PM_{2.5}$, which is 2.5 microns or smaller in diameter, and PM_{10}, which is 10 microns or smaller in diameter.

EPA classifies geographic areas as either attainment or non-attainment for each criteria air pollutant, based on whether the NAAQS have been achieved. Air districts in areas that are designated non-attainment must prepare regional air quality plans, discussed in further detail below, to be included in the overall State Implementation Plan. Areas that have a "maintenance" designation have been non-attainment for a certain criteria pollutant but have been re-designated as attainment. **Table 3.1-2** summarizes the current NAAQS and CAAQS and indicates the attainment status of the Bay Area with respect to these pollutants. As shown in the table, the SFBAAB has been classified as non-attainment with respect to ozone and $PM_{2.5}$ standards.

TABLE 3.1-2
STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND SFBAAB ATTAINMENT STATUS

Pollutant	Averaging Time	National Standards		California Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	1 hour	—	—	0.09 ppm	Nonattainment
	8 hours	0.07 ppm	Nonattainment	0.070 ppm	Nonattainment
Carbon Monoxide	1 hour	35 ppm	Attainment	20 ppm	Attainment
	8 hours[a]	9.0 ppm	Attainment	9.0 ppm	Attainment
Nitrogen Dioxide	1 hour	0.100 ppm	Unclassified	0.18 ppm	Attainment
	Annual Avg.	0.053 ppm	Attainment	0.030 ppm	Attainment
Sulfur Dioxide	1 hour	0.075 ppm	Attainment	0.25 ppm	Attainment
	24 hours	0.14 ppm	Attainment	0.04 ppm	Attainment
	Annual Avg.	0.030 ppm	Attainment	—	—
Respirable Particulate Matter (PM_{10})	24 hours	150 μg/m^3	Nonattainment	50 μg/m^3	Nonattainment
	Annual Avg.	—	—	20 μg/m^3	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	24 hours	35 μg/m^3	Nonattainment	—	—
	Annual Avg.	12 μg/m^3	Unclassified/ Attainment	12 μg/m^3	Nonattainment
Lead	Monthly Avg.	—	—	1.5 μg/m^3	Attainment
	Quarterly	1.5 μg/m^3	Attainment	—	—
Hydrogen Sulfide	1 hour	—	—	0.03 ppm	Unclassified
Sulfates	24 hours	—	—	25 μg/m^3	Attainment
Visibility-Reducing Particles	8 hours	—	—	Extinction of 0.23/km; visibility of 10 miles or more	Unclassified
Vinyl Chloride	24 hours	—	—	0.01 ppm	—

NOTES:
μg/m^3 = micrograms per cubic meter; Avg. = Average; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; PM_{10} = particulate matter 10 microns or less in diameter; ppb = parts per billion; ppm = parts per million

[a] A more-stringent 8-hour carbon monoxide state standard exists around Lake Tahoe (6 ppm).

SOURCE: BAAQMD, 2017c.

Hazardous Air Pollutants

Federal law uses the term "hazardous air pollutants" (HAPs) to refer to the same types of compounds that are referred to as TACs under state law; HAPs are a subset of TACs. Please refer to the discussion of state-identified TACs for more detail, below. Currently, 187 substances are regulated as HAPs. The federal CAA requires EPA to identify the National Emission Standards for Hazardous Air Pollutants (NESHAP) to protect public health and welfare. More than 125 types of stationary sources are regulated under the NESHAP, while mobile-source emissions of HAPs are regulated through vehicle and fuel standards.

State

California Clean Air Act and California Ambient Air Quality Standards

At the state level, CARB oversees California air quality policies and regulations. California has adopted its own air quality standards, known as CAAQS, as shown in Table 3.1-2. In addition to the pollutants regulated at the federal level, California has set ambient air quality standards for hydrogen sulfide, sulfates, visibility-reducing particles, and vinyl chloride. California's ambient standards are at least as protective as the NAAQS and are often more stringent.

In 1988, California enacted the California Clean Air Act (California Health and Safety Code Section 39600 et seq.), which called for the designation of areas as attainment or non-attainment based on State ambient air quality standards (i.e., the CAAQS), rather than the federal standards. The California Clean Air Act requires each air district in which CAAQS are exceeded to prepare a plan that documents reasonable progress toward attainment. If an air basin (or portion thereof) exceeds the CAAQS for a particular criteria air pollutant, it is considered to be non-attainment for that criteria air pollutant until the area can demonstrate compliance. As indicated in Table 3.1-2, the SFBAAB is classified as non-attainment for 8-hour ozone, 1-hour ozone, annual average PM_{10}, 24-hour PM_{10}, and annual average $PM_{2.5}$.

Toxic Air Contaminants

The California Health and Safety Code defines TACs as air pollutants that may cause or contribute to an increase in mortality or in serious illness, or that may pose a present or potential hazard to human health. The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807. A total of 243 substances have been designated TACs under California law; they include the 187 (federal) HAPs adopted in accordance with State law. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify, quantify, and evaluate risks from air toxics sources; however, AB 2588 does not regulate air toxics emissions.

As discussed earlier, the main TAC of concern in the Bay Area is DPM. In August 1998, CARB identified DPM emissions from diesel-fueled engines as a TAC (CARB, n.d.-a). Following this designation, in 2000, CARB approved its comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB, 2000). Further regulations of diesel emissions by CARB include the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression Ignition Diesel Engines and Equipment Program. All of these regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment (refer to the detailed discussion below).

Regional

BAAQMD has jurisdiction over the SFBAAB and monitors and regulates air quality in the region by inspecting and issuing permits for stationary sources of air pollution, responding to citizen complaints, and executing programs to reduce air pollution throughout the region.

BAAQMD Air Quality Plans

As demonstrated in Table 3.1-2, the SFBAAB is designated as nonattainment for both the federal and State ozone standards. As a result, BAAQMD is required to prepare air quality plans under the CAA and the California CAA to meet the federal and State air quality standards in areas that are designated non-attainment. Maintenance plans are required for attainment areas that had previously been designated non-attainment to ensure continued attainment of the standards. Because of the SFBAAB's classification as "serious" non-attainment for the 1-hour ozone standard, BAAQMD is required to update its Clean Air Plan every three years to reflect progress toward meeting attainment status.

In April 2017, BAAQMD adopted the most recent update to its Clean Air Plan, the *2017 Clean Air Plan*, whose primary goals are to protect public health and to protect the climate (BAAQMD, 2017b). The *2017 Clean Air Plan* updates the *Bay Area 2010 Clean Air Plan* and complies with State air quality planning requirements, as codified in the California Health and Safety Code (although the 2017 plan was delayed beyond the three-year update requirement of the code). State law requires the Clean Air Plan (CAP) to include all feasible measures to reduce emissions of ozone precursors and to reduce the transport of ozone precursors to neighboring air basins.

The 2017 CAP contains 85 measures to address reduction of several pollutants: ozone precursors, PM, air toxics, and GHGs. Other measures focus on a single type of pollutant: super GHGs such as methane and black carbon that consist of harmful fine particles that affect public health.

BAAQMD CEQA Guidelines and Thresholds of Significance

The BAAQMD *California Environmental Quality Act Air Quality Guidelines* is an advisory document that provides lead agencies, consultants, and project proponents with procedures for assessing air quality impacts and preparing environmental review documents. The document describes the criteria that BAAQMD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for use in determining whether projects would have significant adverse environmental impacts, identifies methods for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts.

BAAQMD updated the 1999 CEQA Air Quality Guidelines in 2010. In May 2011, BAAQMD adopted an updated version of its thresholds of significance for use in determining the significance of projects' environmental effects under CEQA (Thresholds), and published the BAAQMD CEQA Guidelines for consideration by lead agencies. The 2011 BAAQMD CEQA Guidelines' thresholds lowered the previous (1999) thresholds of significance for annual emissions of ROG, NO_X, and PM_{10}, and set a standard for $PM_{2.5}$ and fugitive dust. The 2011 BAAQMD CEQA Guidelines also include methods for evaluating risks and hazards for the siting of stationary sources and of sensitive receptors.

The BAAQMD resolution adopting the significance thresholds in 2010 and 2011 was set aside by the Alameda County Superior Court on March 5, 2012. On August 13, 2013, the California Court of Appeals issued a full reversal of the Superior Court's judgment, and on December 17, 2015, the California Supreme Court reversed in part the appellate court's judgment and remanded the case for further consideration consistent with the Supreme Court opinion. The California

Supreme Court ruled unanimously that CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project" (*California Building Industry Association v. Bay Area Air Quality Management District* [December 17, 2015] 62 Cal.4th 369). The Supreme Court confirmed that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future residents or users." The Court also held that when a project has "potentially significant exacerbating effects on existing environmental hazards" those impacts are properly within the scope of CEQA because they can be viewed as impacts of the project on "existing conditions" rather than impacts of the environment on the project.

BAAQMD most recently updated its *CEQA Air Quality Guidelines* in May 2017. These guidelines recommend quantitative significance thresholds along with direction on recommended analysis methods. BAAQMD states that the quantitative significance thresholds are "advisory and should be followed by local governments at their own discretion," and that lead agencies are fully within their authority to develop their own thresholds of significance. However, BAAQMD offers these thresholds for lead agencies to use in order to inform environmental review for development projects in the Bay Area. Lead agencies may also reference the *CEQA Thresholds Options and Justification Report* developed by BAAQMD staff in 2009. This provides lead agencies with a justification for continuing to rely on the BAAQMD 2011 thresholds.

BAAQMD Rules and Regulations

Emissions sources associated with the SJCC FMP would be subject to regulatory requirements in the BAAQMD rules and regulations listed below:

Regulation 2, Rules 1 (General Permit Requirements), 2 (New Source Review), and 5 (New Source Review of Toxic Air Contaminants). Under these rules, all stationary sources that have the potential to emit TACs above a certain level are required to obtain permits from BAAQMD. These rules provide guidance for the review of new and modified stationary sources of TAC emissions, including evaluation of health risks and potential mitigation measures. The regulation also reduces health risks by requiring improved pollution control when existing sources are modified or replaced. If it is determined that a facility's emissions would exceed BAAQMD's threshold of significance for TACs, the source would then be required to implement BACT for Toxics to reduce emissions. Sources of HAPs may also be required to implement Maximum Achievable Control Technology. The proposed emergency generators would be subject to these rules.

Regulation 6, Rule 6. Controls trackout of solid material onto public paved roads from three types of sites: large bulk material sites, large construction sites, and large disturbed area sites.

Regulation 8, Rule 3. Regulates the quantity of VOCs in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured.

Regulation 9, Rule 3. Sets limits on emissions of NO_X from new heat transfer operations by requiring that heat transfer operations designed for a maximum heat output of 264 gigajoules per hour not exceed 125 ppm of NO_X when burning gaseous fuel, and not exceed 225 ppm of NO_X when burning liquid fuel.

Regulation 9, Rule 7. Sets limits the emissions of NOx and CO from industrial, institutional and commercial boilers, steam generators and process heaters of different sizes.

Regulation 9, Rule 8. Imposes emissions limits on spark-ignited engines powered by waste and fossil-derived fuels, compression-ignited engines, and dual fuel pilot compression-ignited engines. limits the hours of operation for emergency standby engines, which must be equipped with a non-resettable totalizing meter that measures either hours of operation or fuel usage.

Regulation 9, Rule 18. BAAQMD regulation being developed to reduce health risks from toxic emissions from existing facilities ranging in size from large-scale plants like factories and oil refineries to smaller operations like back-up generators and gas stations.

Regulation 11, Rule 2. Controls emissions of asbestos to the atmosphere during demolition, renovation, milling, and manufacturing and prohibits the use of asbestos on certain roadways, in molded insulating materials, and on buildings during construction, alteration, and/or repair. The rule also prohibits visible emissions from any operation involving the demolition, renovation, removal, manufacture, or fabrication of asbestos-containing products and specifies procedures to be implemented during these activities.

Planning Healthy Places

In 2016, BAAQMD prepared its *Planning Healthy Places* guidebook to assist local governments, planners, elected officials, developers, community groups, and other parties in addressing and minimizing potential air quality issues associated with local sources of air pollutants, especially TACs and PM. The guidebook provides best management strategies to reduce emissions and human exposure to pollutants that can be implemented in city or county general plans, neighborhood or specific plans, land use development ordinances, or individual projects.

BAAQMD has developed a map identifying areas where best management practices should be applied, and where further study is needed (BAAQMD, 2016). As shown on the Planning Healthy Places map, the project site is located in an area where the recommended best management practices should be applied to reduce exposure and subsequent health impacts associated with air pollution. Best management practices recommended by the Planning Healthy Places guidebook include a number of emissions reduction strategies.

Community Air Risk Evaluation Program

Under the CARE program, BAAQMD has identified areas with high TAC emissions (referred to in this context as “priority” or “impacted” communities) and sensitive populations that could be affected by them, and to uses this information to establish policies and programs to reduce TAC emissions and exposures (BAAQMD, 2014a; BAAQMD, 2014b). To date, BAAQMD has identified Concord, Richmond/San Pablo, central San José, eastern San Francisco, western Alameda County, Vallejo, San Rafael, and Pittsburg/Antioch as CARE-impacted communities where TACs, $PM_{2.5}$, and ozone have the greatest impact on human health (BAAQMD, 2014a). The main objectives of the program are:

- Evaluate potential health risks associated with exposure to TACs from both stationary and mobile sources.

- Assess potential exposures to sensitive receptors and identify impacted communities.
- Prioritize TAC reduction measures for significant TAC sources in impacted communities.
- Develop and implement mitigation measures—such as grants, guidelines, or regulations—to improve air quality, focusing initially on priority communities.

The SJCC campus is located within a CARE-impacted community as identified by the BAAQMD (BAAQMD, 2014a).

Local

There are no local plans and policies related to air quality that are applicable to the proposed SJCC FMP.

3.1.3 Analysis, Impacts, and Mitigation

Significance Criteria

For the purposes of this EIR, an air quality impact would be significant if implementing the SJCC FMP would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;
3. Expose sensitive receptors to substantial pollutant concentrations; or
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Significance Thresholds

Table 3.1-3 summarizes the significance thresholds as described in the *CEQA Air Quality Guidelines* and used in this analysis.

The analysis for potential conflict with or obstruction with the implementation of the applicable air quality plan (significance criterion 1) applies qualitative BAAQMD guidance for lead agencies to consider in assessment of consistency with the 2017 CAP (See Impact 3.1-1).

BAAQMD's significance threshold listed above in Table 3.1-3 are used to assess construction-related impacts due to criteria air pollutant emissions (See Impact 3.1-2) and operational criteria air pollutants emissions (See Impact 3.1-3) (significance criterion 2). The analysis for potential exposure of sensitive receptors (elderly, sick, and young children) to substantial pollutant concentrations (significance criterion 3) uses the BAAQMD's significance criteria for health risks and hazards identified in the above Table 3.1-3, as discussed in Impact 3.1-4.

TABLE 3.1-3
BAY AREA AIR QUALITY MANAGEMENT DISTRICT CEQA AIR QUALITY SIGNIFICANCE THRESHOLDS

Pollutant	Construction Thresholds Average Daily Emissions (pounds per day)	Operational Thresholds: Average Daily Emissions (pounds per day)	Operational Thresholds: Maximum Annual Emissions (tons per year)
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust	BAAQMD best management practices	Not applicable	
Risks and Hazards for New Sources and Receptors (Project)	Same as operational thresholds	• Increased cancer risk of > 10.0 in 1 million • Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.3 μg/m^3 annual average	
Risks and Hazards for New Sources and Receptors (Cumulative)	Same as operational thresholds	• Increased cancer risk of > 100 in 1 million • Increased non-cancer risk of > 10.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.8 μg/m^3 annual average	

NOTES:
μg/m^3 = micrograms per cubic meter; BAAQMD = Bay Area Air Quality Management District; CEQA = California Environmental Quality Act; CO = carbon monoxide; NO_X = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; PM_{10} = particulate matter 10 microns or less in diameter; ppm = parts per million; ROG = reactive organic gases

Zone of influence for risks and hazards is 1,000-foot radius from property line of source or receptor

SOURCE: BAAQMD, 2017a.

Criterion Not Analyzed

As discussed in the Initial Study, there would be no impact related to the following criterion for the reasons described below, and is therefore not discussed further in this section:

- ***Criterion 4 - Odors.*** With respect to odors, the BAAQMD CEQA Guidelines provide guidance in the form of screening distances to help evaluate potential odor impacts. They identify potential odor sources of concern, such as wastewater treatment plants, oil refineries, asphalt plants, chemical manufacturing, painting/coating operations, coffee roasters, food processing facilities, recycling operations, and metal smelters, and recommend buffer zones around them to avoid potential odor conflicts.

  No such sources of odor are located in the vicinity of the SJCC campus nor would the SJCC FMP result in development that would be a potential source of odors. Further, as the SJCC FMP involves improvements to an existing campus, it would not introduce any new receptors to the campus.

Methodology

Project-related air quality impacts fall into two categories: short-term impacts due to construction, and long-term impacts due to project operation. During construction of the SJCC FMP, criteria air pollutants would be generated primarily from the combustion of fuel in construction equipment and vehicle trips associated with worker commute, material delivery, and hauling. In addition, construction activities would affect local particulate concentrations due to fugitive dust generated from ground disturbance activities and vehicle travel on unpaved surfaces. Development proposed under the SJCC FMP would be constructed over a 9-year period starting in 2021 and would involve the renovation, demolition, and construction of several buildings at the SJCC campus.

The SJCC campus would continue to operate through the construction period. As buildings are renovated and constructed, they would likely become operational; however, for the evaluation of significance of operational impacts, total operational emissions upon completion of all demolition, renovation and construction activities associated with the SJCC FMP are compared to existing baseline levels.

Operational emissions from the SJCC FMP would be generated primarily from increase in vehicle trips (due to increased student enrollment), energy use associated with the increased building area, and other area sources (such as landscaping, use of architectural coatings for maintenance activities, etc.).

Construction Impacts

Construction Criteria Air Pollutant Emissions

Criteria air pollutant emissions generated from construction activities include:

- Exhaust emissions from fuel combustion for mobile heavy-duty diesel and gasoline-powered equipment (including construction equipment and employee vehicles);
- Particulate matter from soil disturbance during site preparation and grading activities (also known as fugitive dust); and
- Evaporative emissions of ROG from paving activity and the application of architectural coatings.

Construction emissions were estimated using the latest version of the California Emissions Estimator Model (CalEEMod version 2016.3.2). Project-specific inputs to the model included types and sizes of land uses proposed for construction, site area, demolition and renovation areas, infill and off-haul volumes (when provided), and starting year of construction. For the estimation of emissions from demolition and new construction of project buildings, CalEEMod defaults were used for duration of the various construction phases, types, number and activity level of equipment used under each phase as well as the number of worker and truck trips associated with each phase. For the estimation of emissions from renovation, a construction equipment fleet consisting of a crane, a forklift, a loader and an air compressor was assumed.

Based on a preliminary timeline provided by the District, construction activities associated with the SJCC FMP were organized into 5 phases. Each phase was modeled as a separate CalEEMod run. Total SJCC FMP construction emissions were divided by the total number of workdays over the 9-year construction period (taking into account any overlapping phases) to derive average daily emissions. Estimated average daily construction-related emissions of criteria air pollutants are then compared to BAAQMD's significance thresholds (shown in Table 3.1-3) to determine significance of impacts.

Construction phasing, project-specific assumptions and default CalEEMod settings used to estimate emissions can be found in the CalEEMod outputs included in Appendix B.

Construction Health Risk

A health risk assessment (HRA) was completed to evaluate increase in health risks to nearby receptors (i.e., residents and students) from exposure to TACs associated with the proposed SJCC FMP. The HRA focused on construction emissions from the SJCC FMP, which is considered a new but temporary source. The construction HRA estimated cancer risks, chronic health hazards, and $PM_{2.5}$ concentrations at off-site residences, schools and daycare centers located near the project area. The HRA was conducted using guidelines from the BAAQMD and CAPCOA and analyzes the potential health risk and hazard impacts at the receptor that would be exposed to the maximum risk and hazard.

For construction activities, DPM exposure represents the primary health hazard. As discussed earlier, DPM is a complex mixture of chemicals and particulate matter identified by the State as a TAC with potential cancer and chronic non-cancer effects. DPM emissions would be generated by the operation of off-road construction equipment (e.g., excavators, loaders, cranes, graders) and on-road diesel-fueled heavy-duty vehicles. Although other exposure pathways exist (i.e., ingestion, dermal contact), the inhalation pathway is the dominant exposure pathway from DPM for both cancer risk and chronic non-cancer health effects. Consequently, this HRA only evaluates the inhalation cancer and chronic non-cancer effects of DPM inhalation. The methodology for the HRA is detailed in Appendix B.

Average annual DPM emissions for each year of construction of the SJCC FMP from 2021 to 2029 were estimated based on CalEEMod outputs. Annual DPM emissions for each construction year were averaged over the number of construction workdays within each year to generate an annual DPM emission rate for each construction year. PM_{10} is conservatively used as a surrogate for DPM. Similarly, exhaust $PM_{2.5}$ emission rates were also calculated for each construction year.

The AERMOD (version 18081) dispersion model was used to convert construction DPM and $PM_{2.5}$ emission rates derived above to annual DPM and $PM_{2.5}$ concentrations. A receptor grid was placed around the campus site to cover all sensitive receptors up to 1,000 feet from the campus boundary. In addition to residential receptors, the receptor grid includes the two schools located within 1,000 feet of the SJCC campus boundary – the Sherman Oaks Elementary School and the Neighborhood Christian Preschool. Modeling inputs and assumptions for the AERMOD run can be found in Appendix B. The annual concentration resulting from the dispersion modeling was applied to the yearly DPM and $PM_{2.5}$ emission rates estimated using CalEEMod, to represent the DPM and $PM_{2.5}$ concentrations at each receptor for each construction year.

Finally, the calculated DPM concentrations at the receptors for each construction year were applied to the OEHHA unit risk methodologies to calculate the potential increase in lifetime cancer risk, chronic non-cancer risk and $PM_{2.5}$ concentrations from the SJCC FMP's construction activities over the construction duration (OEHHA, 2015). The maximum impacted receptor was identified and the estimated increase in lifetime cancer risk was compared to BAAQMD project-level threshold of 10 in one million.

Non-cancer health hazards for chronic diseases are expressed in terms of a hazard index (HI), a ratio of TAC concentration to a reference exposure level (REL), below which no adverse health effects are expected, even for sensitive individuals. OEHHA has recommended an ambient concentration of 5 $\mu g/m^3$ as the chronic inhalation REL for DPM exhaust. The maximum HI, calculated as the ratio of maximum annual DPM concentration to the REL is compared to the BAAQMD threshold of 1.0, to determine significance. The estimated maximum annual $PM_{2.5}$ concentrations is compared to the BAAQMD threshold of 0.3 $\mu g/m^3$ to evaluate impacts.

Similarly, health risks were estimated for the Neighborhood Christian Preschool and the Sherman Oaks Elementary School located approximately 450 feet and 950 feet to the east and south of the project site, respectively.

The Santa Clara Valley Medical Center, located to the west of the SJCC campus across South Bascom Avenue would have hospital receptors. However, health risks from the SJCC FMP to hospital receptors would be less than those to residential receptors as their exposure duration would only be a fraction of the exposure duration of residential receptors. Further, hospitals are equipped with filtration systems with a minimum efficiency reporting value (MERV) of 13. An air filter's MERV rating measures how effectively the filter stops dust and other contaminants from passing through the filter and into the air stream. Filters with higher MERV ratings trap small particles more effectively than filters with lower MERV ratings. In general, filters with a rating of MERV 16 or below are used for residential, commercial and general hospital use. MERV 17 through MERV 20 filters are typically used in surgical operating rooms, clean rooms and other contexts that require absolute cleanliness. These high efficiency filters can remove particulates in the 0.3- to1-micron size range with an efficiency of 99.97 percent. Therefore, exposure to receptors at the hospital would be significantly lower than residential receptors.

OEHHA health risk parameters. OEHHA equations and the health impact calculations are detailed in Appendix B.

Operational Impacts

Operational Criteria Air pollutants

Buildout of changes proposed under the SJCC FMP would result in an increase in emissions of criteria air pollutants from the SJCC campus. The increase would result from the following sources:

- Mobile sources - Increase in vehicle trips to the campus due to increased student enrollment;
- Energy sources - Increase in combustion of natural gas combustion for space and water heating to serve the expanded campus;
- Area sources - Increase in on-site activities such as landscaping, use of maintenance architectural coatings, and use of consumer products such as cleaning products; and
- Stationary sources – Increase in emissions associated with testing and maintenance of the emergency generators.

Each of these sources is further discussed below.

Mobile Sources. Increased vehicle emissions associated with the SJCC FMP, notably from increase in student enrollment, would be one of the major sources of operational emissions. The net increase in VMT that would occur from the SJCC FMP that was used in this analysis to estimate vehicle-related emissions was derived from the transportation analysis in Section 3.6, *Transportation*. Full buildout from the SJCC FMP would result in a net increase of 1,211 daily trips when compared to existing levels and generate approximately 9,257 additional daily VMT (Hexagon Transportation Consultants, Inc., 2021). In addition to exhaust emissions, vehicles would also generate PM_{10} and $PM_{2.5}$ emissions from entrained road dust and tire and brake wear.

Emergency Generators. The SJCC campus currently includes an emergency generator at the existing GE building which is slated for demolition under the SJCC FMP. It is assumed that this generator would be replaced with a generator of similar size and more recent manufacture, thereby being more energy efficient and reducing emissions. In addition, the SJCC FMP would add a second emergency generator at the proposed Career Technology Education Building (CTE Building), which would be a new source of emissions. The proposed generators would require a permit to operate from the BAAQMD. Emergency generators must be tested monthly, and would be permitted to operate annually for no more than 50 hours per year for testing and maintenance purposes, typically for 1 hour per day each month. Emissions from testing and maintenance of the proposed generators were calculated using emission factors from the US EPA's AP-42 database of emission factors assuming a maximum of 50 hours of operation per year and 1 hour per day for each generator. Emissions from the existing generator were estimated using default emission factors within CalEEMod. Standard generators of a power rating of 650 kilowatts (kW), or 872 horsepower (hp) were assumed for both existing and proposed generators.

Natural Gas Combustion. Air pollutant emissions would be generated on-site from the combustion of natural gas for space and water heating in project buildings. The Central Plant serves the heating and cooling needs of the majority of the campus buildings. Buildings not served by the Central Plant are served by dedicated package systems. Total natural gas use for the campus under existing and projected future (2030) conditions with the project are estimated and presented in the *Utility Infrastructure Master Plan* prepared for the campus (P2S Eng., 2020). These estimates include natural gas consumed by the boilers at the Central Plant as well as natural gas supplied to buildings and facilities not served by the Central Plant. Emissions from natural gas combustion for the existing and future scenarios were calculated based on these estimates and emission factors for natural combustion within CalEEMod.

The Central Plant currently houses three boilers fueled by natural gas and are rated at 4.3 million BTU per hour each. Based on an agreement entered into between the BAAQMD and the District, all three boilers would be replaced with new boilers that comply with the emission limits in BAAQMD Regulation 9, Rule 7, Section 307. The new boilers would be a model certified by the BAAQMD for use under Regulation 9, Rule 7 and would be registered with the BAAQMD, or have a BAAQMD operating permit. As the project would not result in an increase in the number or capacity of the boilers at the campus and since the new boilers would replace high emitting older existing boilers, it is anticipated that there would be a reduction in emissions from the boilers.

Area Sources. The SJCC FMP would generate building-related operational emissions of criteria air pollutants from area sources including architectural coatings, landscaping equipment, and use of consumer products such as cleaning products. CalEEMod defaults were used to estimate emissions from these area sources under both existing and project scenarios.

Operational emissions were estimated using the CalEEMod program for the SJCC FMP buildout year of 2030. Though buildings renovated or constructed prior to 2030 could become operational soon after construction, this analysis focuses on the total increase in operational emissions upon full buildout of the SJCC FMP as compared to existing levels. The increase in emissions due to the SJCC FMP was estimated by separately modeling the existing and FMP scenarios. Inputs and assumptions used in modeling the existing and FMP scenarios are detailed in Appendix B.

Emissions from operations were assumed to occur 365 days a year (i.e., annual emissions were divided by 365 days to arrive at average daily emissions). Impacts were determined by comparing the estimated increase in daily operational emissions upon full buildout of the SJCC FMP to the BAAQMD's significance thresholds for operation.

Operational Health Risk

Emissions of TACs during operation of the SJCC FMP would be minimal. Increase in vehicle trips due to the project would primarily be in the form of gasoline-fueled vehicle trips made by the students and staff. DPM emissions from any increase in truck deliveries to the campus would be minimal and would be subject to CARB idling regulations per § 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.

Diesel emergency back-up generators would be required as a safety egress requirement for new buildings constructed as part of the proposed SJCC FMP that would exceed 75 feet in height. Therefore, it is assumed that the SJCC FMP would include two new emergency generators – one to replace the existing generator at the GE building and a second at the new CTE building. New diesel generators larger than 50 hp would be subject to the permitting and New Source Review requirements of BAAQMD Regulation 2, and must comply with the Air Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines. As part of the permit application, a source- and site-specific HRA would need to be conducted to ensure that health risks to nearby sensitive receptors would be less than 10 in 1 million. As a practical matter, BAAQMD will not issue a permit for a new generator that results in an operational cancer risk greater than 10 in one million. Therefore, required compliance with existing BAAQMD regulations would ensure that operational health risks from the project would be less than significant and are not discussed further in the analysis presented below.

Health Effects of Criteria Air Pollutants

In a 2018 decision (*Sierra Club v. County of Fresno*, 6 Cal.5th 502, also referred to as *Friant Ranch*), the California Supreme Court decided that CEQA requires disclosure of the potential for a project's emissions to affect human health when the project's criteria air pollutant emissions exceed applicable thresholds and contribute considerably to a significant cumulative impact. The decision requires EIRs to either (1) make a "reasonable effort" to substantively connect the estimated amount of a given air pollutant a project will produce and the health effects associated with that pollutant, or (2) explain why such an analysis is infeasible.[4]

The Court also clarified that CEQA "does not mandate" that EIRs include "an in-depth risk assessment" that provides "a detailed comprehensive analysis … to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure."[5]

Typically, the health impact of a particular criteria pollutant is analyzed by air districts on a regional scale, based on how close the area is to attaining the ambient air quality standards. Because air districts' attainment plans and supporting air quality modeling tools are regional in nature, they are not typically used to evaluate the impacts of individual projects on ambient concentrations of criteria air pollutants, or to correlate those impacts to potential resultant effects on public health. The complex nature of dispersion of criteria air pollutants and the complex atmospheric chemistry (especially in the case of ozone and fine particulate matter) limit the usefulness of applying the available models to predict health impacts on a project level. The accumulation and dispersion of air pollutant emissions within an air basin depends on the size and distribution of emission sources in the region and meteorological factors such as wind, sunlight, temperature, humidity, rainfall, atmospheric pressure, and topography. Various air districts in California agree that it is very difficult to quantify health impacts and that the specific tools and methods to use are still under development. Therefore, the health effects of criteria pollutants generated by the SJCC FMP are discussed qualitatively in this analysis.

Consistency with Clean Air Plan

As discussed above, the applicable air quality plan is the BAAQMD's 2017 CAP, which identifies measures to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce GHG emissions. Consistency with the CAP can be determined if the project supports the goals of the plan, includes applicable control measures from the plan and would not disrupt or hinder implementation of any plan control measures.

BAAQMD guidance states that lead agencies should consider three questions in assessing consistency with the 2017 CAP: (1) Would the project support the primary goals of the Clean Air Plan? (2) Does the project include applicable control measures from the Clean Air Plan? and (3) Does the project disrupt or hinder implementation of control measures identified in the Clean Air Plan?

To meet the primary goals, the CAP recommends specific control measures and actions. The 2017 CAP includes 85 control measures aimed at reducing air pollution in the SFBAAB. A tabular comparison of applicable control measures in the 2017 CAP and existing implementation mechanisms or elements of the project was completed to determine whether the proposed project would meet the primary goals of the 2017 CAP and whether the project includes all applicable

4 6 Cal.5th at 510–511.
5 6 Cal.5th at 521.

control measures. A qualitative assessment of whether the project would disrupt or hinder implementation of any 2017 CAP control measure was also completed.

Non-CEQA Impacts of the Environment on the Project

As discussed in the Regulatory Setting,[6] CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's users or residents, except where the proposed project would exacerbate an existing environmental condition. Accordingly, the identified significance criteria related to exposure of sensitive receptors to substantial pollutant concentrations are valid only to the extent that the proposed project would in some way exacerbate air quality conditions. For this EIR, air quality impacts on the proposed sensitive receptors were considered in the context of the contributions from new emissions from the proposed SJCC FMP, during both construction and operational phases, and not from existing emissions from off-site sources.

The CDC proposed under the SJCC FMP would include sensitive receptors on-campus. The CDC is proposed for construction in 2026 in the southern portion of the campus in the southeastern corner of the student parking lot E. Assuming that it would become operational immediately after completion of construction, future receptors at the CDC would be exposed to emissions from continuing construction activities associated with the project between 2026 and 2029.

Therefore, in addition to off-site receptors, the HRA also analyzes health risks to future on-site occupants of the CDC from exposure to SJCC FMP construction emissions. A separate AERMOD run was conducted to model concentrations at the future project receptors of the CDC. This run included emissions sources associated with construction activities that would occur after completion of the CDC represented as three polygon area sources. Health risks were calculated using OEHHA-recommended methodologies discussed earlier and the results were compared to BAAQMD thresholds.

Cumulative Impacts

Criteria Air Pollutants

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. If a project's contribution to the cumulative impact is considerable, then the project's cumulative impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels at which a project's individual emissions would be cumulatively considerable. Therefore, per the BAAQMD CEQA Guidelines, if a project exceeds the identified project-level significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. If a project generates emissions less than the identified significance thresholds, its emissions would not be considered cumulatively

[6] *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal.4th 369. Opinion Filed December 17, 2015.

considerable, resulting in a less than significant adverse air quality impact to the region's existing air quality conditions.

Cumulative Health Risk Assessment

The cumulative HRA tabulates the impact of SJCC FMP-related risks plus risks from off-site sources (stationary and mobile) in the vicinity of the campus at the off-site Maximally Exposed Individual Receptor (MEIR). BAAQMD recommends that the cumulative health risk analysis include other air emissions sources within a "zone of influence" of 1,000 feet surrounding the project site. As such, this evaluation includes combined health risks from all sources of TACs and $PM_{2.5}$ for those receptors within 1,000 feet of the project boundary.

Sources evaluated include BAAQMD-permitted stationary sources, roadways with more than 10,000 vehicles per day, highways, major roadways and any other major source of emissions within the zone of influence such as railways. BAAQMD provides tools for screening background health risk impacts for permitted stationary sources, major roadways and highways, and rail. The cumulative analysis relies on these tools. BAAQMD's Health Risk Calculator with Distance Multipliers was used to determine the impact from each permitted source to the MEIRs.

In addition, the cumulative analysis also considered health risks from future sources proposed as part of other projects in the project vicinity. The total cumulative risks to the MEIR is compared to the BAAQMD's cumulative health risk thresholds to determine significance of impacts.

Impacts and Mitigation Measures

Impact 3.1-1: SJCC FMP construction and operation could conflict with or obstruct implementation of the applicable air quality plan. (*Less than Significant with Mitigation*)

The most recently adopted air quality plan for the SFBAAB is the 2017 CAP. The CAP is a road map that demonstrates how the Bay Area will implement all feasible measures to attain ambient air quality standards in accordance with the requirements of the California Clean Air Act. It also provides a control strategy to reduce ozone, PM, air toxics, and GHGs.

BAAQMD recommends that consistency of a project with the applicable air quality plan be determined with respect to the following considerations.

- Support the primary goals of the CAP;
- Include applicable control measures from the CAP; and
- Avoid disrupting or hindering implementation of control measures identified in the CAP.

The primary goals of the 2017 CAP are to attain air quality standards, reduce population exposure to air pollutants, to protect public health in the Bay Area, and to reduce GHG emissions and protect the climate. Any project that would not support these goals would not be considered consistent with the 2017 Clean Air Plan. The recommended measure for determining project support of these goals is consistency with BAAQMD-approved CEQA thresholds of significance. Therefore, if the SJCC FMP would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the it would be considered consistent with the 2017 Clean Air Plan.

As discussed in detail under Impacts 3.1-2 and 3.1-3 below, the SJCC FMP would not result in emissions exceeding the BAAQMD threshold either during construction or operation. Therefore, the SJCC FMP would be considered to support the primary goals of the Clean Air Plan.

The Clean Air Plan includes 85 control measures aimed at reducing air pollutants and GHGs in the SFBAAB. These control measures are grouped into various categories and include stationary- and area-source measures, mobile-source measures, transportation control measures, land use measures, and energy and climate measures. The Clean Air Plan recognizes that, to a great extent, community design dictates individual travel mode and that a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and GHG emissions from motor vehicles is to channel future Bay Area growth into communities where goods and services are located nearby and people have a range of viable transportation options. Many of the Clean Air Plan measures address stationary sources and will be implemented by BAAQMD using its permit authority, and therefore, are not suited for implementation through project approval actions. The measures that are appropriate for implementation through project approvals are identified below.

Table 3.1-4 identifies the Clean Air Plan measures that may apply to the SJCC FMP. This table identifies each applicable control strategy and correlates it with specific elements of the project to determine consistency. Mitigation measures identified in Section 3.4, *Greenhouse Gas Emissions* would also ensure the SJCC FMP's consistency with the 2017 Clean Air Plan. These measures have been referenced in the consistency analysis presented in Table 3.1-4. The mitigation measures are detailed in Section 3.4, *Greenhouse Gas Emissions*.

TABLE 3.1-4
SJCC FMP CONSISTENCY WITH POTENTIALLY APPLICABLE 2017 CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Measure Description	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Measure?
SS21—New Source Review of Toxic Air Contaminants	SS21 requires a health impact review for new and modified sources that emit toxic air contaminants (TACs) in excess of trigger levels as regulated by BAAQMD Regulation 2, Rule 5 (Rule 2-5). It also establishes risk thresholds for mitigation and permit approval.	The SJCC FMP's emergency generators would comply with all applicable rules of BAAQMD Regulation 2 including Rules 1, 2 and 5.	Yes.
SS25—Coatings, Solvents, Lubricants, Sealants and Adhesives	SS25 will reduce emissions of ROG from architectural coatings and other materials by proposing more stringent ROG limits as appropriate.	The SJCC FMP would comply with all applicable BAAQMD rules and regulations regarding ROG emission limits.	Yes.
SS32—Emergency Backup Generators	SS32 will reduce emissions of DPM, TACs, and criteria pollutants from existing sources including emergency backup generators by enforcing Rule 11-18, resulting in reduced health risks to impacted individuals.	This draft regulation applies to existing sources. The SJCC FMP would replace the existing emergency generator and thus this regulation would not apply.	Yes.

TABLE 3.1-4
SJCC FMP CONSISTENCY WITH POTENTIALLY APPLICABLE 2017 CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Measure Description	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Measure?
SS36—Particulate Matter from Trackout	SS36 developed Regulation 6, Particulate Matter; Rule 6: Trackout (Rule 6-6) to address mud and dirt that can be "tracked out" from construction sites, bulk material storage, and disturbed surfaces onto public paved roads where vehicle traffic will pulverize the mud and dirt into fine particles and entrain them into the air.	Construction activities associated with the SJCC FMP would implement BMPs required by the BAAQMD, as part of Mitigation Measure 3.1-2, which would reduce trackout.	Yes, with implementation of Mitigation Measure 3.1-2.
SS38—Fugitive Dust	SS38 reduces particulate matter (PM_{10} & $PM_{2.5}$) fugitive dust emissions from traffic and other operations on construction sites, large disturbed surfaces, and other sources of fugitive PM emissions.	Construction activities associated with the SJCC FMP would implement dust control BMPs required by the BAAQMD as part of Mitigation Measure 3.1-2.	Yes, with implementation of Mitigation Measure 3.1-2.
TR3—Local and Regional Bus Service	TR3 aims to reduce emissions by improving existing transit service in the region's core transit systems, and include new bus rapid transit lines in San Francisco, Oakland and Santa Clara County.	Existing transit service to the campus is provided by VTA bus routes 25 and 61. The bus stops closest to the campus, near South Bascom Avenue and Renova Drive are located within one-half mile of the campus. Location of the SJCC campus with access to transit services serves to reduce to reduce emissions associated with automobile trips.	Yes.
TR5—Transit Efficiency and Use	TR5 will improve transit efficiency and make transit more convenient for riders through continued operation of 511 Transit, full implementation of Clipper® fare payment system and the Transit Hub Signage Program.	Transit service to the SJCC campus is provided by VTA bus routes with bus stops located within on-half mile of the campus. The Clipper® fare payment system can be used on VTA buses, and routes and schedules are available on 511 Transit.	Yes.
TR7—Safe Routes to Schools and Safe Routes to Transit	TR7 will facilitate safe routes to schools and transit by providing funds and working with transportation agencies, local governments, schools, and communities to implement safe access for pedestrians and cyclists. Likely projects will include implementation of youth outreach and educational programs to encourage walking and cycling, the construction of bicycle facilities and improvements to pedestrian facilities.	The SJCC campus is served by existing bike facilities on South Bascom Avenue, Leigh Avenue, and Parkmoor Avenue, The *San José Better Bike Plan 2025,* which the city is currently developing, is considering protected bike lanes on South Bascom Avenue, Moorpark Avenue, and Leigh Avenue, which would provide direct access to the campus. The existing and proposed network of bicycle facilities provide good connectivity between transit stops in the vicinity and the SJCC campus. The SJCC FMP proposes several improvements that would increase pedestrian safety within the SJCC campus including rideshare drop-off locations in parking Lots B and G and an expanded drop-off location at the Leland Avenue entrance which would serve as a pedestrian gateway into campus. The existing network of sidewalks and crosswalks in the SJCC campus vicinity provides pedestrians connectivity from pedestrian facilities within the campus boundary to nearby transit stops and other uses in the SJCC campus vicinity.	Yes.

TABLE 3.1-4
SJCC FMP CONSISTENCY WITH POTENTIALLY APPLICABLE 2017 CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Measure Description	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Measure?
TR8—Ridesharing	TR8 will promote ridesharing services and incentives through the implementation of the 511 Regional Rideshare Program, as well as local rideshare programs implemented by Congestion Management Agencies. These activities will include marketing rideshare services, operating a rideshare information call center and website, and provide vanpool support services. In addition, this measure includes provisions for encouraging car sharing programs.	Ridesharing services to the SJCC campus are available through the 511 Regional Rideshare Program as well as other private rideshare programs.	Yes.
TR9—Bicycle and Pedestrian Access and Facilities	The bicycle component of TR9 strives to expand bicycle facilities serving employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers. Typical improvements include bike lanes, routes, paths, and bicycle parking facilities. The bicycle component also includes a bike share pilot project that was developed to assess the feasibility of bicycle sharing as a first- and last-mile transit option. The pedestrian component of this measure is intended to improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment sites, and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width and intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes, and street trees.	The SJCC campus is served by existing bike facilities on South Bascom Avenue, Leigh Avenue, and Parkmoor Avenue, The *San José Better Bike Plan 2025,* which the city is currently developing, is considering protected bike lanes on South Bascom Avenue, Moorpark Avenue, and Leigh Avenue, which would provide direct access to the campus. The existing and proposed network of bicycle facilities provide good connectivity to the residential neighborhoods near the SJCC campus. The SJCC FMP would not remove any existing bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities In addition, the SJCC FMP includes several on-site improvements to improve pedestrian safety.	Yes.
TR13—Parking Policies	This control measure outlines how MTC and the BAAQMD, in cooperation with regional agency partners, will (1) take actions at the regional level to implement parking policies that will benefit air quality, and (2) encourage and support local agency parking policies to reduce motor vehicle travel and promote focused growth.	The SJCC FMP would incrementally add parking on-campus, however, this would be to address an existing parking shortfall issue.	Yes.
TR14—Cars and Light Trucks	This control measure summarizes actions by the BAAQMD, MTC, local businesses, city and county governments, and State and federal agencies to expand the use of Zero Emission Vehicles and Plug-in Electric passenger vehicles and light-duty trucks within the Bay Area.	Consistent with efforts by the BAAQMD, MTC and the City of San Jose to expand the use of Zero Emissions Vehicles, with the implementation of GHG Mitigation Measure 3.4-1e, Electric Vehicle Charging, the SJCC FMP would designate a minimum of 10 percent of total parking spaces for EV charging to promote the use of zero-emission vehicles and plug-in electric passenger vehicles.	Yes, with Implementation of GHG Mitigation Measure 3.4-1g.

TABLE 3.1-4
SJCC FMP CONSISTENCY WITH POTENTIALLY APPLICABLE 2017 CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Measure Description	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Measure?
TR22—Construction, Freight and Farming Equipment	TR22 directs the BAAQMD to work to reduce emissions from off-road equipment used in the construction, freight handling and farming industries by pursuing the following strategies: (1) offering financial incentives between 2017 and 2030 to retrofit engines with diesel particulate filters or upgrade to equipment with electric or Tier IV off-road engines; (2) work with the California Air Resources Board, the California Energy Commission and others to develop more fuel-efficient off-road engines and drive trains; and (3) work with local communities to encourage use of renewable electricity and fuels.	The SJCC FMP would reduce emissions from off-road construction equipment through the implementation of Mitigation Measure 3.1-3, Construction Health Risk Minimization Plan, which would require that all construction equipment used on-site be certified to Tier 4 Final emission standards.	Yes, with implementation of Mitigation Measure 3.1-3.
EN2—Decrease Energy Use	EN2 would decrease electricity demand through the adoption of additional energy efficiency policies and programs.	All renovated and newly constructed buildings under the SJCC FMP would be compliant with the most recent 2019 Title 24 standards. In addition, almost of the mitigation measures identified in Air Quality and GHG sections while reducing emissions would also reduce energy use.	Yes.
BL1—Green Buildings	BL1 seeks to increase energy efficiency and the use of on-site renewable energy—as well as decarbonize existing end uses—for all types of existing and future buildings.	The new CTE building is proposed to be designed as an all-electricity Zero Net Energy building relying entirely on carbon-free electricity. In addition, GHG Mitigation Measure 3.4-1c requires installation of on-site photovoltaic systems sized adequately to meet the energy needs of the new building at a minimum.	Yes, with GHG Mitigation Measures 3.4-1b and 3.4-1c.
BL2—Decarbonize Buildings	BL2 seeks to reduce greenhouse gas emissions, criteria pollutants and TACs by limiting the installation of space- and water-heating systems and appliances powered by fossil fuels.	The SJCC FMP would reduce GHG emissions, criteria pollutants and TACs through the use of all-electric heating systems in the CTE building. GHG Mitigation Measure 3.4-1b would require all new buildings to be constructed as Zero Net Energy buildings with no natural gas infrastructure and relying entirely on carbon-free electricity.	Yes.

SOURCE: Table complied by Environmental Science Associates in 2021 based on BAAQMD, 2017b.

As demonstrated in Table 3.1-4, on balance, the SJCC FMP is generally consistent with the transportation-related CAP control measures listed in Table 3.1-4 above. This is reflected in the reduction in VMT per student with the implementation of the SJCC FMP. Implementation of GHG **Mitigation Measure 3.4-1e, Electric Vehicle Charging** would ensure the SJCC FMP's consistency with Control Measure TR-14. In addition, mitigation measures proposed for adoption to reduce the effects described under Impacts 3.1-2 and 3.1-4 of this section, and Impact 3.4-1 of Section 3.4, *Greenhouse Gas Emissions* would also support control measures from the 2017 Clean Air Plan.

Lastly, the SJCC FMP involves improvements to the existing campus and would not cause the disruption, delay or otherwise hinder the implementation of any air quality plan control measure. Examples of projects that could cause the disruption or hinder implementation of the Clean Air Plan control measures are projects that would preclude the extension of a transit line or bike path or projects that propose excessive parking beyond parking requirements.

The SJCC FMP would maintain the existing character of the educational campus in an urban area with availability of local transit. It would not preclude the extension of a transit line or a bike path or any other transit improvement. Thus, the SJCC FMP would not disrupt or hinder implementation of control measures identified in the Clean Air Plan.

> **Mitigation:** Implement **Mitigation Measure 3.1-2: Best Management Practices for Controlling Particulate Emissions during Construction, Mitigation Measure 3.1-3: Construction Health Risk Reduction Plan, and Mitigation Measure 3.4-1e, Electric Vehicle Charging in Section 3.4, *Greenhouse Gas Emissions***.
>
> **Significance after Mitigation:** With the mitigation measures identified above, the SJCC FMP would not conflict with, or obstruct implementation of the *2017 Clean Air Plan*, and the impact would be **less than significant with mitigation incorporated**.

Impact 3.1-2: Construction activities associated with the SJCC FMP could result in a cumulatively considerable increase in emissions for which the SFBAAB is non-attainment under an applicable federal or State ambient air quality standard. (*Less than Significant with Mitigation*)

As discussed earlier, the SFBAAB is a non-attainment area for ozone, PM_{10} and $PM_{2.5}$ under federal and State air quality standards. The analysis below focuses on the potential for demolition, renovation and construction activities under the SJCC FMP to result in a cumulatively considerable net increase in construction emissions of ROG and NOx (ozone precursors) as well as PM_{10} and $PM_{2.5}$. Project-related emissions of these pollutants would be considered cumulatively considerable if the estimated average daily emissions from these activities would exceed emission thresholds set forth by BAAQMD.

SJCC FMP construction would generate emissions of criteria air pollutants, including those for which the SFBAAB is non-attainment. Criteria pollutant emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$would be generated from heavy-duty construction equipment, application of architectural coatings, paving, and on-road mobile sources from hauling, vendor, and worker trips. As discussed above in the *Methodology* section, emissions from construction equipment usage and vehicle trips were estimated using CalEEMod. Average daily emissions were estimated assuming construction activities to occur 5 days per week on average. Although it is possible that construction may occasionally occur beyond these days and hours, this is not anticipated to occur with enough frequency to materially affect average daily emissions associated with overall construction activities.

Table 3.1-5 presents the SJCC FMP's average daily unmitigated emissions of construction-related criteria air pollutants and compares them to BAAQMD's significance thresholds.

TABLE 3.1-5
AVERAGE DAILY UNMITIGATED CONSTRUCTION CRITERIA POLLUTANT EMISSIONS

Year	Average Daily Emissions (Pounds per Day)[a]			
	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Project Increase	5.1	16.4	0.6	0.6
BAAQMD Threshold	54	54	82	54
Exceeds Threshold?	No	No	No	No

NOTES:
NO_X = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; PM_{10} = particulate matter 10 microns or less in diameter; ROG = reactive organic gases

[a] Average daily construction emissions represent total annual emissions divided by 260 work days per year.

SOURCE: Data compiled by Environmental Science Associates in 2021 (refer to Appendix B).

Unmitigated SJCC FMP construction emissions would not exceed BAAQMD's CEQA thresholds of significance for all four pollutants. Thus, construction impacts would be **less than significant**.

Consistent with the BAAQMD's methodology, PM emissions shown in Table 3.1-5 include only exhaust emissions. In addition to exhaust emissions, emissions of fugitive dust would also be generated by construction activities associated with grading and earth disturbance, stockpiling, travel on paved and unpaved roads, and other activities. Such emissions could result in a potential significant impact. With regard to fugitive dust emissions, the BAAQMD CEQA Guidelines focus on implementation of recommended dust control measures rather than a quantitative comparison of estimated emissions to a significance threshold. Studies have shown that the application of BMPs at construction sites substantially control fugitive dust (WRAP, 2006) and individual measures have been shown to reduce fugitive dust by anywhere from 30 percent to 90 percent (BAAQMD, 2009). For all projects, the BAAQMD recommends the implementation of its *Basic Control Mitigation Measures* (BAAQMD, 2017a). These measures would be required to be implemented by the SJCC FMP in accordance with **Mitigation Measure 3.1-2** below. The BAAQMD considers implementation of these dust control measures to result in a less than significant impact due to construction fugitive dust.

Mitigation Measure 3.1-2: Best Management Practices for Controlling Particulate Emissions during Construction

To reduce impacts from fugitive dust emissions during SJCC FMP construction, construction contractors shall be required to implement the following BMPs recommended by the BAAQMD for all projects. These measures will reduce particulate emissions primarily during soil movement, grading and demolition activities but also during vehicle and equipment movement on unpaved project sites:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Significance after Mitigation: Less than Significant. Implementation of Mitigation Measure 3.1-2 would ensure that dust control measures implemented during construction would be consistent with the guidance from BAAQMD to reduce fugitive dust-related impacts to a less than significant level. Therefore, during construction, the project's contribution to the cumulative air quality impact in the SFBAAB would also be less than significant.

Impact 3.1-3: Operation of campus facilities and buildings developed under the SJCC FMP could result in a cumulatively considerable increase in emissions for which the SFBAAB is non-attainment under an applicable federal or State ambient air quality standard. (*Less than Significant*)

As discussed earlier, the SFBAAB is a non-attainment area for ozone, PM_{10} and $PM_{2.5}$ under federal and State air quality standards. The analysis below focuses on the potential for the increase in campus operational activities due to the project that would result in a cumulatively considerable net increase in operational emissions of ROG and NOx (ozone precursors) as well as PM_{10} and $PM_{2.5}$. Project-related emissions of these pollutants would be considered cumulatively considerable if the estimated average daily emissions from these activities would exceed emission thresholds set forth by BAAQMD.

Operation of buildings and facilities, and associated increase in student population, under the SJCC FMP would result in an increase in criteria air pollutant and precursor emissions, including ROG, NO_X, PM_{10} and $PM_{2.5}$. Emissions would be generated from a variety of sources, including onsite area sources (e.g., increased natural gas combustion for space and water heating, testing and maintenance of new backup generators, operation of landscape maintenance equipment, maintenance application of paint and other architectural coatings, use of consumer products such as cleaning products) and mobile on-road sources from as student and staff commute trips.

As discussed above in the *Methodology* section, increases in operational emissions associated with the SJCC FMP were calculated using the CalEEMod program using inputs detailed in Appendix B. **Table 3.1-6** presents the average daily unmitigated operational emissions of criteria air pollutants for existing and project scenarios. The table also compares the increase in emissions due to the SJCC FMP to average daily and annual significance thresholds from the BAAQMD CEQA Guidelines.

TABLE 3.1-6
INCREASE IN OPERATIONAL CRITERIA POLLUTANT EMISSIONS DUE TO SJCC FMP

Source	Average Daily Emissions[a,b] (lbs/day)			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Existing				
Mobile Sources	6.0	26.1	36.8	10.0
Area Sources	15.4	< 0.1	< 0.1	< 0.1
Natural gas Combustion	0.6	5.8	0.4	0.4
Emergency Generator	0.2	0.9	< 0.1	< 0.1
Total	**22.2**	**32.8**	**37.2**	**10.5**
With Project (2030)				
Mobile Sources	7.1	31.0	43.7	11.9
Area Sources	19.8	< 0.1	< 0.1	< 0.1
Natural Gas Combustion	1.1	10.4	0.8	0.8
Emergency Generators	0.1	1.8	< 0.1	< 0.1
Total	**28.2**	**43.1**	**44.5**	**12.7**
Net Change from Existing (lbs/day)	5.9	10.3	7.3	2.2
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	No	No	No	No
Net Change from Existing (tons/year)	1.1	1.9	1.3	0.4
BAAQMD Significance Threshold	10	10	15	10
Exceeds Threshold?	No	No	No	No

NOTES:
NO_X = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; PM_{10} = particulate matter 10 microns or less in diameter; ROG = reactive organic gases

[a] Operational emissions are presented for the full buildout year of 2030.
[b] Average daily construction emissions represent total annual emissions divided by 365 days per year.

SOURCE: Table compiled by Environmental Science Associates in 2021 (refer to Appendix B)

As shown in Table 3.1-6, the increase in operational emissions due to the SJCC FMP would not exceed BAAQMD's mass daily or annual significance thresholds for ROG, NO_X, PM_{10}, and $PM_{2.5}$. Although VMT associated with mobile sources would increase over existing conditions with buildout of the SJCC FMP, emissions from mobile sources would not significantly increase due to the greater efficiency of the overall vehicle fleet mix predicted for year 2030. These efficiencies are created by greater fleet fuel efficiency, increase in number of EVs and automobile emissions controls. Thus, the proposed SJCC FMP would result in a **less than significant** impact with respect to operational emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Mitigation: None required.

Impact 3.1-4: Construction activities associated with the SJCC FMP could lead to health risks from exposure of sensitive receptors to substantial concentrations of TACs. ***(Less than Significant with Mitigation)***

DPM represents the primary TAC of concern from construction activities. Construction activities associated with the SJCC FMP would generate DPM emissions from the combustion of diesel in internal combustion engines of construction equipment such as loaders, excavators, backhoes, cranes, as well as diesel-fueled heavy duty haul trucks. Existing sensitive receptors in the vicinity of the campus are detailed earlier in this section. The BAAQMD considers a 1000-foot radius from the emissions source as the zone of influence within which receptors are likely to be exposed to substantial pollutant concentrations. Therefore, this analysis focusses on impacts to residential uses, schools and preschools located within 1,000 feet of the campus boundary, in addition to the future on-site receptors at the proposed Child Development Center (CDC).

The key drivers to exposure sensitivity are concentration of pollutants and duration of exposure. Exposure is a function of the concentration of a substance or substances in the environment and the extent of exposure. According to OEHHA, health risk assessments should be based on a 30-year exposure period (OEHHA, 2015). However, such assessments should be limited to the period/duration of activities associated with the SJCC FMP.

To assess the SJCC FMP's potential to expose sensitive receptors to substantial concentrations of TACs, an HRA was conducted to assess increased cancer risk, non-cancer chronic health effects, and localized annual average $PM_{2.5}$ concentrations from project construction to off-site residential, off-site school and preschool and future on-site CDC receptors. The HRA analyzes maximum risks to off-site residential receptors assuming exposure to a third-trimester fetus.[7] To determine whether significant impacts would occur, the estimated cancer risk, non-cancer chronic risk, and annual average $PM_{2.5}$ concentration results were compared to the project-level health risk significance thresholds of an increase in cancer risk level greater than 10 in 1 million, a non-cancer chronic HI greater than 1.0, and an annual average $PM_{2.5}$ concentrations greater than 0.3 $\mu g/m^3$ of $PM_{2.5}$, respectively.

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7 As discussed above, adults are much less susceptible to increased cancer risk, so to assess worst-case scenario, this analysis accounts this "age sensitivity factor" by including results for child receptors.

As discussed in the *Methodology* section above, the HRA considered two exposure scenarios to assess worst-case risk at locations of both existing off-site and future on-site sensitive receptors:

- Exposure of existing off-site sensitive receptors to the entire duration of project construction from 2021 to 2029.
- Exposure of future on-site sensitive receptors at the CDC to project construction emissions occurring after its construction and occupancy. Based on the schedule provided by the District, the CDC is expected to be constructed from early to mid-2026. Conservatively assuming immediate operation upon completion of construction, occupants of the CDC would be exposed to continuing project construction emissions between 2026 and 2028.

Table 3.1-7 presents the results of the unmitigated HRA for these receptors. The maximally exposed off-site child resident MEIR would occur at the nearest residence south of the campus on Kingman Avenue. The estimated maximum risk to a child resident at the MEIR would occur when the third trimester exposure starts in 2026 and would result in an increase in lifetime cancer risk of 76.8 in 1 million, above the BAAQMD 10 in a million threshold. The risk at this location would be driven by construction activities associated with the CDC, the parking structure and the Aquatic Center. Child receptors at the Neighborhood Christian Preschool and the Sherman Oaks Elementary School would experience maximum increase in lifetime cancer risks of 1.8 and less than 0.01 in a million, respectively, which would be less than the significance thresholds. As shown in Table 3.1-7, all off-site receptors analyzed would experience an increase in chronic non-cancer risks below the BAAQMD threshold for Hazard Index of 1.0 $PM_{2.5}$ concentrations at all analyzed off-site receptors would also be less than the BAAQMD threshold.

Maximum increase in lifetime cancer risk at the future receptors of the CDC would exceed the BAAQMD threshold at 14.5 in 1 million, however, the highest chronic HI and $PM_{2.5}$ concentrations at this receptor would be less than the respective BAAQMD thresholds.

As the incremental lifetime cancer risk to existing nearby residential receptors and future CDC receptors would be above the 10 in one million risk threshold, this impact would be considered **significant**.

Mitigation Measure 3.1-3 identified below would require construction contractors to use construction equipment that meet the Tier 4 Final emission standards. **Table 3.1-8** presents the mitigated health risks for all receptor types under both scenarios. With mitigation, incremental lifetime cancer risk, chronic HI and $PM_{2.5}$ concentrations at all analyzed off-site and on-site receptors would be less than the respective BAAQMD project level thresholds for health risks. This impact would be **less than significant with mitigation**.

TABLE 3.1-7
UNMITIGATED INCREMENTAL INCREASE IN LIFETIME CANCER RISK, CHRONIC HAZARD INDEX, AND ANNUAL AVERAGE $PM_{2.5}$ CONCENTRATION FROM PROJECT CONSTRUCTION

Receptor Type/	Exposure Period	Incremental Increase in Lifetime Cancer Risk (in 1 million)[a]	Chronic Hazard Index[a,b]	Annual Average $PM_{2.5}$ Concentration ($\mu g/m^3$)[a,b]
Off-Site Receptors				
Resident Child MEIR[c]	2021 – 2028	**76.8**	0.05	0.25
Child at Sherman Oaks Elementary School	2021 - 2028	<0.001	0.005	0.02
Child at Neighborhood Christian School	2021 - 2028	1.8	0.003	0.02
Significance Threshold		10	1.0	0.3
Exceeds Threshold (Yes or No)?		**Yes**	No	No
On-Site Receptors				
Child at Child Development Center	2026 - 2028	**14.5**	0.03	0.15
Significance Threshold		10	1.0	0.3
Exceeds Threshold (Yes or No)?		**Yes**	No	No

NOTES: $\mu g/m^3$ = micrograms per cubic meter; HI = Hazard Index; MEIR = Maximally Exposed Individual Receptor; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

a **Bold values** represent risks that exceed thresholds.

b Hazard index values and annual average $PM_{2.5}$ concentrations represent the worst year of exposure, not a summation

c The resident child cancer risk MEIR is located at nearest residence south of the campus on Kingman Avenue.

SOURCES: Data compiled by Environmental Science Associates in 2021 (refer to Appendix B).

TABLE 3.1-8
MITIGATED INCREMENTAL INCREASE IN LIFETIME CANCER RISK, CHRONIC HAZARD INDEX, AND ANNUAL AVERAGE $PM_{2.5}$ CONCENTRATION FROM SJCC FMP CONSTRUCTION

Receptor Type/	Exposure Period/Max. Risk Year	Incremental Increase in Lifetime Cancer Risk (in 1 million)[a]	Chronic Hazard Index[a,b]	Annual Average $PM_{2.5}$ Concentration ($\mu g/m^3$)[a,b]
Off-Site Receptors				
Resident Child MEIR[c]	2021 - 2028	6.6	0.005	0.02
Child at Sherman Oaks Elementary School	2021 - 2028	<0.001	<0.001	0.002
Child at Neighborhood Christian School	2021 - 2028	0.1	<0.001	0.001
Significance Threshold		10	1.0	0.3
Exceeds Threshold (Yes or No)?		No	No	No
On-Site Receptors				
Child at Child Development Center	2026 - 2028	1.3	0.003	0.01
Significance Threshold		10	1.0	0.3
Exceeds Threshold (Yes or No)?		No	No	No

NOTES: $\mu g/m^3$ = micrograms per cubic meter; HI = Hazard Index; MEIR = Maximally Exposed Individual Receptor; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

a Mitigation assumes use of construction equipment that meet the EPA's Tier 4 Final emission standards.

b Hazard index values and annual average $PM_{2.5}$ concentrations represent the worst year of exposure, not a summation.

c The resident child cancer risk MEIR is located at nearest residence south of the campus on Kingman Avenue.

SOURCES: Data compiled by Environmental Science Associates in 2021 (refer to Appendix B).

Mitigation Measure 3.1-3: Construction Health Risk Reduction Plan

SJCC shall require construction contractors to implement a Construction Health Risk Reduction Plan that includes the following measures. These measures shall be included as part of contract specifications:

a. Construction contractors shall be required to demonstrate that all heavy-duty off-road construction equipment with engines greater than 25 horsepower used for construction activities shall be equipped with the most effective Verified Diesel Emissions Control Strategies (VDECS) available for the engine type. In this case, the best available VDECS would be implementation of Tier 4F engines as certified by CARB and EPA. This adherence shall be verified through submittal of an equipment inventory and Certification Statement to the BAAQMD. The Certification Statement must state that each contractor agrees to compliance and acknowledges that a significant violation of this requirement shall constitute a material breach of the contractor's agreement and/or the general contract with the project applicant.

b. Use alternative fuels as commercially available, such as renewable diesel, biodiesel, natural gas, propane, and electric equipment, to the extent feasible. Portable equipment shall be powered by grid electricity or alternative, non-fossil fuels (i.e., not diesel) instead of by diesel generators.

c. Idling times on all diesel-fueled commercial vehicles weighing more than 10,000 pounds shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to two minutes. This limit is more restrictive than the five-minute limit required by the California airborne toxics control measure (California Code of Regulations Title 13, Section 2485s). Clear signage to this effect shall be provided for construction workers at all access points.

d. Idling times on all diesel-fueled off-road equipment exceeding 25 horsepower shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to two minutes. Fleet operators must develop a written policy as required by California Code of Regulations Title 23, Section 2449 ("California Air Resources Board Off-Road Diesel Regulations").

Significance after Mitigation: Less than significant. Implementation of Mitigation Measure 3.1-3 would reduce construction-related health risks to less than the BAAQMD' project level thresholds by requiring use of Tier 4F lower-emissions equipment meeting the most stringent EPA standards.

Impact 3.1-5: The proposed SJCC FMP could lead to increased health risks from exposure of sensitive receptors to substantial concentrations of criteria air pollutants. ***(Less than Significant Impact)***

The health effects associated with emissions of criteria pollutants are described in the Air Pollutants of Concern discussion in Section 3.1.1 above. As described in the Criteria Air Pollutants discussion in *Section 3.1.2, Regulatory Setting*, compliance with the ambient air quality standards (NAAQS and CAAQS) indicates that regional air quality can be considered protective of public health.

The SJCC FMP would generate less than significant quantities of criteria pollutant emissions ROG, NO_X, and particulate matter, as discussed under Impact 3.2-4. However, the health impacts of these emissions on sensitive receptors is difficult if not speculative to quantify. Given that ozone is a secondary pollutant formed through a complex reaction between its precursors (i.e., NO_X and ROG) in the atmosphere with the presence of sunlight and meteorological conditions, the impacts of ozone are analyzed at a basin-wide or regional level rather than local (SCAQMD, 2014; SJVAPCD, 2014). The health-based ambient air quality standards for ozone are therefore the concentrations of ozone, not the mass emissions of their precursor pollutants NO_X and ROG. Because of the complexity involved with ozone formation, ozone concentrations, and the state of environmental science modeling in use at this time, it is infeasible to quantify targeted ozone concentrations from NO_X or ROG emissions attributable to a particular project or an area. Since the SJCC FMP would not exceed the numeric indicator for ROG and NO_X emissions during either construction or operation, it is not likely that project ROG and NO_X emissions could result in an increase in ground-level ozone concentrations in proximity to the project site or elsewhere in the SFBAAB.

As expressed in the *amicus curiae* brief submitted for the *Sierra Club v. County of Fresno* case (also known as the *Friant Ranch Case;* SJVAPCD, 2014), the CEQA significance thresholds for criteria pollutants from the air districts are set at emission levels tied to the region's attainment status and are emission levels at which stationary pollution sources permitted by the air district must offset their emissions. Therefore, given that the project would not exceed the mass emissions thresholds established by the BAAQMD, it is not likely that emissions from project-related activities will cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

The primary health concern with exposure to NO_X emissions is the secondary formation of ozone. As the *amicus curiae* briefs submitted for the *Sierra Club v. County of Fresno* case suggested, and as was stated above, because of the complexity of ozone formation, and given the state of environmental science modeling in use at this time, it is infeasible to determine whether, or to what extent, a single project's precursor (i.e., NO_X and ROG) emissions would potentially result in the formation of ground-level ozone, as well as when and where ground-level ozone would form. Furthermore, available models today are designed to determine regional, population-wide health impacts, and cannot accurately quantify ozone-related health impacts caused by project level NO_X or ROG emissions. Notwithstanding these scientific constraints, the disconnect between project level NO_X emissions and ozone-related health impact cannot be bridged at this time.

While specific ROGs may be TACs; they are not expected to present significant health risk impacts from project construction and operational activities. Construction would involve use of equipment and trucks powered by diesel engines that produce substantially fewer ROG emissions than gasoline powered motor vehicles. Potential health risks from DPM emissions generated by diesel equipment and trucks, discussed above under Impact 3.1-4, far outweigh the risks associated with ROG. ROG emissions generated by the project would be from motor vehicles, construction equipment, and architectural coatings, but the level of emissions generated would not result in the exceedances of the BAAQMD's significance thresholds as shown in Tables 3.1-5 and 3.1-6. Additionally, the Project would comply with BAAQMD Regulation 8, Rule 3, which restricts the ROG content of coatings for both construction and operational applications.

As discussed under Impacts 3.1-2 and 3.1-3, construction and operation of the SJCC FMP would not result in NOx or ROG emissions that exceed the BAAQMD's average daily or total annual emission thresholds that are established at health protective levels with an adequate margin of safety. Therefore, individual project emissions less than these levels would not be anticipated to result in an adverse health effects from exposure to ROG or NOx. The SJCC FMP's impact would be **less than significant**.

Mitigation: None required.

Cumulative Impacts

Impact C-3.1-6: Implementation of the SJCC FMP combined with cumulative development in the vicinity would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard. (Less than Significant with Mitigation)

BAAQMD developed thresholds of significance for both construction and operation with consideration of individual project emission levels that would be cumulatively considerable. If a project exceeds the identified project significance levels, then its emissions would be cumulatively considerable. The analysis in Impact 3.1-2 demonstrates that, with mitigation, the SJCC FMP's construction emissions would not exceed emission thresholds for ROG, NO_X, PM_{10} or $PM_{2.5}$. Likewise, the analysis under Impact 3.1-3 shows that operational emissions under the SJCC FMP would not exceed emission thresholds for ROG, NO_X, PM_{10} or $PM_{2.5}$. Therefore, the SJCC FMP's contribution to the cumulative air quality impact of the area would be less than significant during both construction and operation.

Impact 3.1-1 above, addresses potential impacts with respect to consistency with the BAAQMD 2017 Clean Air Plan. Because the 2017 Clean Air Plan focuses on reducing population exposure to air pollutants throughout the region, the assessment in Impact 3.1-1 is a cumulative analysis as it assesses consistency with a region wide air quality plan. Therefore, a separate cumulative assessment of consistency with the 2017 Clean Air Plan is not required.

Mitigation: Implement Mitigation Measure 3.1-2.

Significance after Mitigation: Less than Significant.

Impact C-3.1-7: Implementation of the SJCC FMP could contribute considerably to cumulative emissions of TACs and $PM_{2.5}$ that could expose sensitive receptors to substantial pollutant concentrations or health risks. (Less than Significant with Mitigation*)*

In addition to a project's individual TAC impacts during construction and operation, the BAAQMD recommends evaluating the potential cumulative health risks to sensitive receptors from existing and reasonably foreseeable future sources of TACs. The method for determining cumulative health risk requires the tallying of health risk from permitted stationary sources, major roadways, and any other identified substantial sources of TACs in the vicinity of a project site (i.e., within a 1,000-foot radius) and then adding the individual sources to determine whether the BAAQMD's cumulative health risk thresholds are exceeded.

Table 3.1-9 shows the health risks to the off-site residential MEIR identified under the construction health risk analysis in Impact 3.1-4 above, from project and cumulative sources. The only permitted stationary source within 1,000 feet of this receptor is the existing emergency generator at the existing GE building which would be demolished under the project. In addition, there are no foreseeable off-site cumulative construction projects in the project vicinity that could occur at approximately the same time as the project. Therefore, the cumulative health risks at the MEIR are a sum of the project's mitigated construction risks, operational risks and the background risks from mobile sources as determined using the BAAQMD's tools. As shown in Table 3.1-9, the cumulative health risks to the off-site MEIR under the SJCC FMP would be less than the BAAQMD's cumulative thresholds and hence, **less than significant**.

TABLE 3.1-9
CUMULATIVE HEALTH IMPACTS TO OFF-SITE MEIR

Source Type	Cancer Risk (persons per million)	Chronic Hazard Impact	$PM_{2.5}$ Concentration ($\mu g/m^3$)
Mobile Sources			
Highways	11.9	--	0.35
Major Roadways	4.3	--	0.09
Rail	2.8	--	0.005
Project Sources			
Mitigated SJCC FMP Construction	6.6	0.005	0.02
SJCC FMP Emergency Generators[a]	20.0	<0.01	0.01
Cumulative Impacts[b]	45.6	<0.01	0.48
BAAQMD Cumulative Significance Thresholds	100	10	0.8
Exceeds Cumulative Threshold?	No	No	No

NOTES:
a Risks posed by the generators are conservatively assumed to be at the maximum permitted value, but would likely be less.
b Cumulative totals may not add up due to rounding.

SOURCE: Appendix B.

Mitigation: Implement Mitigation Measure 3.1-3.

Significance after Mitigation: Less than Significant.

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3.2 Cultural Resources

This section assesses the potential for the proposed SJCC FMP to materially damage or disturb historic architectural resources. Prehistoric and historic-era archaeological resources and human remains were analyzed in the Initial Study and the impacts to these types of resources were determined to be less than significant with mitigation (see **Appendix A**). This section describes the existing environmental setting for historic architectural resources; discusses the federal, State, and local regulatory framework; and evaluates potentially significant impacts of the proposed project on historic architectural resources. Feasible mitigation measures are identified to avoid or minimize potentially significant impacts on these resources to the extent feasible.

Further, this study was initiated after Governor Gavin Newsom issued Executive Order N-33-20, a statewide shelter-in-place order in response to the pandemic. This has limited travel and forced the closure of publicly accessible archives; therefore, conducting in-person research at various repositories was not possible. However, the material that was available online and in ESA's own library, as well as the data provided by the District is sufficient to determine the presence or absence of historical resources pursuant to CEQA on the SJCC campus. The analysis is supplemented by additional research using information from the California Historic Resources Information System, historic map research, and previously completed building evaluations prepared for the campus included as **Appendix C**.

3.2.1 Environmental Setting

Definitions

The term *cultural resource* describes historic architectural resources (also referred to as the *built environment*); archaeological sites (both prehistoric and historic-era) consisting of material evidence of past human use of the landscape; and tribal cultural resources as places of importance to Native American tribes. As this section focuses only on historic architectural resources that is the only definition provided below.

Historic architectural resources include buildings, structures, objects, and historic districts. Residences, cabins, barns, military-related features, industrial buildings, and bridges are examples of historic resources. The CEQA Guidelines define a historical resource as:

(1) A resource in the California Register of Historic Resources (California Register);

(2) A resource included in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or

(3) Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California—provided the lead agency's determination is supported by substantial evidence in light of the whole record.

The City of San José Historic Resources Inventory (HRI) was established to identify historic resources of varying significance.[1] It includes properties listed on or eligible for the National Register of Historic Places (National Register) and California Register, as well as those listed as or eligible for listing as City Landmarks/Districts, Candidate City Landmarks/Districts, Structures of Merit, and Identified Sites/Structures. City Landmarks are those properties that have “historical, architectural, cultural, aesthetic or engineering interest or value of a historical nature.”[2] Structures of Merit and Identified Sites/Structures are considered of lesser historic significance, as defined in the *Envision San José 2040 General Plan* (City General Plan), but do not meet the criteria for City Landmark or Candidate City Landmark status as set forth in San José Municipal Code Chapter 13.48. Only City Landmarks and Districts, Candidate City Landmarks and Districts, and their contributors are considered historical resources under CEQA because all are defined with locally adopted criteria listed in City Historic Preservation Ordinance Chapter 13.48. (The City Landmark designation also includes National Register– and California Register–listed and eligible properties.) Identified Sites/Structures and Contributing Sites/Structures outside of City Landmark and Candidate Landmark Districts are classifications of the HRI that may require additional research and evaluation to determine specific areas significance and levels of eligibility.

Historic Context

City of San José

California was ceded to the United States at the end of the Mexican-American War in 1848 and became a state two years later with San Jose serving as the first capital. [3] The discovery of gold shortly after the annexation of California to the United States spurred growth in San José as a supply hub for gold seekers as well as for those that recognized its agricultural potential.[4] The combination of miners passing through, expanding agriculture, and the arrival of legislators spurred the rapid development.[5]

History of San José City College

The following is from the San José Modernism Historic Context Statement:[6]

> San José Junior College (renamed San José City College in 1958) was housed in San José High School buildings from its 1921 founding until 1928, and then physically associated with San José State College (now San José State University) from 1928-1953. In March 1948, the legislature received a recommendation that the Junior College and State College separate. In 1953, the San José Unified School District began overseeing the Junior College at its own campus on Moorpark Avenue at San José-Los Gatos Road (Project Site), where Higgins & Root Associates, AIA, had designed twenty “movable” units arranged

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1 The HRI is not a complete list of all historic resources in San José. It was last comprehensively updated in 2016 and is updated on a parcel-by-parcel basis through individual, project-based review. Parcels not listed on the HRI may qualify for listing upon further analysis and review.

2 City of San José, *City of San José Municipal Code* Section 13.48.020(A).

3 Sanjose.org website, https://www.sanjose.org/pdf/visit-san-jose-san-joses-history, accessed December 16, 2020.

4 Archives and Architecture, *Historical Overview and Context for the City of San Jose*, 1992, page 5.

5 Archives and Architecture, *Historical Overview and Context for the City of San Jose*, 1992, page 7.

6 PAST Consultants, LLC, *San Jose Modernism Historic Context Statement*, June 2009, pages 59-61.

around a quadrangle, costing $211,000. In Spring 1954, the Board of Education approved the college's site plan, which envisioned developing the 58-acre campus for 2,000 students. Immediate plans called for nine additional movable units, plus permanent buildings including an administration building, men's gymnasium, library, three science laboratories, plus football and baseball fields and a track.

By January 1956, the San José Mercury News labeled the Junior College as a "burgeoning giant among Santa Clara County schools" with 3,645 students, far above the 1954 estimate of 2,000 pupils. The fears that the Junior College and San José State would compete for students and duplicate offerings had been unfounded. The paper noted that given San José's rapid growth, the only thing that would slow the development of the Junior College would be lack of facilities rather than lack of enrollment.

Construction continued in the 1960s, when a new master plan was unveiled. The cover of the February 1961 San José-Santa Clara telephone directory featured an aerial rendering of the college. A new 11,814 square foot Speech Arts building, with a 350-seat theatre (reputedly "the most technically advanced in the San José area"), full stage, mobile orchestra pit, makeup rooms, three classrooms, and modern lighting system was completed in 1963 on the north end of campus. Higgins & Root Associates, AIA, was the architect and O.E. Anderson Co. was the contractor. Higgins & Root also designed the college's 24,600 square foot, concrete block Student Service Center Building (1962), with a sunken, 120 square foot landscaped courtyard, located just south of the Administration Building. In 1963, the San José/Evergreen Community College District was formed, comprising San José City College and Evergreen Valley College.

Historic Resources on the Project Site

Methodology/Identification of Historic Resources

The SJCC campus was established over 50 years ago; therefore, an assessment was conducted to determine if historic-age buildings were present and if these qualified as historic resource according to CEQA that could be significantly impacted by the proposed SJCC FMP. Archaeological Resource Management (ARM) prepared two reports in 2009; *Stage I: Historical Background & Photography of 12 Structures on the San Jose City College Campus* and *Stage II Historic Evaluation of 12 Structures on the San Jose City College Campus*. ARM concluded that "[n]one of the twelve structures on the San Jose City College campus evaluated for this report appear to be potentially eligible for in the National Register of Historic Places or the California Register of Historic Resources."[7]

The twelve buildings included the Men's Gymnasium (1955), Women's Gymnasium, also referred to as Auxiliary Gym in the past (1950), Swimming Pool (1960), Racquetball Courts (1977), Field House (c1960), Classroom Blocks (Buildings, 100, 200, 300, and the Central Plant; Building 300 is in the process of being demolished) (1952), and the three buildings associated

7 Archaeological Resources Management, *Stage II Historic Evaluation of 12 Structures on the San Jose City College Campus*, page 2.

with the Arts Complex (c1954). **Table 3.2-1** below summarizes the status of these buildings as potential historic resources.

TABLE 3.2-1
BUILDINGS AFFECTED BY PROPOSED PROJECT

Name/Number	Proposed Action	Year Built	Historic Resource Status
Building 200	Renovation	1952	Recommended ineligible (ARM, 2009)
RC Building	Renovation	NHA	n/a
Technology Center	Renovation	NHA	n/a
Jaguar Student Development and Multi-Cultural Center (formerly the Men's Gym)	Renovation	1955	Recommended ineligible (ARM, 2009)
Theater Arts Building	Renovation/addition(s)	c1954	Recommended ineligible (ARM, 2009)
Central Plant	Addition	1952	Recommended ineligible (ARM, 2009)
Track and Field	Addition	c1960	Recommended ineligible (ARM, 2009)
Business Building	Demolition	1961	Recommended ineligible (ESA, 2021)
General Education Building	Demolition	NHA	n/a

NOTES:
CL= City Landmark
IS = Identified Structure: Listed on the HRI as a potential historic resource pending further research and evaluation.
NHA = not historic-age

Summary of Significance

The proposed SJCC FMP proposes the renovation or demolition of ten (10) buildings, six of which are historic-age. Five of the historic-age buildings were evaluated by ARM in 2009 and one by ESA in 2021. A summary of each of the building evaluations is provided below. More detailed building evaluations are provided in Appendix C.

CTE Building 200 and the Central Plant

Career Technical Education (CTE) Building 200 and the Central Plant were included in ARM's 2009 evaluation as part of the Classroom Block. The Classroom Block also included CTE Building 100 and CTE Building 300. The 2009 report determined that there were no significant events or people associated with the Classroom Block and that the modernist architectural style was not a significant representation of that style.[8] As such the Classroom Block, which includes CTE Building 200 and the Central Plant, were recommended as ineligible.

Jaguar Student Development and Multi-Cultural Center (formerly the Men's Gym)

The Jaguar Student Development and Multi-Cultural Center, identified as the Men's Gym in the 2009 evaluation, was evaluated as part of the SJCC Athletic Complex. The SJCC Athletic Complex also included the Women's Gym, Swimming Pool, Field House, and Racquetball Courts. While it was noted that in the past seven decades former SJCC athletes have gone on to gain national significance by becoming Olympic champions and world record holders the

8 Archaeological Resources Management, *Stage II Historic Evaluation of 12 Structures on the San Jose City College Campus*, page 2.

associations were primarily with the track and not with the Men's Gym and other buildings; therefore, it was determined that the SJCC Athletic Complex, including the Men's Gym, was not associated with events or persons of historic significance (California Register Criteria 1 and 2).[9] "The structures are built in a modernist architectural style; however, they do not appear to be a significant enough example of modernism to be eligible for listing under criterion 3.[10] Therefore, the 2009 report recommended the SJCC Athletic Complex ineligible.

Theater Arts Building

The Theater Arts Building was evaluated in 2009 as part of the Fine Arts Complex. The Fine Arts Complex also included two smaller ancillary buildings that are attached by breezeways. The 2009 report determined that there were no significant events or people associated with the Fine Arts Complex and that the modernist architectural style was not a significant representation of that style.[11] Therefore, the 2009 report recommended the Fine Arts Complex, which includes the Theater Arts Building, as ineligible.

Business Building

ESA evaluated the Business Building (Building B) for eligibility for the California Register of Historical Resources and locally as a Candidate City Landmark or Structure of Merit. Due to its lack of association with significant events and people, lack of architectural distinction as a Higgins & Root designed project, and lack of information potential ESA recommends the Business Building as ineligible both at the state (California Register) and local levels.

There are no listed or eligible historical resources according to CEQA on the SJCC campus that could be impacted by the proposed SJCC FMP.

Historic Resources within 200-feet of the Project Site

There are no known historic resources within 200 feet of the SJCC campus.[12]

3.2.2 Regulatory Setting

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966, as amended (U.S. Code Title 54, Section 306108), and its implementing regulations established the National Register of Historic Places as a comprehensive inventory of known historic resources throughout the United States. The National Register is administered by the National Park Service under the direction of the Secretary of the Interior. It includes buildings, structures, sites, objects, and districts that possess historic, architectural, archaeological, engineering, or cultural significance. A property is

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9 Archaeological Resources Management, *Stage II Historic Evaluation of 12 Structures on the San Jose City College Campus*, page 2.

10 Archaeological Resources Management, *Stage II Historic Evaluation of 12 Structures on the San Jose City College Campus*, page 2.

11 Archaeological Resources Management, *Stage II Historic Evaluation of 12 Structures on the San Jose City College Campus*, page 2.

12 Northwest Information Center records search, July 27, 2020.

considered significant if it meets the criteria for listing in the National Register at Code of Federal Regulations Title 36, Section 60.4 (36 CFR 60.4), as stated below:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:
>
> A. Are associated with events that have made a significant contribution to the broad patterns of our history, or
>
> B. Are associated with the lives of persons significant in our past, or
>
> C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
>
> D. Have yielded, or may be likely to yield, information important in prehistory or history.

If a federal action is required for implementation of a project, National Historic Preservation Act Section 106 requires federal agencies to consider the effects of the undertaking on historic properties (properties listed in or eligible for listing in the National Register) and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. The Section 106 review normally involves a four-step procedure, which is described in detail in the implementing regulations (36 CFR Part 800). The four steps can be summarized as follows:

1. Identify historic properties in consultation with the State Historic Preservation Office and interested parties.
2. Assess effects.
3. Consult with the State Historic Preservation Office and others to develop and execute an agreement regarding the treatment of historic properties.
4. Proceed with the project according to the agreement.

Secretary of the Interior's Standards and Guidelines

The Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards) outline four specific approaches to the treatment of historic properties: preservation, restoration, rehabilitation, and reconstruction. CEQA references these standards when considering the significance of project impacts, or mitigation of said impacts on historic structures.

Of these approaches, rehabilitation is the most commonly applied set of standards. The Secretary of the Interior's Standards for Rehabilitation are as follows:[13]

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

[13] The exact wording of the standards varies depending on the source. These are taken from National Park Service, Technical Preservation Services website. Available at https://www.nps.gov/tps/standards.htm. Accessed March 30, 2020.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

State

California Register of Historical Resources

The California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1(a)). Certain resources are determined by law to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a historical resource must be significant at the federal, state, or local level under one or more of the following criteria (PRC Section 5024.1(c)):

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

(2) Is associated with the lives of persons important in our past.

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

Integrity is the authenticity of a historic resource's physical identity as shown by the survival of characteristics that existed during the period of significance. For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historic resource and to convey the reasons for its significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

Significance Criteria

For the purposes of this EIR, a cultural resources impact would be significant if implementing the proposed SJCC FMP would:

- Cause a substantial adverse change in the significance of a historic resource pursuant to CEQA Guidelines Section 15064.5

As stated previously, for the purposes of CEQA, historic resources are those resources listed or determined eligible for listing in the National Register or California Register, or as being designated or meeting the criteria for designation as City Landmarks and City Landmark Districts, including Candidate City Landmarks and Candidate City Landmark Districts. These include contributors to districts that also meet these criteria. Structures of Merit, Identified Sites/ Structures, Conservation Areas (including their contributing sites/structures), and Contributing Sites/Structures that are not associated with a Candidate or Landmark District are eligible for listing in the HRI and contribute to the historic fabric of San José but do not qualify as historic resources for the purposes of CEQA. They are presented in the preceding discussion for disclosure purposes and are not included in the impacts discussion below.

Potential Impacts to Archaeological Resources and Disturbance to Human Remains

As disclosed earlier, the Initial Study analyzed the potential impacts of the SJCC FMP to archaeological resources, and the potential disturbance to human remains. See the Initial Study–Appendix A, Cultural Resources subsection for discussions and identified mitigation measures. As demonstrated in the Initial Study, the resulting impact to these resources would be less than significant with implementation of mitigation measures as needed. Similarly, with implementation of the identified mitigation measures, the proposed SJCC FMP's contribution to cumulative impacts would not be considerable, and the impact would be less than significant with mitigation. As such these effects are not discussed further in this section.

3.2.3 Analysis, Impacts, and Mitigation

Approach to Analysis

Historic Resources

Potential impacts on historic resources were assessed by identifying any activities (during either construction or operations) that could affect resources identified as historic resources for the purposes of CEQA.

CEQA and CEQA Guidelines

Once a resource has been identified as a CEQA historic resource, it must be determined whether the project's impacts would "cause a substantial adverse change in the significance" of the resource (CEQA Guidelines Section 15064.5(b)). A substantial adverse change in the significance of a historic resource means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired" (CEQA Guidelines Section 15064(b)(1)). A historical resource is considered materially impaired through the demolition or alteration of the resource's physical characteristics that convey its historical significance and that justify its inclusion in the California Register (CEQA Guidelines Section 15064.5(b)(2)(A)).

Where potential impacts on historical resources are identified, CEQA Guidelines Section 15126.4(b) states that compliance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* will generally reduce potential impacts to a less-than-significant level. In addition, "in some circumstances, documentation of an historical resource … as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur" (CEQA Guidelines Section 15126.4(b)(2)).

Evaluation Summary

The project would result in the demolition of one historic-age building, the Business Building. ESA evaluated the Business Building for eligibility on the California Register and at the local level as a City of San Jose Landmark or Candidate City Landmark. The Business Building is recommended ineligible for listing in the California Register or locally as a City Landmark. The full evaluation of the Business Building is located in the Department of Parks and Recreation (DPR) 523 form set in Appendix C.

Impacts and Mitigation Measures

Historic Architectural Resources

Impact 3.2-1: Implementation of the SJCC FMP would demolish historic architectural resources, but would not result in a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. (No Impact)

Research has indicated that there are no known historic architectural resources located on the SJCC campus. The SJCC FMP would result in the demolition of one (1) historic-age building, the

Business Building. ESA evaluated the Business Building for eligibility on the California Register and at the local level as a Candidate City Landmark. A brief history of SJCC is provided above, as well as summery of the evaluation of the Business Building.

The full evaluation of the Business Building is located in the DPR523 form set in Appendix C. It has been evaluated for eligibility for the California Register of Historical Resources under the established four criteria.

It was determined that the Business Building was not eligible for listing on the California Register or at the local level as a Candidate City Landmark. The Business Building was built in 1961 in the International Style and was designed by Higgins & Root. The history of SJCC archival evidence did not reveal that any significant events were specifically associated with the Business Building (Criterion 1). The Business Building lacks association with significant events and people (Criterion 2). The Business Building is not considered an excellent surviving example of the Higgins & Root's work as little remains of the original master planned campus and it does not warrant consideration as a historic resource individually. Therefore, the Business Building is recommended ineligible for the California Register under Criterion 3. Research did not reveal that the Business Building would provide important information relevant to history or pre-history that was not already known (Criterion 4).

Due to these reasons, it has been recommended ineligible because it lacks association with significant events and people, lacks architectural distinction as a Higgins & Root designed project, and lacks information potential for qualification as a historic resource. Therefore, it is not a historical resource under CEQA. As there are no other historic resources on the SJCC campus the proposed SJCC FMP would have **no impact** to historical resources as defined in CEQA Guidelines Section 15064.5.

Mitigation: None required.

Cumulative Impacts

Impact C-3.2-2: Implementation of the SJCC FMP would result in cumulatively considerable impacts on historic architectural resources, in combination with past, present and reasonably foreseeable future projects in the vicinity of the SJCC campus site. (No Impact)

There are no historic architectural resources as defined by CEQA that would be impacted by the proposed SJCC FMP; therefore, no cumulative impacts would result from the proposed SJCC FMP.

Mitigation: None required.

3.2.4 References

Archaeological Resources Management, *Stage II Historic Evaluation of 12 Structures on the San Jose City College Campus*. Archives and Architecture, *Historical Overview and Context for the City of San Jose*, 1992.

National Park Service, Technical Preservation Services website. Available at https://www.nps.gov/tps/standards.htm. Accessed March 30, 2020.

PAST Consultants, LLC, San Jose Modernism Historic Context Statement, June 2009.

Sanjose.org website, https://www.sanjose.org/pdf/visit-san-jose-san-joses-history, accessed December 16, 2020.

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3.3 Energy

This section describes and evaluates effects on energy resources such as electricity, natural gas, and transportation fuels that could result from construction and operation of development proposed in the SJCC FMP. The section describes the existing energy infrastructure serving the SJCC campus and the existing energy consumption at the campus; summarizes federal, State, regional, and local laws and regulations related to energy demand and conservation; analyzes the potential impacts of the SJCC FMP related to energy demand; and identifies potentially feasible measures that could mitigate significant impacts.

The information has been prepared in accordance with Public Resources Code (PRC) Section 21100(b)(3), CEQA Guidelines Section 15126.2(b), and CEQA Guidelines Appendix F. Section 15126.2(b) and Appendix F provide that an EIR should evaluate potential impacts of a proposed project as a result of the demand for energy during the project's construction and operational phases and encourage measures to avoid or reduce inefficient, wasteful, or unnecessary consumption of energy.

The analysis in this section was developed based on project-specific construction and operational features described in Chapter 2, *Project Description*, and Section 3.7, *Utilities and Service Systems*. The analysis also accounts for and is consistent with assumptions made in Section 3.1, *Air Quality*, Section 3.4, *Greenhouse Gas Emissions*, and Section 3.6, *Transportation*.

3.3.1 Environmental Setting

State Energy Profile

Total energy usage in California was 7,967 trillion British thermal units (Btu) in 2018 (the most recent year for which data is available), which equates to an average of 202 million Btu per capita per year. These figures place California second among the 50 states in total energy use and 48th in per-capita consumption. Of California's total energy usage, the breakdown by sector is roughly 40 percent transportation, 23 percent industrial, 19 percent commercial, and 18 percent residential. Electricity and natural gas in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum-based fuel consumption is generally accounted for by transportation-related energy use (U.S. Energy Information Administration, 2021).

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, coal, and nuclear generation resources. Approximately 68 percent of the electrical power needed to meet California's demand is produced in the state; the balance, approximately 32 percent, is imported from the Pacific Northwest and the Southwest. In 2018, California's in-state electricity use was derived from natural gas (43 percent); large hydroelectric resources (16.5 percent); nuclear sources (8 percent); and renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (32 percent). Coal, oil and other sources generated the remaining 0.5 percent of California's in-state electricity use (California Energy Commission [CEC], 2021a).

Regional Setting

Electricity

Electricity, as a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of resources—including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources—into usable energy. The delivery of electricity involves a number of system components for distribution and use. Electricity is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours. For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 watt-hours. On a utility scale, the capacity of a generator is typically rated in megawatts (MW), which is 1 million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours, which is one billion watt-hours.

Pacific Gas and Electric Company (PG&E) provides electrical and natural gas services to approximately 16 million people throughout its 70,000-square-mile service area, across central, coastal, and Northern California, an area bounded by Humboldt County to the north and Kern County to the south (PG&E, 2021a). PG&E produces and purchases energy from a mix of conventional and renewable generating sources.

PG&E generates power from a variety of energy sources, including large hydropower (greater than 30 MW), natural gas, nuclear sources, and renewable resources, such as wind, solar, small hydropower (less than 30 MW), and geothermal sources. Approximately 29 percent of PG&E's 2019 electricity purchases were from renewable sources with 27 percent from large hydroelectric resources and 44 percent from nuclear (PG&E, 2020). In 2018, PG&E sold approximately 87,375,000 MWh to customers (PG&E, 2018). Refer to **Table 3.3-1** for a summary of electricity use at the state, regional and local levels.

In San José, electricity is provided by San José Clean Energy (SJCE), a Community Choice Program organized under California law. SJCE is one of 23 existing Community Choice Aggregators (CCAs) in California with the anticipation there will be more CCAs in the near future. The SJCE CCA purchases electricity directly from generators, which is then delivered by PG&E over its existing utility lines. Residents and businesses of San José are automatically enrolled in the GreenSource program, which provides 86 percent greenhouse gas (GHG) emissions–free electricity, or can elect to enroll in the "TotalGreen" program, which provides 100 percent GHG emissions–free electricity from entirely renewable sources. Customers can also opt out at any time and continue purchasing electricity from PG&E.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. In California, natural gas is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. Natural gas satisfies almost one-third of California's total energy demand. It can be measured in terms of both cubic feet and Btu.

TABLE 3.3-1
EXISTING ANNUAL STATE, REGIONAL, AND COUNTY ENERGY USE

Source	Amount per year
Electricity	
State[b]	279,401,880 MWh
PG&E[b]	87,375,000 MWh
Santa Clara County[b]	16,664,461 MWh
Natural Gas	
State	12,327,096,996 MMBtu
PG&E	1,016,713,000 MMBtu
Santa Clara County	45,972,076 MMBtu
Gasoline	
State	15,365,000,000 gallons
Santa Clara County	713,000,000 gallons
Diesel	
State	3,658,330,000 gallons
Santa Clara County	87,500,000 gallons

NOTES:
MMBtu = million British thermal units; MWh = megawatt-hours; PG&E = Pacific Gas and Electric Company

SOURCES:
[a] CPUC, 2021a; PG&E, 2018.
[b] PG&E, 2021b.
[c] CEC, 2020a.

PG&E provides natural gas transportation services to “core” customers and to “non-core” customers (industrial, large commercial, and natural gas–fired electric generation facilities) that are connected to its gas system in its service territory. Core customers can purchase natural gas procurement service (natural gas supply) from either PG&E or non-utility third-party gas procurement service providers (referred to as “core transport agents”). When core customers purchase gas supply from a core transport agent, PG&E still provides gas delivery, metering, and billing services to those customers. When PG&E provides both transportation and procurement services, PG&E refers to the combined service as “bundled” natural gas service. Currently, more than 95 percent of core customers, representing nearly 80 percent of the annual core market demand, receive bundled natural gas service from PG&E.

PG&E does not provide procurement service to non-core customers, who must purchase their gas supplies from third-party suppliers. PG&E offers backbone gas transmission, gas delivery (local transmission and distribution), and gas storage services as separate and distinct services to its non-core customers. Access to PG&E’s backbone gas transmission system is available for all natural gas marketers and shippers, as well as non-core customers. PG&E also delivers gas to off-system customers (i.e., outside of PG&E’s service territory) and to third-party natural gas storage customers.

Table 3.3-1 provides a summary of natural gas use at the state, regional and local levels.

Transportation Energy

According to the California Energy Commission (CEC), transportation accounted for nearly 41.1 percent of total energy consumption in California during 2017 (CEC, 2020b). In 2019, 15.4 billion gallons of gasoline and 3.7 billion gallons of diesel fuel were consumed in California (CEC, 2020a).[1] Petroleum-based fuels currently account for more than 90 percent of transportation fuel use in California (CEC, 2016).

The state has developed and is implementing strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, total gasoline consumption in California has declined. The CEC predicts that the demand for gasoline will continue to decline over the next 10 years and beyond, and there will be an increase in the use of alternative fuels (CEC, 2018a). According to fuel sales data from the CEC, fuel consumption in Santa Clara County was approximately 713 million gallons of gasoline and 89 million gallons of diesel fuel in 2019 (CEC 2020a).[2] Refer to Table 3.3-1 for a summary of statewide fossil fuel consumption in 2018–2019.

Local Setting

Existing annual energy use at the SJCC campus includes mobile sources and energy usage associated with the existing buildings on the campus. The 61-acre SJCC campus currently includes 19 buildings. Fourteen of the 19 campus buildings are over 30 years old, of which seven are approaching or exceed 60 years of age.

PG&E provides natural gas and electricity to the campus. The SJCC campus has its own electrical distribution system which receives 12-kilovolt (kV) and 4.16 kV service from PG&E and purchases its electric supply directly from PG&E. The newer 12 kV system enters through a single point at its Central Plant, and is distributed through a system of underground vaults to most of the newer buildings on the campus. The older 4.16 kV system feeds buildings 100 through 300. The Central Plant also includes a central heating and cooling system that provides heating and cooling to majority of the buildings on campus. The existing total annual electric and gas consumption at the campus is 5,590,455 kWh and 21,676.5 million British thermal units (MMBtu), respectively, with an energy use intensity of 60.5 kilo Btu per square foot per year (P2S Eng, 2020).

[1] Diesel is adjusted to account for retail (52 percent) and non-retail (48 percent) diesel sales. CEC-A15 results for diesel sales do not include non-retail diesel sales, which are 48 percent of total diesel sales. For purposes of this analysis, the 48 percent of non-retail diesel sales were accounted, and therefore, reported statewide diesel sales are higher than reported in the A15 results. Refer to footnote in the CEC-A15 results.

[2] Diesel is adjusted to account for retail (52 percent) and non-retail (48 percent) diesel sales. CEC-A15 results for diesel sales do not include non-retail diesel sales, which are 48 percent of total diesel sales. For purposes of this analysis, the 48 percent of non-retail diesel sales were accounted, and therefore, reported countywide diesel sales are higher than reported in the A15 results. Refer to footnote in the CEC-A15 results.

3.3.2 Regulatory Setting

Federal

Federal policies and regulations set broad energy efficiency standards and incentives for consumer products, automobile and fuel efficiency, and other purposes. Such requirements, as those listed below, tend to be primarily applicable to the automobile manufacturing sector but do have indirect applicability to the SJCC FMP. These federal requirements are listed here for informational purposes.

National Energy Conservation Policy Act

The National Energy Conservation Policy Act (NECPA) serves as the underlying authority for federal energy management goals and requirements. Signed into law in 1978, NECPA has been regularly updated and amended by subsequent laws and regulations. This law is the foundation of most federal energy requirements. NECPA established energy-efficiency standards for consumer products and includes a residential program for low-income weatherization assistance, grants and loan guarantees for energy conservation in schools and hospitals, and energy-efficiency standards for new construction. Initiatives in these areas continue today.

Energy Policy Act of 1992

The Energy Policy Act of 1992 was enacted to reduce U.S. dependence on foreign petroleum and improve air quality. This law includes several provisions intended to build an inventory of alternative-fuel vehicles in large, centrally fueled fleets in metropolitan areas. The Energy Policy Act of 1992 requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty alternative fuel vehicles capable of running on alternative fuels each year. Financial incentives were also included to drive efficiency and a greater use of renewable energy. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of alternative fuel vehicles. The Energy Policy Act of 1992 also requires states to consider a variety of incentive programs to help promote alternative-fuel vehicles.

Energy Policy Act of 2005

The National Energy Policy Act of 2005 sets equipment energy efficiency standards and seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, under the act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, including hybrid vehicles; constructing energy-efficient buildings; and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary micro-turbine power plants, and solar power equipment.

Executive Order 13423 (Strengthening Federal Environmental, Energy, and Transportation Management), signed in 2007, strengthens the key energy management goals for the federal government and sets more challenging goals than the Energy Policy Act of 2005. The energy reduction and environmental performance requirements of Executive Order 13423 were expanded upon in Executive Order 13514 (Federal Leadership in Environmental, Energy, and Economic Performance), which was signed in 2009.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 sets federal energy management requirements in several areas, including energy reduction goals for federal buildings, facility management and benchmarking, performance and standards for new buildings and major renovations, high-performance buildings, energy savings performance contracts, metering, energy-efficient product procurement, and reduction in petroleum use, including by setting automobile efficiency standards, and increase in alternative fuel use. This act also amends portions of the National Energy Policy Conservation Act.

Corporate Average Fuel Economy Standards

Established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (EPA) jointly administer the CAFE standards. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given to (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) the need for the nation to conserve energy.[3]

In September 2019, EPA finalized the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program and announced its decision to withdraw the Clean Air Act preemption waiver granted to the State of California in 2013 (EPA, 2019).

State

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The Act established a state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures.

California Energy Action Plan

California's *2008 Energy Action Plan Update* updates the *2005 Energy Action Plan II,* which is the state's principal energy planning and policy document. The plan maintains the goals of the original *Energy Action Plan*, describes a coordinated implementation plan for state energy policies, and identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. First-priority actions to address California's increasing energy demands are to promote energy efficiency, demand response (i.e., reducing customer energy usage during peak periods to address power system reliability and support the best use of energy infrastructure), and use of renewable power sources. To the extent that these strategies are unable to satisfy increasing energy and capacity needs, the plan supports clean and efficient fossil-fuel fired generation.

3 For more information on the CAFE standards, refer to https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy.

State of California Integrated Energy Policy

In 2002, the Legislature passed Senate Bill 1389 (SB 1389), which required the CEC to develop an integrated energy plan biannually for electricity, natural gas, and transportation fuels, for the California Energy Report. SB 1389 requires the CEC to prepare a biennial Integrated Energy Policy Report (IEPR) that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code Section 25301[a]). The IEPR has replaced the Energy Action Plan as the chief program intended to provide a comprehensive statewide energy strategy to guide energy investments, energy-related regulatory efforts and GHG reduction measures.

The 2019 Integrated Energy Policy Report provides the results of CEC assessments on a variety of energy issues facing California:

- Decarbonizing buildings;
- Integrating renewables;
- Energy efficiency;
- Energy equity;
- Integrating renewable energy;
- Updates on Southern California electricity reliability;
- Climate adaptation activities for the energy sector;
- Natural gas assessment;
- Transportation energy demand forecast; and
- California energy demand forecast.

Title 24 - California Energy Efficiency Standards

The Energy Efficiency Standards for residential and nonresidential buildings specified in Title 24, Part 6 of the California Code of Regulations were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated approximately every three years to allow for consideration and possible incorporation of new energy-efficiency technologies and methods. The current standards became effective on January 1, 2020 (CEC, 2021b).

California Green Building Standards Code (CALGreen, or Title 24 Part 11)

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. CALGreen is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment. Since 2011, the CALGreen Code is mandatory for all new residential and non-residential buildings constructed in the state. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2019, with new measures taking effect on January 1, 2020.

Renewables Portfolio Standard (RPS)

The State of California adopted standards to increase the percentage that retail sellers of electricity, including investor-owned utilities and CCAs, must provide from renewable resources. The standards are referred to as the RPS. Qualifying renewables under the RPS include bioenergy such as biogas and biomass, small hydroelectric facilities (30 MW or less), wind, solar, and geothermal energy. The CPUC and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy (CPUC, 2021b).

Executive Orders S-14-08 and S-21-09

In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expanded the state's RPS to 33 percent renewable power by 2020. In September 2009, Governor Schwarzenegger continued California's commitment to the RPS by signing Executive Order S-21-09, which directed the California Air Resources Board (CARB) under its AB 32 authority to enact regulations to help the state meet its RPS goal of 33 percent renewable energy by 2020.

SB 350 - Clean Energy and Pollution Reduction Act of 2015

SB 350, known as the Clean Energy and Pollution Reduction Act of 2015, was enacted on October 7, 2015, and provides a new set of objectives in clean energy, clean air, and pollution reduction by 2030. The objectives include the following:

- To increase from 33 percent to 50 percent by December 31, 2030, the procurement of the state's electricity from renewable sources.
- To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals that were established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly-owned utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers must also have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

On the same day that SB 100 was signed, Governor Brown signed Executive Order B-55-18 with a new statewide goal to achieve carbon neutrality (zero-net GHG emissions) by 2045 and to maintain net negative emissions thereafter.

Appliance Efficiency Regulations, California Code of Regulations Title 20

California's Appliance Efficiency Regulations (20 CCR Part 160-1608) contain standards for both federally regulated appliances and non-federally regulated appliances. The regulations are updated regularly to allow consideration of new energy efficiency technologies and methods. The current regulations were adopted by the CEC on November 18, 2009. The standards outlined in the regulations apply to appliances that are sold or offered for sale in California. More than 23 different categories of appliances are regulated, including refrigerators, freezers, water heaters, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings.

Transportation Energy

AB 1007 (Pavley)-Alternative Fuel Standards

Assembly Bill 1007 (Pavley, Chapter 371, Statutes of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the State Alternative Fuels Plan in partnership with the CARB and in consultation with other state, federal, and local agencies. The final State Alternative Fuels Plan, published in December 2007, attempts to achieve an 80 percent reduction in GHG emissions associated with personal modes of transportation, even as California's population increases.

California Assembly Bill 1493 (AB 1493, Pavley)

In response to the transportation sector being the largest contributor to California's carbon dioxide (CO_2) emissions, AB 1493 (commonly referred to as CARB's Pavley regulations), enacted on July 22, 2002, requires CARB to set GHG emission standards for new passenger vehicles, light duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009 through 2016 and Phase II established standards for model years 2017 through 2025 (CARB, 2021 and EPA, 2012). Refer to Section 3.4, *Greenhouse Gas Emissions*, of this EIR for additional details regarding this regulation.

Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products that started with a 0.25 percent reduction in 2011, and culminated in a 10 percent total reduction in 2020. In September 2018, CARB extended the LCFS program to 2030, making significant changes to the design and implementation of the program, including a doubling of the carbon intensity reduction to 20 percent by 2030. Carbon intensity claims are all subject to third-party verification.

Petroleum importers, refiners, and wholesalers can either develop their own low carbon fuel products or buy LCFS credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.

Executive Order B-16-12 - 2025 Goal for Zero Emission Vehicles (ZEV)

In March 2012, Governor Brown issued an executive order establishing a goal of 1.5 million ZEVs on California roads by 2025. In addition to the ZEV goal, Executive Order B-16-12 stipulated that by 2015 all major cities in California will have adequate infrastructure and be ‘zero-emission vehicle ready’ so that by 2020 the state will have established adequate infrastructure to support 1 million ZEVs; and that by 2050, virtually all personal transportation in the state will be based on ZEVs, and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

CARB’s Advanced Clean Car Program

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 and is closely associated with the Pavley regulations (CARB, 2021). The program requires a greater number of ZEV models for years 2015 through 2025 to control smog, soot, and GHG emissions. This program includes the Low-Emissions Vehicle regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and the ZEV regulations to require manufactures to produce an increasing number of pure ZEV’s (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025.

CARB’s Mobile Source Strategy

The Mobile Source Strategy (2016) includes an expansion of the Advanced Clean Cars program (which further increases the stringency of GHG emissions for all light-duty vehicles, and 4.2 million ZEVs and plug-in hybrid light-duty vehicles by 2030). It also calls for more stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero-emission trucks primarily for classes 3 through 7 “last mile” delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels. CARB’s Mobile Source Strategy includes measures to reduce total light-duty vehicle miles travelled (VMT) by 15 percent compared to business-as-usual in 2050.

Executive Order B-48-18

On January 26, 2018, Governor Brown issued an executive order establishing a goal of 5 million ZEVs on California roads by 2030 and to spur the installation and construction of 250,000 plug-in electric vehicle chargers, including 10,000 direct current fast chargers, and 200 hydrogen refueling stations by 2025.

California Community Colleges

Climate Change and Sustainability Resolution and Policy

In January 2020, the Board of Governors of the California Community Colleges adopted a *Climate Change and Sustainability Resolution* and *Climate Change and Sustainability Policy* (California Community Colleges, 2020) as part of their ongoing commitment to environmental sustainability and providing California community college students and their communities sustainable and safe learning environments. Together the resolution and policy acknowledge the urgency of climate change and its impact on community college campuses, communities and state.

Adoption of this policy and resolution aligns the efforts of the California Community Colleges on climate change and sustainability with California's *Climate Change Strategy*. The policy and resolution provide a set of seven goals to be achieved by 2030, with incremental progress for each expected by 2025, as shown in **Table 3.3-2**.

TABLE 3.3-2
GREENHOUSE GAS REDUCTION AND SUSTAINABILITY GOALS FOR CALIFORNIA COMMUNITY COLLEGES

By 2025	By 2030
1. Reduce GHG emissions to 30 percent below 1990 levels	Reduce GHG emissions to 40 percent below 1990 levels
2. Increase renewable energy consumption to 25 percent	Increase renewable energy consumption to 50 percent
3. 25 percent of fleet vehicles are zero-emission vehicles	50 percent of fleet vehicles are zero-emission vehicles
4. 50 percent of all new buildings and major renovations will be constructed as Zero Net Energy	100 percent of all new buildings and major renovations will be constructed as Zero Net Energy
5. 50 percent of all new buildings and major renovations will achieve at least a Leadership in Energy and Environmental Design (LEED) "Silver" or equivalent rating	100 percent of all new buildings and major renovations will achieve at least a LEED "Silver" or equivalent rating
6. Increase procurement of sustainable products and services by 20 percent compared to current levels	Increase procurement of sustainable products and services by 25 percent compared to existing levels
7. Reduce municipal solid waste by 25 percent compared to current levels	Reduce municipal solid waste by 50 percent compared to current levels

SOURCE: California Community Colleges, 2020.

The policy and resolution requires community college districts to develop their own local climate change and sustainability resolutions which may include commitments to implement the Board of Governors' Climate Change and Sustainability Policy and Resolution's goals locally, offer environmental sciences degrees and certificates with an emphasis on climate change, and other significant local climate change strategies and environmental sustainability measures thereby integrating climate change and sustainability into all facets of campus operations, and not just local facilities programs and business services.

San José Evergreen Community College District

In October 2020, the San Jose Evergreen Community College District adopted Resolution No. 101320-6 (San Jose Evergreen Community College District, 2020) affirming its commitment to pursue the 2025 and 2030 climate change and sustainability goals in the California Community Colleges Board of Governors' Climate Change and Sustainability Policy and Resolution.

3.3.3 Analysis, Impacts, and Mitigation

Significance Criteria

For the purposes of this EIR, an energy impact would be significant if implementing the proposed SJCC FMP would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Methodology

This impact analysis evaluates the potential for the proposed SJCC FMP to result in the wasteful use of energy or wasteful use of energy resources during construction and operation, consistent with Public Resources Code 21100(b)(3). The analysis provides construction and operational energy use estimates for the proposed SJCC FMP, which is used to determine whether this energy use would be considered wasteful, inefficient, or unnecessary, taking into account available energy supplies and existing use patterns, the SJCC FMP's energy efficiency features, and compliance with applicable standards and policies aimed to reduce energy consumption, including the state's Title 24 Energy Efficiency Standards. The quantification of SJCC FMP-related energy use presented in this section is based on the energy use assumptions and GHG emission estimates presented in Section 3.1, *Air Quality* and Section 3.4, *Greenhouse Gas Emissions*. Energy use during the construction and operation of the SJCC FMP are also assessed for consistency with local and state policies adopted to conserve and reduce energy consumption.

The data, assumptions, and methodology used to calculate energy use and assess potential impacts of the SJCC FMP are described below.

Construction Energy Use

Construction activities associated with implementation of the SJCC FMP would consume energy primarily in the form of transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, construction workers traveling to and from the campus. Electricity consumed by any electric powered construction equipment would be minimal in comparison to the amount of diesel and gasoline consumed. Natural gas is generally not used during construction.

Construction activities and the associated energy use could vary substantially from day to day, depending on the phase and specific type of construction activity and the number of workers and vendors who would travel to the campus. Construction associated with the FMP is expected to begin in May 2021 and last till 2029. This analysis relies on assumptions for the types, number and level of usage of construction equipment for each activity consistent with what was used for the air quality and GHG analyses. Though best estimates of energy consumption are provided for informational purposes, the analysis in this section relies on the two Appendix G CEQA checklist criteria listed above.

Diesel fuel consumption associated with on-site construction equipment have been estimated based on the GHG emissions estimates for off-road equipment from CalEEMod in combination with The Climate Registry (TCR) 2019 default factors for calculating CO_2 emissions from diesel fuel (TCR, 2020). All off-road construction equipment is assumed to be diesel-fueled.

With regard to on-road construction vehicles, it is assumed that light-duty automobiles and trucks used by commuting workers would be fueled by gasoline and that on-road construction vehicles, such as vendor and haul trucks for demolition debris, soil, and other material hauling, would use diesel fuel. This analysis assumes that no electric on-road vehicles would be used during construction under the SJCC FMP. The fuel quantities that would be required for on-road vehicles during construction have been calculated based on the GHG emissions associated with commuting workers and vendor and haul trips estimated using CalEEMod defaults for estimated trip counts and for worker, vendor, and haul trip lengths and TCR 2019 default factors for calculating CO_2 emissions from gasoline and diesel fuels (TCR, 2020).

Refer to **Appendix D** for detailed energy calculations.

Operational Energy Use

Operational energy impacts were assessed based on the increase in energy demand due to implementation of the SJCC FMP over existing conditions. The assumptions used here are the same as those used in Section 3.1, *Air Quality* and Section 3.4, *Greenhouse Gas Emissions*. Operational energy associated with existing conditions was subtracted from energy associated with the total operations with the implementation of the SJCC FMP to calculate the net increase in energy consumed at the campus due to the implementation of the SJCC FMP.

Electricity

Within CalEEMod, building electricity usage from existing buildings that would not be affected by the SJCC FMP were estimated using historical energy usage rates available in CalEEMod. Electricity use from new and renovated buildings was calculated based on the default 2016 Title 24 electricity usage rates in CalEEMod adjusted to reflect the additional reductions in the current 2019 Title 24 standards. In addition to electricity use associated with campus buildings, electricity demand from treatment and distribution of water use associated with operation of development under the SJCC FMP was calculated using CalEEMod estimates for indoor and outdoor water use and the electrical intensity factors for water supply and distribution. The SJCC FMP's estimated electricity demand was analyzed relative to the state's existing and planned energy supplies in 2030 (CEC, 2018) to determine whether PG&E would be able to meet the SJCC FMP's energy demands.

Natural Gas

Total existing and projected (2030) natural gas use for the campus was derived from the *Utilities Infrastructure Master Plan* for the SJCC campus (P2S Eng., 2020). This includes natural gas consumed at SJCC's Central Plant as well as that consumed at buildings not served by the Central Plant. The projected increase in natural gas demand due to the SJCC FMP was analyzed relative to the state's existing and planned energy supplies in 2030 (California Gas and Utilities, 2018) to determine whether PG&E would be able to meet projected energy demand. While the energy use would reduce over the life of the project, comparison to the analyzed first full operational year of 2030 provides a conservative analysis as supply projections for electricity and natural gas increase in future years.

Mobile Sources

Fuel use in mobile sources associated with operation of the SJCC FMP was estimated based on existing and projected VMT (as estimated in the transportation study prepared in support of this EIR), Santa Clara county-specific vehicle fleet mixes in EMFAC2017, and the fleet-average fuel consumption for each fuel. Fleet average fuel consumption factors for gasoline, diesel and natural gas were derived from the EMFAC2017 model. Electricity demand for EVs is based on VMT from EMFAC2017 and an estimated EV energy economy (in kWh per mile) of 34 kWh/100 miles (EPA, 2021).

Emergency Generators

Diesel fuel consumption associated with the testing and maintenance of the existing and proposed emergency generators are estimated based on the GHG emissions estimates from CalEEMod in combination with The Climate Registry (TCR) 2019 default factors for calculating CO_2 emissions from diesel fuel (TCR, 2020). The GHG estimates from CalEEMod assume a maximum 50 hours of operation per year for testing and maintenance, consistent with BAAQMD permit requirements.

The total annual operational energy use estimated for existing and future conditions with the implementation of the FMP are summarized in **Table 3.3-3** by energy use type. The net change in operational energy demand due to the SJCC FMP is the difference between the existing energy demand and the energy demand with the full buildout of development proposed under the SJCC FMP. Supporting calculations are provided in Appendix D.

TABLE 3.3-3
ANNUAL OPERATIONAL ENERGY USE AT SJCC FMP BUILDOUT

Energy Use Type	Existing Conditions in 2020	SJCC FMP Buildout in 2030	Net New Energy Use under SJCC FMP
Electricity from PG&E Grid (MWh/year)			
Campus Buildings & Facilities	5,928	6,804	876
Water Use	279	358	78
Mobile Sources	118	293	175
Total Electricity Use	**6,326**	**7,455**	**1,129**
Natural Gas (MMBtu/year)			
Central Plant & Campus Buildings	21,677	38,547	16,871
Mobile Sources[1]	440	568	128
Total Natural Gas Use	**22,117**	**39,115**	**16,998**
Diesel (gallons/year)			
Mobile Sources	108,118	111,461	3,343
Testing of Emergency Generators	1,626	4,494	2,868
Total Diesel Use	**109,744**	**115,954**	**6,211**
Gasoline (gallons/year)			
Mobile Sources	641,711	566,977	-74,735
Total Gasoline Use	**641,711**	**566,977**	**-74,735**

NOTES:
kBtu = thousand British Thermal Unit; MWh = Megawatt-hour.

1 EMFAC2017 includes compressed natural gas in terms of diesel gallon equivalents. This is converted into Btu per the U.S. Department of Energy Alternative Fuel Data Center conversion: 1 DGE of CNG = 128,488 Btu. Available at: https://afdc.energy.gov/fuels/equivalency_methodology.html.

Consistency with Plans and Policies

The assessment presented below also includes a discussion of the SJCC FMP's compliance with relevant energy-related regulatory requirements and incorporation of design features and mitigation measures discussed in Section 3.1, *Air Quality* and Section 3.4, *Greenhouse Gas Emissions*, that would minimize the amount of energy usage during construction and operation.

Impacts and Mitigation Measures

Impact 3.3-1: The SJCC FMP would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation. ***(Less than Significant)***

Construction Energy Use

Construction activities associated with implementation of the SJCC FMP would require the use of fuels (gasoline and diesel) for the operation of construction equipment and vehicles to perform a variety of activities, including excavation, hauling, paving, and transportation of construction workers and materials. Minimal amounts of energy in the form of electricity may also be consumed by some pieces of construction equipment, such as welding machines, power tools, lighting, and other equipment. However, the volume of electricity use during construction would be minor compared to diesel and gasoline use. Natural gas is not anticipated to be used for construction activities.

Table 3.3-4 below, presents the estimated total and annual average construction energy consumption by energy source for the SJCC FMP. It should be noted that the total energy consumption would occur incrementally over the construction duration of nine (9) years. The level of energy usage would fluctuate depending on the energy intensity of construction activities underway during any particular time period.

TABLE 3.3-4
SJCC FMP CONSTRUCTION ENERGY USE

Energy Use Type	Unit of Measure	Project Construction Usage
Diesel		
On-road vehicles	gallons/project	64,970
Off-road equipment	gallons/project	222,810
Total Diesel Use	gallons/project	287,780
Annual Average Diesel Use[1]	**gallons/year**	**31,976**
Gasoline		
On-road vehicles	gallons/project	36,433
Total Gasoline Use	gallons/project	36,433
Annual Average Gasoline Use[1]	**gallons/year**	**4,048**

NOTES:
1 Annual averages are estimated by dividing the total energy use by the expected 9-year duration of construction.
SOURCE: Appendix D.

As detailed in Table 3.3-4, it is estimated that construction related off-road equipment and on-road vehicles would consume a total of approximately 287,780 gallons of diesel fuel and on-road worker vehicles would consume a total of approximately 36,433 gallons of gasoline over the entire construction duration of the SJCC FMP. These total use amounts are equivalent to averages of approximately 31,976 gallons of diesel fuel per year and 4,048 gallons of gasoline fuel per year over the 9-year construction period. Note that while construction energy use is presented as an annual average of construction activities, some construction years would be more energy intensive when new construction takes place due to the phasing of activities. These annual average diesel and gasoline use amounts are equivalent to approximately 0.04 percent of the diesel and 0.001 percent of the gasoline sold in Santa Clara County annually. Overall, the use of diesel and gasoline fuels to construct development allowed under the SJCC FMP would not be substantial relative to the total sales of transportation fuels in Santa Clara County.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet more than 50 years of worldwide consumption (BP Global, 2021). Mobile sources associated with the SJCC FMP would comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Vehicles used for trips generated by the SJCC FMP would also comply with AB 1493 and the LCFS, which are designed to reduce vehicular GHG emissions, but would also result in additional fuel savings.

Construction of the SJCC FMP would use fuel-efficient equipment consistent with federal and State regulations, such as fuel-efficiency regulations in accordance with CARB’s Pavley Phase II standards; the anti-idling regulation in accordance with 13 CCR Section 2485; and fuel requirements for stationary equipment in accordance with 17 CCR Section 93115 (concerning Airborne Toxic Control Measures). Construction would also comply with State measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While these regulations are intended to reduce construction emissions, compliance with the idling restrictions and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines. Thus, the SJCC FMP’s construction-related energy use would be minimized and construction would not result in the wasteful, inefficient, or unnecessary consumption of energy. This impact would be **less than significant**.

Operation

Operation of the SJCC FMP would require long-term consumption of energy in the form of electricity, natural gas, diesel and gasoline. Electricity would be used as the primary power source for the operation of HVAC system and lighting needs of buildings. In addition, water used in campus buildings would require the consumption of electricity to supply, treat, and distribute potable water and also to convey and treat wastewater generated at the new buildings constructed under the FMP. Natural gas would be used at the SJCC’s Central Plant to provide the heating and cooling needs of the majority of the campus buildings. Natural gas would also be supplied to buildings that are not served by the Central Plant. Testing and maintenance of the proposed emergency generators would consume diesel fuel. The vehicle trips generated by the implementation of the SJCC FMP would primarily require the use of gasoline and diesel, but also an increasing amount of electricity and a smaller amount of natural gas to fuel these vehicle trips.

Table 3.3-3 summarizes the total annual operational energy use upon buildout in 2030, which also shows the energy use associated with existing uses. The difference between existing and projected 2030 energy use is the net change in energy use attributable to the SJCC FMP.

As shown in Table 3.3-3, implementation of the SJCC FMP would result in an annual net new energy demand of approximately 1,129 MWh of electricity, 16,998 MMBtu of natural gas, and 6,211 gallons of diesel. However, the annual gasoline consumption from vehicle trips to the campus are expected to reduce by approximately 74,735 gallons per year. Though the SJCC FMP would result in an increase in VMT, the increase in fuel efficiency between existing and 2030 conditions, as well as the introduction of EVs, more than offset the emissions increase from the increased VMT resulting in a net reduction in gasoline usage. Based on EMFAC2017, average fleet-wide fuel efficiency for gasoline fueled vehicles is expected to increase from 25.8 miles per gallon (mpg) in 2019 to 34 mpg in 2030.

Electricity

Assuming compliance with 2019 Title 24 Building Energy Efficiency standards and applicable 2019 CALGreen Code requirements, at buildout, campus buildings and facilities would result in a projected net increase in the annual demand for electricity totaling approximately 876 MWh.

Based on data collected by the CEC's California Energy Consumption Database, the state's total electricity consumption for 2019 was 279,401,880 MWh of electricity and Santa Clara County's total electricity consumption for 2019 was 16,664,461 MWh (CEC, 2018b). As such, the SJCC FMP-related net increase in annual electricity consumption of 1,129 MWh, would represent approximately 0.003 percent of statewide electricity and 0.05 percent of countywide electricity. Furthermore, statewide energy demand for 2030 is estimated at 326,026,000 MWh (CEC, 2018b). The future energy use due to the SJCC FMP would represent a very small percent of future state consumption, and would be within projected electricity supplies.

With regard to peak-load conditions, the State's grid system experienced an annual high peak of 46,424 MW on July 5, 2018. On the same day, PG&E experienced a peak annual demand of 19,245 MW (California Independent System Operator, 2019). In comparison, the proposed SJCC FMP would consume a net increase of 1,129 MWh on an annual basis; assuming 12 hours of active electricity demand per day, that would be equivalent to approximately 0.3 MW at buildout (peak demand assuming 4,380 hours per year of active electricity demand).[4]

This estimate also conservatively excludes the benefits of improvements in demand response attributable to the Title 24 energy standards, which would further reduce peak demand. The Title 24 Building Energy Efficiency Standards include measures that encourage load shifting and demand response. Title 24 energy use performance standards are based on the time-dependent valuation of energy, which uses the value of the electricity or natural gas used at every hour of the year to incentivize load shifting off of the peak. Increase in energy use due to the SJCC FMP

4 Calculated as follows: 1,129 MWh / 4,380 hours = 0.3 MW.

would not have a substantial impact on the peak- and base-period demands for electricity or other forms of energy. Therefore, the SJCC FMP's operational electricity consumption would have a negligible effect on peak-load conditions of the power grid.

In addition to complying with the CALGreen Code, as required by Mitigation Measure 3.4-1f of Section 3.4, *Greenhouse Gas Emissions*, all renovated and newly constructed buildings on-campus would be required to incorporate design features necessary to achieve the LEED Silver certification level. In addition, Mitigation Measures 3.4-1a requires that all electricity used on campus be derived from carbon-free, renewable sources, while Mitigation Measure 3.4-1c would require installation of on-site photovoltaic systems to generate power to meet the needs of the newly constructed buildings, at a minimum. Mitigation Measure 3.4-1i would require the SJCC FMP to implement measures to conserve water and promote the use of reclaimed water, which would help reduce electricity consumption needed to treat and transport water used at the campus. Implementation of these measures would further reduce energy consumption, promote energy efficiency, and increase the use of renewable electricity at the campus. Therefore, operation of the proposed SJCC FMP would not result in the wasteful, inefficient, or unnecessary consumption of electricity, and the impact would be **less than significant**.

Natural Gas

As discussed earlier, the SJCC's Central Plant provides the heating and cooling needs of the majority of buildings on campus. Buildings not served by the Central Plant are served by dedicated package systems. Based on the *Utility Infrastructure Master Plan* prepared for the campus, natural gas usage is anticipated to increase from 21,677 MMBtu in 2019 to 38,547 MMBtu in 2030 with the implementation of the SJCC FMP. Natural gas for vehicles would also increase and is discussed below in the Transportation Energy section. Though natural gas usage will increase with the FMP, greater efficiencies would be introduced through newer equipment and systems. The Central Plant currently houses three boilers fueled by natural gas that are rated at 4.3 million BTU per hour each. Based on an agreement entered into between the BAAQMD and the SJECCD, all three boilers would be replaced with new boilers that comply with the emission limits in BAAQMD Regulation 9, Rule 7, Section 307. The new boilers would be more energy efficient than the existing ones.

As discussed above, in addition to complying with applicable regulatory requirements regarding energy conservation (e.g., California Building Energy Efficiency Standards and the CALGreen Code), the SJCC FMP also includes design features to further reduce natural gas use. The Career Technology Education (CTE) Building is proposed to be constructed as a Zero Net Energy Building relying entirely on renewable energy in the form of electricity. This would reduce future natural gas use at the campus.

In the 2018 California Gas Report, PG&E accounts for anticipated regional demand based on various factors, including growth in employment by economic sector, growth in housing and population, and increasingly demanding state goals for reducing GHG emissions. PG&E accounts for an increase in employment and housing from 2018 to 2035. The proposed would be consistent with the growth projections set forth in the 2018 California Gas Report.

Furthermore, the 2018 California Gas Report estimates that the future supply of natural gas within the PG&E planning area will be approximately 1,177,147,000 MMBtu (California Gas and Electric Utilities, 2018). As stated above, the SJCC FMP's annual net increase in demand for natural gas is estimated to be approximately 16,998 MMBtu. Thus, increase in natural gas use due to the SJCC FMP would account for approximately 0.001 percent of the forecasted annual consumption in the PG&E planning area; would fall within PG&E's projected consumption for the area; and would be consistent with PG&E's anticipated regional demand from population or economic growth. In addition, GHG mitigation Measure 3.4-1b requires that all new buildings be constructed as Zero Net Energy to reduce GHG emissions which would further reduce future natural gas usage.

Therefore, operation of the SJCC FMP would not result in the wasteful, inefficient, or unnecessary consumption of natural gas, and the impact would be **less than significant**.

Transportation Energy

During operation, increase in vehicle use due to the SJCC FMP would consume petroleum-based fuels for vehicular travel to and from the campus. The SJCC campus is located in an area well served by public transit. Existing transit service to the study area is provided by the Santa Clara Valley Transportation Authority (VTA). Four local VTA bus routes, one rapid VTA bus route, one VTA express bus route, and one light rail train route (Green Line) serve the vicinity of the campus. Part of the campus is located in a Priority Development Area and Transit Priority Area, which designate the site as an area for future growth due to transit access and proximity to job centers, shopping districts, and other services.

Though the implementation of the SJCC FMP would increase vehicle trips to the campus due to increased student enrollment, the location of the SJCC campus with access to transit would result in a reduction of VMT per student when compared to existing conditions. The vehicle fleet that would be used by staff and students would consist primarily of light-duty automobiles, which are subject to fuel-efficiency standards. Other trips to the campus would include truck trips for delivery of materials, waste collection and maintenance-related activities. Most of these trips would also be subject to fuel-efficiency standards and/or compliance with anti-idling regulations for medium- and heavy-duty vehicles.

As reported in Table 3.3-3, the SJCC FMP's mobile sources would result in an annual net increase in diesel usage of approximately 3,343 gallons per year while gasoline usage is anticipated to decrease by approximately 74,735 gallons per year. As discussed earlier, the reduction in gasoline usage is due to the increase in average fleet-wide fuel efficiency for gasoline fueled vehicles, which would more than offset the increase in gasoline use due to the increased VMT. Based on the California Energy Commission's *California Annual Retail Fuel Outlet Report*, statewide consumption amounted to 15,365,000,000 gallons of gasoline and 3,658,330,000 gallons of diesel. Santa Clara County consumed 713,000,000 gallons of gasoline and approximately 87,500,000 gallons of diesel fuel in 2019 (CEC, 2020a). Transportation fuel use due to the implementation of the SJCC FMP would account for 0.0002 percent of statewide consumption and 0,007 percent of countywide consumption of diesel, based on the available county fuel sales data for the year 2019.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet more than 50 years of worldwide consumption (BP Global, 2019). Fuels used for vehicle trips resulting from the SJCC FMP would be required to comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Vehicles used for the increased number of trips to the SJCC campus due to the SJCC FMP would also comply as applicable with AB 1493 and the LCFS, which are designed to reduce vehicular GHG emissions, but would also result in additional fuel savings.

For these reasons, energy use associated with the operation of the SJCC FMP would not be considered wasteful, inefficient, or unnecessary, and the impact would be **less than significant**.

> **Mitigation:** None required. However, implementation of Mitigation Measures 3.1-1a, 3.1-1b, and 3.1-1c in Section 3.1, *Air Quality* and Mitigation Measures 3.4-1a through 3.4-1i in Section 3.4, *Greenhouse Gas Emissions* would further reduce energy consumption and increase use of renewable energy.

Impact 3.3-2: Energy use associated with the implementation of the proposed SJCC FMP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. *(Less than Significant with Mitigation)*

California Community Colleges Climate Change and Sustainability Resolution and Policy

As detailed in Section 3.4, *Greenhouse Gas Emissions*, the SJCC FMP was found to be inconsistent with the goals of the *Climate Change and Sustainability Resolution and Policy* adopted by the Board of Governors of the California Community Colleges in January 2020. Based on Resolution 101320-6 adopted by the San Jose Evergreen College District, development at the SJCC campus would be required to implement measures to comply with the GHG reduction and sustainability goals of the *Climate Change and Sustainability Resolution and Policy*. The eight goals enumerated in this Policy address energy efficiency and use of renewable energy in addition to reducing GHG emissions.

Mitigation Measures 3.4-1a through 3.4-1j have been identified in Section 3.4, *Greenhouse Gas Emissions*, to ensure the SJCC FMP's consistency with the goals of the *Climate Change and Sustainability Resolution and Policy*. This consistency determination is detailed in Table 3.4-8 in Section 3.4, *Greenhouse Gas Emissions.* Therefore, with mitigation, the SJCC FMP would be consistent with the goals of the *Climate Change and Sustainability Resolution and Policy.*

CALGreen Code and Title 24

Buildings and facilities proposed under the SJCC FMP would be designed in a manner that would be consistent with relevant energy conservation plans designed to encourage development resulting in the efficient use of energy resources. The SJCC FMP would comply with the most recently adopted CALGreen Code and Title 24 requirements to reduce energy consumption by implementing energy-efficient building designs, reducing indoor and outdoor water demands, providing EV charging spaces, and installing energy-efficient lighting, appliances and equipment. The SJCC FMP would be required to implement LEED efficiency strategies and incorporate water conservation, energy conservation, and other features consistent with the CALGreen Code, Title 24, City and community college sustainability goals. Thus, the impact would be **less than significant with mitigation**. In addition, implementation of Mitigation Measure 3.4-1f would require that all new buildings and major renovations shall be constructed to achieve LEED Silver or equivalent rating. This would ensure that the SJCC FMP would surpass energy efficiency regulatory requirements set forth in the Title 24 building standards. As a result, the SJCC FMP would not conflict with or obstruct a state plan for renewable energy or energy efficiency.

> **Mitigation:** Implement Mitigation Measures 3.4-1a through 3.4-1j in Section 3.4, *Greenhouse Gas Emissions*.
>
> **Significance after Mitigation:** Less than Significant. Implementation of mitigation measures identified above would ensure the SJCC FMP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Cumulative Impacts

Impact C-3.3-3: Energy use associated with the implementation of the SJCC FMP would not result in a cumulatively considerable contribution to a significant energy impact. ***(Less than Significant with Mitigation)***

The geographic area for cumulative energy impacts is the State of California. Past, present, and future development projects contribute to the state's energy impacts. If a project is determined to have a significant energy impact, it is concluded that the impact would be cumulatively considerable. As discussed under Impacts 3.3-1 and 3.3-2, with mitigation measures identified, the SJCC FMP would not result in significant energy impacts or conflict with or obstruct a state or local plan for energy efficiency. The SJCC FMP, therefore, would not have a cumulatively considerable contribution to a significant cumulative energy impact. As a result, the cumulative impact of the SJCC FMP would be **less than significant with mitigation**.

> **Mitigation:** Implement Mitigation Measures 3.1-1a, 3.1-1b, and 3.1-1c in Section 3.1, *Air Quality* and Mitigation Measures 3.4-1a through 3.4-1j in Section 3.4, *Greenhouse Gas Emissions*.
>
> **Significance after Mitigation:** Less than Significant. Implementation of mitigation measures identified above would ensure the SJCC FMP would not lead to a cumulatively considerable contribution to a significant energy impact.

3.3.4 References

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3.4 Greenhouse Gas Emissions

This section presents an analysis of potential impacts of the SJCC FMP associated with greenhouse gas (GHG) emissions. For technical information about the analysis assumptions, calculations and model outputs, refer to **Appendix B,** *Air Quality and Greenhouse Gas Emissions Calculations*.

3.4.1 Environmental Setting

Climate Science

"Global warming" and "climate change" are common terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century. Both natural processes and human actions have been identified as affecting the climate. The Intergovernmental Panel on Climate Change (IPCC) has concluded that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward.

However, increasing GHG concentrations resulting from human activity since the 19th century, such as fossil fuel combustion, deforestation, and other activities, are believed to be a major factor in climate change. GHGs in the atmosphere naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space—a phenomenon referred to as the "greenhouse effect." Some GHGs occur naturally and are necessary for keeping the Earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have trapped solar radiation and decreased the amount that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

Carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are the principal GHGs. When concentrations of these gases exceed historical concentrations in the atmosphere, the greenhouse effect is intensified. CO_2, methane, and nitrous oxide occur naturally and are also generated through human activity. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas methane results from off-gassing, natural gas leaks from pipelines and industrial processes, and incomplete combustion associated with agricultural practices, landfills, energy providers, and other industrial facilities. Nitrous oxide emissions are also largely attributable to agricultural practices and soil management. CO_2 sinks (i.e. land uses that absorb more carbon than they emit) include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution, and are two of the largest reservoirs of CO_2 through the process of sequestration. Other human-generated GHGs include fluorinated gases such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, which have much higher heat-absorption potential than CO_2, and are byproducts of certain industrial processes.

CO_2 is the reference gas for climate change, as it is the GHG emitted in the highest volume. The effect that each of the GHGs have on global warming is the product of the mass of their emissions and their global warming potential (GWP). GWP indicates how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2. For example, methane and nitrous oxide are substantially more potent

GHGs than CO_2, with GWPs of 25 and 298 times that of CO_2 respectively, which has a GWP of 1 (CARB, 2021).

In emissions inventories, GHG emissions are typically reported as metric tons (MT) of CO_2 equivalent (CO_2e). CO_2e is calculated as the product of the mass emitted of a given GHG and its specific GWP. While methane and nitrous oxide have much higher GWPs than CO_2, CO_2 is emitted in higher quantities and it accounts for the majority of GHG emissions in CO_2e, both from commercial developments and human activity in general.

Effects of Global Climate Change

Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, an increase in high ground-level ozone days, larger forest fires, and increased drought in some parts of the state. Secondary effects are likely to include the displacement of thousands of coastal businesses and residences (as a result of sea level rise), impacts on agriculture, changes in disease vectors, and changes in habitat and biodiversity. As the California Air Resources Board (CARB) *Climate Change Scoping Plan* (CARB, 2008) noted, the legislature, in enacting Assembly Bill (AB) 32 – The Global Warming Solutions Act, found that global warming would cause detrimental effects to some of the state's largest industries, including agriculture, winemaking, tourism, skiing, commercial and recreational fishing, forestry, and the adequacy of electrical power generation. The *Climate Change Scoping Plan* states: "The impacts of global warming are already being felt in California. The Sierra snowpack, an important source of water supply for the state, has shrunk 10 percent in the last 100 years. It is expected to continue to decrease by as much as 25 percent by 2050. World-wide changes are causing sea levels to rise – about 8 inches of increase has been recorded at the Golden Gate Bridge over the past 100 years – threatening low coastal areas with inundation and serious damage from storms." AB 32 is discussed further below in Section 3.4.2.

Ecosystem and Biodiversity Impacts

Climate change is expected to have effects on diverse types of ecosystems. As temperatures and precipitation change, seasonal shifts in vegetation will occur; this could affect the distribution of associated flora and fauna species. The IPCC states that "a large fraction of both terrestrial and freshwater species faces increased extinction risk under projected climate change during and beyond the 21st century, especially as climate change interacts with other stressors, such as habitat modifications, over exploitation, and invasive species" (IPCC, 2014a). Forest dieback poses risks to carbon storage, biodiversity, wood production, water quality, and economic activity. Wildfires, which are an important control mechanism in many ecosystems, are becoming more severe and more frequent, making it difficult for native plant species to repeatedly re-germinate. Continued emission of GHGs will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive, and irreversible impacts for people and ecosystems (IPCC, 2014b).

Human Health Impacts

Climate change will likely increase the risk of vector-borne infectious diseases, particularly those found in tropical areas and spread by insects such as malaria, dengue fever, and encephalitis.

Cholera, which is associated with algal blooms, could also increase. While these health effects would largely affect tropical areas in other parts of the world, effects would also be felt in California. Warming of the atmosphere would be expected to increase smog and particulate pollution, which could adversely affect individuals with heart and respiratory problems, such as asthma. Extreme heat events would also be expected to occur with more frequency and could adversely affect the elderly, children, and the homeless. Finally, the water supply impacts and seasonal temperature variations expected as a result of climate change could affect the viability of existing agricultural operations, making the food supply more vulnerable (USGCRP, 2016).

Emission Inventories

U.S. GHG Emissions

In 2017, the United States emitted about 6,457 million metric tons (MMT) of CO_2e (MMTCO_2e), with 76.1 percent of those emissions coming from fossil fuel combustion. Of the major sectors nationwide, transportation accounts for the highest volume of GHG emissions (approximately 29 percent), followed by electricity (28 percent), industry (22 percent), agriculture (9 percent), commercial buildings (6 percent), and residential buildings (5 percent). Between 1990 and 2017, total U.S. GHG emissions rose by 1.3 percent, but emissions have generally decreased since peaking in 2005. Since 1990, U.S. emissions have increased at an average annual rate of 0.4 percent (EPA, 2019).

State of California GHG Emissions

The CARB compiles GHG inventories for the state. Based on the 2017 GHG inventory data (i.e., the latest year for which data are available from CARB), emissions from GHG emitting activities statewide were 424.1 MMTCO_2e (CARB, 2019). Between 1990 and 2020, the population of California grew by approximately 10 million (from 29.8 to 39.8 million) (California Department of Finance, 2021a). This represents an increase of approximately 34 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from $773 billion in 1990 to $3.14 trillion in 2019, representing an increase of approximately 306 percent (more than three times the 1990 gross state product) in today's dollars (California Department of Finance, 2021b).

Despite the population and economic growth, CARB's 2017 statewide inventory indicated that California's net GHG emissions in 2017 were just below 1990 levels, which is the 2020 GHG reduction target codified in California Health and Safety Code Division 25.5, also known as the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). **Table 3.4-1** identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2017. As shown in the table, the transportation sector is the largest contributor to statewide GHG emissions at approximately 40 percent in 2017.

TABLE 3.4-1
STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS

Category	Total 1990 Emissions using IPCC SAR ($MMTCO_2e$)	Percent of Total 1990 Emissions SAR/AR4	Total 2017 Emissions using IPCC AR4 ($MMTCO_2e$)	Percent of Total 2017 Emissions
Transportation	150.7	35%/35%	169.9	40%
Electric Power	110.6	26%/26%	62.4	15%
Commercial Fuel Use	14.4	3%/3%	15.1	4%
Residential	29.7	7%/7%	26.0	6%
Industrial	103.0	24%/24%	89.4	21%
Recycling and Waste[a]	–	–	8.9	2%
High GWP/Non-Specified[b]	1.3	<1%/<1%	19.9	5%
Agriculture/Forestry	23.6	6%/5%	32.4	8%
Forestry Sinks	-6.7		-- [c]	--
Net Total (IPCC SAR)	**426.6**	**100%[e]**	--	--
Net Total (IPCC AR4)[d]	**431**	**100%**	**424.1**	**100%**

NOTES:
IPCC = Intergovernmental Panel on Climate Change; SAR = Second Assessment Report; AR4 = Fourth Assessment Report.
a Included in other categories for the 1990 emissions inventory.
b High global warming potential (GWP) gases are not specifically called out in the 1990 emissions inventory.
c Revised methodology under development (not reported for 2017).
d CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.
e Values may not total to 100% due to rounding

SOURCES: CARB, 2007; CARB, 2019.

Bay Area GHG Emissions

Based on 2015 data, in the nine county San Francisco Bay Area, GHG emissions from the transportation sector represent the largest source of the Bay Area's GHG emissions at 41 percent, followed by the stationary industrial sources at 26 percent, electricity generation and co-generation at 14 percent, and fuel use (primarily natural gas) by buildings at 10 percent. The remaining 8 percent of emissions is composed of fluorinated gas emissions and emissions from solid waste and agriculture. Of the total transportation emissions in 2015, on-road sources accounted for approximately 87 percent, while off-road sources accounted for the remainder (BAAQMD, 2017a).

City of San José GHG Emissions

In April 2019, the City of San José published its community-wide inventory of 2017 GHG emissions. As compared to the 2014 inventory, the 2017 inventory reports a decrease in GHG emissions of just over 17 percent (City of San José, 2019). The City attributes this decrease primarily to Pacific Gas and Electric Company's (PG&E's) cleaner electricity grid and a reduction in energy consumption. The transportation sector remained the greatest contributor of GHG emissions, as is typical statewide. For a sector-by-sector summary of community-wide GHG emissions, see **Table 3.4-2**. The City intends to complete annual GHG inventories to track reduction progress while focusing on implementation of the key policies and actions identified in its

2018 climate action plan. Target areas for GHG emission reduction identified by the City include energy efficiency, renewable energy and electrification, vehicle fuel efficiency, alternative transportation, vehicle trip reduction, and land use and transit planning (City of San José, 2019).

TABLE 3.4-2
CITY OF SAN JOSÉ 2017 COMMUNITY-WIDE GREENHOUSE GAS EMISSIONS BY SECTOR

Sector		$MTCO_2e$
Residential Energy		763,961
Commercial Energy		627,496
Industrial Energy		399,690
Transportation		3,589,159
Solid Waste		271,862
Water & Wastewater		29,235
Process & Fugitive		30,262
	Total	**5,711,665**

NOTE:
$MTCO_2e$ = metric tons of carbon dioxide equivalent

SOURCE: City of San José, 2019.

Existing SJCC Campus GHG Emissions

The SJCC campus in its current condition is detailed in *Section 2.3.5 Existing Campus Layout & On-going Activities* of *Chapter 2, Project Description*. The total floor area associated with the existing campus buildings and facilities is approximately 635,000 square feet. The existing operational GHG emissions were calculated using the California Emissions Estimator Model software (CalEEMod) defaults for energy, area sources, water, wastewater, and solid waste.

Existing SJCC campus mobile source emissions were estimated based on trip generation estimates for existing conditions in the traffic study prepared in support of this EIR. Indirect GHG emissions from electricity use at the SJCC campus are based on historical energy usage rates in CalEEMod. The emissions from the testing and maintenance of the backup generator and natural gas combustion are also accounted.[1] As shown in **Table 3.4-3**, existing GHG emissions, excluding mobile-source emissions, total approximately 7,486 $MTCO_2e$/year.

1 Emissions from the testing and maintenance of the backup generator were estimated in CalEEMod assuming a 650 kW generator operating for a maximum of 50 hours per year for testing and maintenance purposes. Emissions from natural gas combustion are based existing natural gas use provided by the *Utility Infrastructure Master Plan* for the campus (P2S, 2020) and include natural gas combustion at the three boilers at the Central Plant and other buildings not served by the Central Plant. Estimates are based on default emission factors for natural combustion within CalEEMod.

TABLE 3.4-3
EXISTING OPERATIONAL GREENHOUSE GAS EMISSIONS AT THE SJCC CAMPUS

Source		$MTCO_2e$
Area		<0.1
Electricity Use[1]		571
Natural Gas Combustion[2]		1,157
Emergency Generator		17
Mobile Sources		5,274
Solid Waste Generation		415
Water Use		52
	Total	**7,486**

NOTES:
$MTCO_2e$ = metric tons of carbon dioxide equivalent
1 Emissions from electricity use are based on historical energy use rate in CalEEMod.
2 Includes emissions from natural gas combustion at the three boilers at the SJCC's Central Plant and at other buildings on campus not served by SJCC's Central Plant.

SOURCE: Appendix B, *Air Quality and Greenhouse Gas Emissions Calculations*.

3.4.2 Regulatory Setting

Federal

Clean Air Act and U.S. Environmental Protection Agency "Endangerment" and "Cause or Contribute" Findings

In 2007, the U.S. Supreme Court held that the U.S. Environmental Protection Agency (EPA), the federal agency responsible for implementing the Clean Air Act (CAA), must consider regulation of motor vehicle GHG emissions. In *Massachusetts v. Environmental Protection Agency et al.*, twelve states and cities, including California, together with several environmental organizations sued to require EPA to regulate GHGs as pollutants under the CAA (127 S. Ct. 1438 [2007]). The Supreme Court ruled that GHGs fit within the CAA's definition of a pollutant and EPA had the authority to regulate GHGs.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under CAA Section 202(a):

- **Endangerment Finding:** The current and projected concentrations of the six key GHGs—CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

These findings did not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

Vehicle Emissions Standards

In 1975, Congress enacted the Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, EPA and the National Highway Traffic Safety Administration (NHTSA) are responsible for establishing additional vehicle standards. In August 2012, standards were adopted for model years 2017 through 2025 for passenger cars and light-duty trucks. According to EPA, a model year 2025 vehicle would emit half the GHG emissions of a model year 2010 vehicle (EPA and NHTSA, 2010). Notably, the State of California harmonized its vehicle efficiency standards through 2025 with the federal standards at this time (see *Advanced Clean Cars Program* below).

In August 2018, EPA and the NHTSA proposed maintaining the 2020 corporate average fuel economy (CAFE) and CO_2 standards for model years 2021 through 2026. The estimated CAFE and CO_2 standards for model year 2020 are 43.7 miles per gallon (mpg) and 204 grams of CO_2 per mile for passenger cars and 31.3 mpg and 284 grams of CO_2 per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. In September 2019, EPA finalized the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program and announced its decision to withdraw the Clean Air Act preemption waiver granted to the State of California in 2013 (EPA and NHTSA, 2019).

State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs within the State. The major components of California's climate protection initiative are reviewed below.

The CARB is the agency with regulatory authority over air quality issues in California. CARB adopts regulations designed to reduce criteria pollutants, toxic air contaminants, and GHG emissions; and establishes vehicle emissions standards. As discussed earlier, CARB is responsible for preparing, adopting, and updating California's GHG inventory. Additional responsibilities of CARB with respect to specific State mandates are discussed below.

California Environmental Quality Act and Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is a prominent environmental issue requiring analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency (CNRA) guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, no later than July 1, 2009. On December 30, 2009, the CNRA adopted amendments to the CEQA Guidelines, as required by SB 97. The CEQA Guidelines amendments, effective March 18, 2010, provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents.

CEQA Guidelines

The CEQA Guidelines are embodied in the California Code of Regulations (CCR), Title 14, beginning with Section 15000. The current CEQA Guidelines Section 15064.4 states that "a lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project." Section 15064.4 further states:

> *A lead agency should consider the following factors, when determining the significance of impacts from greenhouse gas emissions on the environment:*
>
> *(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
>
> *(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
>
> *(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see e.g., section 15183.5(b)).*

The CEQA Guidelines also state that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of GHG emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (CEQA Guidelines Section 15064(h)(3)).

The CEQA Guidelines do not require or recommend a specific analytical method or provide quantitative criteria for determining the significance of GHG emissions, nor do they set a numerical threshold of significance for GHG emissions. Section 15064.7(c) clarifies that "when adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

When GHG emissions are found to be significant, CEQA Guidelines Section 15126.4(c) includes the following direction on measures to mitigate GHG emissions:

> *Consistent with Section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:*
>
> *(1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision.*
>
> *(2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures.*
>
> *(3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions.*
>
> *(4) Measures that sequester greenhouse gases.*

(5) *In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.*

State of California Executive Orders

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger issued Executive Order S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order S-1-07

Executive Order S-1-07, signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It established a low carbon fuel standard (LCFS) with a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020.

In September 2018, CARB extended the LCFS program to 2030, making significant changes to the design and implementation of the program, including a doubling of the carbon intensity reduction to 20 percent by 2030.

Executive Orders S-14-08 and S-21-09

In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Portfolio Standard (RPS) to 33 percent renewable power by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the RPS by signing Executive Order S-21-09, which directs CARB under its AB 32 authority to enact regulations to help the state meet its RPS goal of 33 percent renewable energy by 2020.

Executive Order S-13-08

Governor Schwarzenegger signed Executive Order S-13-08 on November 14, 2008. The order resulted in the *2009 California Climate Adaptation Strategy* report, developed to summarize the best known science on climate change impacts in the state to assess vulnerability and outline possible solutions that can be implemented within and across state agencies to promote resiliency. The state has also developed an Adaptation Planning Guide to provide a decision-making framework intended for use by local and regional stakeholders to aid in the interpretation of climate science and to develop a systematic rationale for reducing risks caused or exacerbated by climate change (California Natural Resources Agency, 2012).

Executive Order B-16-12

In March 2012, then-Governor Jerry Brown issued an executive order establishing a goal of 1.5 million zero-emission vehicles (ZEVs) on California roads by 2025. In addition to the ZEV goal, Executive Order B-16-12 stipulated that by 2015 all major cities in California will have adequate infrastructure and be "zero-emission vehicle ready"; that by 2020 the state will have established adequate infrastructure to support 1 million ZEVs; that by 2050, virtually all personal transportation in the state will be based on ZEVs; and that GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

Executive Order B-30-15

Governor Brown signed Executive Order B-30-15 on April 29, 2015, which:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030;
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets; and
- Directed CARB to update the Climate Change Scoping Plan (Scoping Plan) to express the 2030 target in terms of million metric tons of CO_2 equivalent.

Executive Order B-48-18

On January 26, 2018, Governor Brown issued an executive order establishing a goal of 5 million ZEVs on California roads by 2030.

Executive Order B-55-18

On September 10, 2018, Governor Brown signed Executive Order B-55-18, committing California to total, economy-wide carbon neutrality by 2045. Executive Order B-55-18 directs CARB to work with relevant state agencies to develop a framework to implement and accounting to track progress toward this goal.

State of California Policy and Legislation

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed AB 1493. AB 1493 required that CARB develop and adopt, by January 1, 2005, regulations to achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State."

To meet the requirements of AB 1493, in 2004 CARB approved amendments to the CCR adding GHG emissions standards to California's existing standards for motor vehicle emissions. All mobile sources were required to comply with these regulations as they were phased in from 2009 through 2016.

Assembly Bill 32 and Senate Bill 32

In September 2006, Governor Schwarzenegger signed the California Global Warming Solutions Act of 2006 (AB 32). AB 32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and established a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was to be accomplished by enforcing a statewide cap on GHG emissions that would be phased in starting in 2012. To effectively implement the cap, AB 32 directed CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specified that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also included language stating that if the AB 1493 regulations could not be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

In 2016, SB 32 and its companion bill AB 197 amended Health and Safety Code Division 25.5, establishing a new climate pollution reduction target of 40 percent below 1990 levels by 2030, and included provisions to ensure that the benefits of state climate policies reach disadvantaged communities.

Climate Change Scoping Plan

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. CARB developed and approved the initial scoping plan in 2008, outlining the regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs that would be needed to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives (CARB, 2008).

CARB approved the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update) in December 2017. The 2017 Scoping Plan Update outlines the proposed framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels (CARB, 2017). Through a combination of data synthesis and modeling, CARB determined that the target statewide 2030 emissions limit is 260 $MMTCO_2e$, and that further commitments will need to be made to achieve an additional reduction of 50 $MMTCO_2e$ beyond current policies and programs. The cornerstone of the 2017 Scoping Plan Update is an expansion of the cap-and-trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2030 limit set forth by Executive Order B-30-15.

In the 2017 Scoping Plan Update, CARB recommends statewide targets of no more than 6 $MTCO_2e$ per capita by 2030 and no more than 2 $MTCO_2e$ per capita by 2050. CARB acknowledges that because the statewide per-capita targets are based on the statewide GHG emissions inventory that includes all emissions sectors in the state, it is appropriate for local jurisdictions to derive evidence-based local per-capita goals based on local emissions sectors and growth projections.

To demonstrate how a local jurisdiction can achieve its long-term GHG goals at the community plan level, CARB recommends developing a geographically specific GHG reduction plan (i.e., climate action plan) consistent with the requirements of CEQA Section 15183.5(b). A so-called "CEQA-qualified" GHG reduction plan, once adopted, can provide local governments with a streamlining tool for project-level environmental review of GHG emissions, provided there are adequate performance metrics for determining project consistency with the plan. Absent conformity with such a plan, CARB recommends "that projects incorporate design features and GHG reduction measures, to the degree feasible, to minimize GHG emissions. Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." While acknowledging that recent land use development projects in California have demonstrated the feasibility to achieve zero net additional GHG emissions (e.g., Newhall Ranch Resource Management and Development Plan), the 2017 Scoping Plan Update states that:

> *Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals, and climate change science… To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT [vehicle miles traveled], and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits locally.*

Cap-and-Trade Program

Initially authorized by AB 32, and extended through the year 2030 with the passage of AB 398 (2017), the California Cap-and-Trade Program is a core strategy that the state is using to meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. CARB designed and adopted the California Cap-and-Trade Program to reduce GHG emissions from "covered entities"[2] (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 $MTCO_2e$ per year), setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve reductions.[3] Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors. The statewide cap for GHG emissions from the capped sectors commenced in 2013. The cap declines over time. Facilities subject to the cap can trade offsets and allowances to emit GHGs.[4]

Senate Bill 375

Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations. The target reductions for the Bay Area are a regional reduction of per-capita GHG

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2 "Covered entity" means an entity in California that has one or more of the processes or operations and has a compliance obligation as specified in Subarticle 7 of the Cap-and-Trade Regulation; and that has emitted, produced, imported, manufactured, or delivered in 2008 or any subsequent year more than the applicable threshold level specified in section 95812(a) of the Regulation.

3 17 CCR 95800–96023.

4 See generally 17 CCR 95811 and 95812.

emissions from cars and light-duty trucks by 7 percent by 2020 and by 15 percent by 2035, compared to a 2005 baseline.

The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) address these goals in *Plan Bay Area 2040*, which identifies Priority Development Areas (PDAs) near transit options to reduce the use of on-road vehicles. By focusing and incentivizing future growth in PDAs, *Plan Bay Area 2040* demonstrates how the nine-county Bay Area can reduce per-capita CO_2 emissions by 16 percent by 2035 (MTC & ABAG, 2017). In a March 2018 hearing, CARB approved revised targets: to reduce per-capita emissions 10 percent by 2020 and 19 percent by 2035 (CARB, 2018a).

California Renewables Portfolio Standard

Senate Bills 1078 and 107

SB 1078 (Chapter 516, Statutes of 2002) required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

Senate Bill X 1-2

SB X 1-2, signed by Governor Brown in April 2011, enacted the California Renewable Energy Resources Act. The law obligated all California electricity providers, including investor-owned and publicly owned utilities, to obtain at least 33 percent of their energy from renewable resources by the year 2020.

Senate Bill 350

SB 350, the Clean Energy and Pollution Reduction Act of 2015 (Chapter 547, Statutes of 2015), was approved by Governor Brown on October 7, 2015. SB 350 increased the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased from 33 percent to 50 percent by December 31, 2030. The act requires the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in existing electricity and natural gas final end uses of retail customers by January 1, 2030.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals that were established by SB 350 in 2015. Specifically, the law increases the percentage of energy that both investor-owned utilities and publicly owned utilities must obtain from renewable sources from 50 percent to 60 percent by 2030. Incrementally, these energy providers must also have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, because many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

Advanced Clean Cars Program

In January 2012, pursuant to Recommended Measures T-1 and T-4 of the Scoping Plan, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZEVs. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Mobile Source Strategy

In May 2016, CARB released the updated Mobile Source Strategy that demonstrates how the state can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next 15 years. The strategy promotes a transition to zero-emission and low-emission vehicles, cleaner transit systems and reduction of vehicle miles traveled (VMT). The Mobile Source Strategy calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) by 2025 and 4.2 million ZEVs by 2030. The strategy also calls for more-stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero emission trucks primarily for class 3–7 “last mile” delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions from mobile sources and a 50 percent reduction in the consumption of petroleum-based fuels (CARB, 2016).

Senate Bill 743

In 2013, Governor Brown signed SB 743, which added Public Resources Code Section 21099 to CEQA. SB 743 changed the way that transportation impacts are analyzed under CEQA, better aligning local environmental review with statewide objectives to reduce GHG emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl development, and reduce VMT in California.

As required under SB 743, OPR developed potential metrics to measure transportation impacts that may include, but are not limited to, VMT, VMT per capita, automobile trip generation rates, or automobile trips generated. The new VMT metric is intended to replace the use of automobile delay and level of service as the metric to analyze transportation impacts under CEQA.

In its 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA*, OPR recommends different thresholds of significance for projects depending on land use types (Governor’s Office of Planning and Research, 2018). For example, residential and office space projects must demonstrate a VMT level that is 15 percent less than that of existing development to determine whether the mobile-source GHG emissions associated with the project are consistent with statewide GHG reduction targets. With respect to retail land uses, any net increase of VMT may be sufficient to indicate a significant transportation impact.

Senate Bill 1383 (Short-Lived Climate Pollutants)

SB 1383, enacted in 2016, requires statewide reductions in short-lived climate pollutants across various industry sectors. The climate pollutants covered under SB 1383 include methane, fluorinated gases, and black carbon—all GHGs with a much higher warming impact than CO_2 and with the potential to have detrimental effects on human health. SB 1383 requires CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emissions reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025.

Assembly Bill 341

AB 341, which became law in 2011, established a new statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020. The new law has changed the way that the state measures progress toward the 75 percent recycling goal, focusing on source reduction, recycling, and composting. AB 341 also requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The purpose of the law is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and expand the opportunity for additional recycling services and recycling manufacturing facilities in California (California Department of Resources Recycling and Recovery, 2020).

Assembly Bill 1826

AB 1826, known as the Commercial Organic Waste Recycling Law, became effective on January 1, 2016, and requires businesses and multi-family complexes (with five units or more) that generate specified amounts of organic waste (compost) to arrange for organics collection services. The law phases in the requirements on businesses with full implementation realized in 2019:

- **First Tier:** Commenced in April 2016, the first tier of affected businesses included those that generate 8 or more cubic yards of organic materials per week.
- **Second Tier:** In January 2017, the affected businesses expanded to include those that generate 4 or more cubic yards of organic materials per week.
- **Third Tier:** In January 2019, the affected businesses expanded further to include those that generate 4 or more cubic yards of commercial solid waste per week.

State of California Building Codes

California Building and Energy Efficiency Standards (Title 24)

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although the standards were not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in lower GHG emissions from residential and non-residential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The current Title 24, Part 6 standards (2019 standards) were made effective on January 1, 2020 (CEC, 2019).

California Green Building Standards Code

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution-emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment.

Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code is reviewed and updated on a three-year cycle.

The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the new measures took effect on January 1, 2020 (California Building Standards Commission, 2018).

California Community Colleges

Climate Change and Sustainability Resolution and Policy

In January 2020, the Board of Governors of the California Community Colleges adopted a *Climate Change and Sustainability Resolution* and *Climate Change and Sustainability Policy* (California Community Colleges, 2020) as part of their ongoing commitment to environmental sustainability and providing California community college students and their communities sustainable and safe learning environments. Together the resolution and policy acknowledge the urgency of climate change and its impact on community college campuses, communities and state.

Adoption of this policy and resolution aligns the efforts of the California Community Colleges on climate change and sustainability with California's *Climate Change Strategy*. The policy and resolution provide a set of seven goals to be achieved by 2030, with incremental progress for each expected by 2025, as shown in **Table 3.4-4**.

TABLE 3.4-4
GREENHOUSE GAS REDUCTION AND SUSTAINABILITY GOALS FOR CALIFORNIA COMMUNITY COLLEGES

By 2025	By 2030
1. Reduce GHG emissions to 30 percent below 1990 levels	Reduce GHG emissions to 40 percent below 1990 levels
2. Increase renewable energy consumption to 25 percent	Increase renewable energy consumption to 50 percent
3. 25 percent of fleet vehicles are zero-emission vehicles	50 percent of fleet vehicles are zero-emission vehicles
4. 50 percent of all new buildings and major renovations will be constructed as Zero Net Energy	100 percent of all new buildings and major renovations will be constructed as Zero Net Energy
5. 50 percent of all new buildings and major renovations will achieve at least a Leadership in Energy and Environmental Design (LEED) "Silver" or equivalent rating	100 percent of all new buildings and major renovations will achieve at least a LEED "Silver" or equivalent rating
6. Increase procurement of sustainable products and services by 20 percent compared to current levels	Increase procurement of sustainable products and services by 25 percent compared to existing levels
7. Reduce municipal solid waste by 25 percent compared to current levels	Reduce municipal solid waste by 50 percent compared to current levels

SOURCE: California Community Colleges, 2020.

The policy and resolution requires community college districts to develop their own local climate change and sustainability resolutions which may include commitments to implement the Board of Governors' Climate Change and Sustainability Policy and Resolution's goals locally, offer environmental sciences degrees and certificates with an emphasis on climate change, and other significant local climate change strategies and environmental sustainability measures thereby integrating climate change and sustainability into all facets of campus operations, and not just local facilities programs and business services.

Regional

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that regulates stationary sources of air pollution in the nine San Francisco Bay Area counties. Additionally, BAAQMD regulates GHG emissions through the following plans, programs, and guidelines.

Clean Air Plan

BAAQMD and other air districts prepare clean air plans in accordance with the federal and state Clean Air Acts. On April 19, 2017, the BAAQMD Board of Directors adopted the 2017 *Clean Air Plan: Spare the Air, Cool the Climate*, an update to the 2010 Clean Air Plan (BAAQMD, 2017a). The Clean Air Plan (CAP) is a comprehensive plan that focuses on the closely related goals of protecting public health and protecting the climate. Consistent with the State's GHG reduction targets, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

BAAQMD Climate Protection Program

BAAQMD established a climate protection program (Program) to reduce pollutants that contribute to global climate change and affect air quality in the San Francisco Bay Area Air Basin. The Program is focused on meeting the 2050 target, as the CAP discussed above is focused on the interim 2030 target. The Program includes measures that promote energy efficiency, reduce VMT, and develop alternative sources of energy, all of which assist in reducing GHG emissions and reducing air pollutants that affect the health of residents. BAAQMD also seeks to support other climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

BAAQMD CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed in the Bay Area. The guidelines also include recommended assessment methodologies for air toxics, odors, and GHG emissions. In June 2010, BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of the BAAQMD CEQA Guidelines, which included significance thresholds for GHG emissions based on the emission reduction goals for 2020 articulated by the California Legislature in AB 32. The first threshold, 1,100 $MTCO_2e$ per year, is a numeric emissions level below which a project's contribution to global climate change would be less than cumulatively considerable. For larger and mixed-use projects, the guidelines state that emissions would be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 $MTCO_2e$ per service population or better. Because these thresholds are based on a 2020 GHG target, these thresholds are no longer relevant for current and future projects. BAAQMD is currently working on the SB 32 interim and long-term 2040 GHG reduction targets; however, these are not available at this time.

Under the current BAAQMD Air Quality Guidelines, a local government may prepare a qualified GHG reduction strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG reduction strategy and general plan that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emissions under CEQA (BAAQMD, 2017b).

Metropolitan Transportation Commission/Association of Bay Area Governments

Sustainable Communities Strategy—Plan Bay Area

MTC is the federally recognized Metropolitan Planning Organization for the nine-county Bay Area, which includes Santa Clara County and the city of San José. On July 18, 2013, Plan Bay Area was jointly approved by ABAG's Executive Board and by MTC.

The plan includes the region's Sustainable Communities Strategy, as required under SB 375, and the 2040 Regional Transportation Plan. The Sustainable Communities Strategy lays out how the region will meet GHG reduction targets set by CARB. CARB's current targets call for the region to reduce per-capita vehicular GHG emissions 10 percent by 2020 and 19 percent by 2035 from a 2005 baseline (CARB, 2018b).

A central GHG reduction strategy of Plan Bay Area is the concentration of future growth in PDAs and Transit Priority Areas (TPAs). To be eligible for PDA designation, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. A TPA is an area within 0.5 miles of an existing or planned major transit stop such as a rail transit station, a ferry terminal served by transit, or the intersection of two or more major bus routes (MTC, 2013). The SJCC campus is not located within a PDA or a TPA.

On July 26, 2017, MTC adopted *Plan Bay Area 2040*, a focused update that builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic, and financial trends since the original plan was adopted (MTC, 2017).

San José Evergreen Community College District

In October 2020, the District adopted Resolution No. 101320-6 (San José Evergreen Community College District, 2020) affirming its commitment to pursue the 2025 and 2030 climate change and sustainability goals in the California Community Colleges Board of Governors' Climate Change and Sustainability Policy and Resolution (please refer to that Policy and Resolution, above).

Local

City of San José

Envision San José 2040 General Plan

The City of San José adopted the *Envision San José 2040 General Plan* in 2011 (City of San José, 2011). Many of the goals and policies identified in the General Plan reflect the City's commitment to sustainability; however, these would not apply to the SJCC FMP.

Climate Smart San José

The City adopted its *Climate Smart San José* plan in 2018 (City of San José, 2018). The plan builds upon the foundational goals and policies identified in the General Plan, and provides additional analysis, recommendations, and corresponding metrics. The plan creates a measurable pathway to meeting the City's GHG emissions reduction targets.

The Plan focuses on three pillars and nine key strategies:

1. A sustainable and climate smart City
- Transition to a renewable energy future
- Embrace our Californian climate

2. A vibrant city of connected and focused growth
- Densify our City to accommodate our future neighbors
- Make homes efficient and affordable for our families
- Create clean, personalized mobility choices
- Develop integrated, accessible public transport infrastructure

3. An economically inclusive city of opportunity
- Create local jobs in our City to reduce VMT
- Improve our commercial building stock
- Make commercial goods movement clean and efficient

The 2030 GHGRS was adopted by the City Council in November 2020 and serves as a framework for the purposes of streamlining under CEQA.

City of San José Greenhouse Gas Reduction Strategy (2030 GHGRS)

The City prepared its initial *Greenhouse Gas Reduction Strategy* in 2011 in conjunction with the General Plan; the strategy was subsequently updated in 2015 (City of San José, 2015). The original strategy was prepared in accordance with AB 32 and CEQA Guidelines Section 15183.5. One of the strategy's five purposes is to "achieve General Plan–level environmental clearance for future development activities (through the year 2020)." In response to SB 32's 2030 goal, the City in August 2020 published the *2030 Greenhouse Gas Reduction Strategy* (2030 GHGRS; City of San José, 2020). This new document is a comprehensive update to the 2011 *GHG Reduction Strategy* and reflects the plans, policies, and codes as approved by the City Council. It builds on the policies set forth in the General Plan and in *Climate Smart San José* (2018). The 2030 GHGRS provides a development checklist that identifies clear strategies for GHG reductions that new projects in the city must implement to demonstrate consistency with the 2030 GHGRS and to achieve the City's 2030 interim GHG reduction target.

Though the District is the lead agency for the SJCC FMP under CEQA, the City's 2030 GHGRS establishes an interim reduction target for 2030 based on the regional growth assumptions including institutional growth such as that for SJCC. Additionally, as the 2030 GHGRS is in alignment with the State SB 32 reduction targets, these reduction trajectories offer a streamlining opportunity to examine the proposed SJCC FMP's GHG emissions in relation to the State's reduction targets.

3.4.3 Analysis, Impacts, and Mitigation

Significance Criteria

For the purposes of this EIR, a GHG emissions impact would be significant if implementing the proposed SJCC FMP would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

CEQA Guidelines Section 15064.4 gives lead agencies the discretion to determine whether to assess GHG emissions quantitatively or qualitatively. The guidelines do not establish a bright-line quantitative threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (refer to CEQA Guidelines Section 15064.7(c)).

Consistency with Qualified Greenhouse Reduction Strategy

The BAAQMD recommends the following thresholds of significance for evaluation of GHG emissions from projects other than stationary sources (BAAQMD, 2017b):

- Mass emissions threshold of 1,100 $MTCO_2e$/year, or
- Emission efficiency metric threshold of 4.6 $MTCO_2e$ per service population per year ($MTCO_2e$/SP/year), or
- Compliance with a qualified GHG Reduction Strategy.

The 1,100 $MTCO_2e$/year and 4.6 $MTCO_2e$/year/SP are thresholds that the BAAQMD has recommended to achieve the AB 32 GHG emission reduction targets for 2020. The State's 2020 GHG targets are superseded by the 2030 GHG targets established in SB 32, which requires that statewide GHG emissions be reduced to 40 percent below the 1990 level by 2030. The BAAQMD has not yet updated its mass emissions and emission efficiency metric thresholds to address SB 32. Therefore, the analysis presented below relies on a qualitative evaluation of the SJCC FMP's compliance with a qualified GHG Reduction Strategy to evaluate impacts.

A qualified GHG Reduction Strategy is one that is consistent with the measures and goals in the most recent CARB Scoping Plan to achieve the GHG reduction goals established at the state level. GHG Reduction Strategies with horizon years beyond 2020 are required to consider continuing the downward reduction path set by AB 32 and SB 32 and move toward climate stabilization goals established in Executive Order S-3-05. A qualified GHG Reduction Strategy adopted by a local jurisdiction should include the following elements as described in the State CEQA Guidelines Section 15183.5:

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area
- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and
- Be adopted in a public process following environmental review.

The BAAQMD recognizes that careful upfront planning by local agencies is invaluable to achieving the state's GHG reduction goals and encourages local governments to adopt qualified GHG Reduction Strategies. Section 15183.5 of the State CEQA Guidelines allows tiering and streamlining the analysis of GHG emissions by lead agencies to analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions. Later project-specific environmental documents may tier from and/or incorporate by reference the existing programmatic review. Compliance with a qualified GHG Reduction Strategy would provide the evidentiary basis for making CEQA findings that development consistent with the GHG Reduction Strategy would result in feasible, measureable, and verifiable GHG reductions consistent with broader State goals and ensure that projects approved under qualified GHG Reduction Strategies would achieve their fair share of GHG emission reductions. Therefore, if a project is located in a community with an adopted qualified GHG Reduction Strategy and is consistent with the Qualified GHG Reduction Strategy, it can be presumed that the project will not have significant GHG emission impacts. A project must demonstrate its consistency by identifying and implementing all applicable feasible measures and policies from the GHG Reduction Strategy into the project. This approach is consistent with CEQA Guidelines Sections 15064(h)(3) and 15183.5(b), which provides that a "*lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem.*"

The City of San José's recently adopted 2030 GHGRS, which presents the City's comprehensive path to reduce GHG emissions to achieve the 2030 reduction target, based on SB 32, BAAQMD, and OPR. Consistent with CEQA Guidelines Section 15183.5 discussed above, the City's 2030 GHGRS represents San José's qualified climate action plan in compliance with CEQA. The City has prepared a GHGRS Compliance Checklist (Checklist) in order to implement GHG reduction strategies from the 2030 GHGRS and provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA.

Given absence of updated guidance or established targets by the BAAQMD and the District for SB 32, GHG impacts of the SJCC FMP are examined by evaluating its consistency with the City's 2030 GHGRS, which is consistent with SB 32. The SJCC campus is located within the City of San José and emissions from the campus are included in the baseline 2017 and projected 2030 emissions inventories for the City. Therefore, the City's 2030 GHGRS represents an appropriate qualified GHG Reduction Strategy for the SJCC FMP for CEQA compliance under Section 15183.5. Consequently, for purposes of this EIR, a significant impact is identified if the SJCC FMP is not consistent with the GHG reduction strategies identified in the 2030 GHGRS and included in the Checklist and hence be inconsistent with the 2030 GHGRS.

Consistency with Plans

According to the second GHG significance criterion, a significant impact would occur if the proposed SJCC FMP would conflict with applicable regulations, plans, and policies that were adopted to reduce GHG emissions that contribute to global climate change. As discussed in the Regulatory Setting, several plans and policies are in place to help the City, the Bay Area and the State reduce GHG emissions consistent with the State's emission reduction targets for 2030 and 2050. Consistency with the City's 2030 GHGRS discussed above would also ensure that the SJCC FMP is consistent with the District's Climate Change and Sustainability Resolution and Policy, the City's 2030 GHGRS and Climate Smart San José, the BAAQMD's 2017 Clean Air Plan and CARB's 2017 Scoping Plan Update.

Methodology

GHG emissions and global climate change represent cumulative impacts from human activities and development projects locally, regionally, statewide, nationally, and worldwide. GHG emissions from all of these sources cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from past, present, and future projects around the world have contributed and will continue to contribute to global climate change and its associated environmental impacts.

The methodology for the evaluation of GHG impacts follows a qualitative consistency determination of the SJCC FMP with the City's 2030 GHGRS Checklist. Therefore, GHG impacts with respect to both GHG significance criteria listed above are addressed together. This evaluation is considered in a cumulative context, and because the analysis of GHG emissions is only relevant in a cumulative context, a project-specific impact assessment is not required. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG impact may be determined not to be cumulatively considerable if it is consistent with the requirements of the GHGRS.

Impacts and Mitigation Measures

Impact 3.4-1: Construction and operation of development proposed under the SJCC FMP could generate GHG emissions, either directly or indirectly, that could conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs and lead to a significant impact on the environment. (*Less than* S*ignificant with Mitigation*)

As discussed above, the SJCC campus is located within the City of San Jose and is a contributor to both the baseline and projected citywide emission inventories included in the City's 2030 GHGRS that form the basis of GHG reduction planning consistent with SB 32. Therefore, the City's 2030 GHGRS is an appropriate qualified GHG Reduction Strategy to evaluate consistency of the SJCC FMP and streamline the CEQA analysis as allowed by Section 15183.5 of the State CEQA Guidelines. The City requires discretionary projects within its jurisdiction to complete Section A, General Plan Policy Conformance and Section B, GHG Reduction Strategies of the Checklist. Projects that propose alternative GHG mitigation measures must also complete Section C, Alternative Project Measures and Additional GHG Reductions.

As discussed above, since District is electing to use the City's GHGRS to assess the SJCC consistency with a qualified GHG Reduction Strategy, **Table 3.4-5** shows the SJCC FMP's consistency with the City's General Plan policies, and **Table 3.4-6** shows a consistency determination with GHG reduction strategies from the Checklist. The tables explain if and how the SJCC FMP would be consistent with the applicable policies and strategies of Sections A and B of the Checklist.

In addition, the City's 2030 GHGRS identifies seven strategies to reduce GHG emissions to achieve the 2030 target. These strategies span a variety of topic areas including energy, building, land use and transportation, water, and waste. Table 3.4-6 lists the seven strategies and discusses applicability and consistency of the SJCC FMP with each.

As shown in Table 3.4-5 and 3.4-6, with the implementation of mitigation measures identified, the SJCC FMP would be consistent with the City of San José's 2030 GHGRS Checklist.

Consistency with the California Community Colleges Climate Change and Sustainability Resolution and Policy

As discussed in the Regulatory Setting, the Board of Governors of the California Community Colleges adopted the *Climate Change and Sustainability Resolution and Policy* in January 2020. Based on Resolution 101320-6 adopted by the District, it affirms and commits to pursuing the climate change and sustainability goals of the *Climate Change and Sustainability Resolution and Policy*.

TABLE 3.4-5
SJCC FMP CONSISTENCY WITH CITY OF SAN JOSÉ 2030 GHGRS CHECKLIST

General Plan Policy	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Policy?
Section A. General Plan Policy Conformance		
1. Consistency with the Land Use/Transportation Diagram (Land Use and Density)		
Is the proposed Project consistent with the Land Use/ Transportation Diagram?	The SJCC FMP would occur within the boundaries of the SJCC campus, and proposed uses would be consistent with those land uses specified the Land Use/Transportation Diagram.	Yes
2. Implementation of Green Building Measures		
MS-2.2: Encourage maximized use of on-site generation of renewable energy for all new and existing buildings.	The SJCC FMP does not propose installation of on-site renewable energy generation systems. Mitigation Measure 3.4-1c identifies that as feasible, on-site photovoltaic systems be installed at the SJCC campus to reduce the total energy needs of the new construction buildings as indicated in Mitigation Measure 3.4-1b.	Yes, with implementation of Mitigation Measure 3.4-1c.
MS-2.3: Encourage consideration of solar orientation, including building placement, landscaping, design and construction techniques for new construction to minimize energy consumption.	The SJCC FMP proposes improvements to an existing, fully developed site. New facilities are proposed to be constructed in place of existing buildings that would be demolished, that would limit the flexibility to orient buildings to maximize solar energy. The new CTE building is proposed to be built as a Zero Net Energy building relying entirely on carbon-free electricity and no natural gas infrastructure. Mitigation Measure 3.4-1f identifies that new buildings and major renovations to be constructed to achieve LEED Silver or equivalent rating. In addition, implementation of Mitigation Measures 3.4-1h and 3.4-1i identify that project design include ways to maximize use of sustainable products and services in construction and operation of the campus and include measures to reduce water use and encourage use of recycle water. These measures would also serve to reduce associated energy use and GHG emissions.	Yes, with implementation of Mitigation Measures 3.4-1f, 3.4-1h and 3.4-1i.
MS-2.7: Encourage the installation of solar panels or other clean energy power generation sources over parking areas.	The SJCC FMP does not propose installation of on-site renewable energy generation systems. Mitigation Measure 3.4-1c identifies that as feasible, on-site photovoltaic systems be installed at the SJCC campus to reduce the total energy needs of the new construction buildings as indicated in Mitigation Measure 3.4-1b.	Yes, with implementation of Mitigation Measure 3.4-1c.
MS-2.11: Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g., design to maximize cross ventilation and interior daylight) and through site design techniques (e.g., orienting buildings on sites to maximize the effectiveness of passive solar design).	The SJCC FMP proposes improvements to an existing, fully developed site. New facilities are proposed to be constructed in place of existing buildings that would be demolished, that would limit the flexibility to orient buildings to maximize solar energy. The new CTE building is proposed to be built as a Zero Net Energy building relying entirely on carbon-free electricity and no natural gas infrastructure. Mitigation Measure 3.4-1f identifies that new buildings and major renovations to be constructed to achieve LEED Silver or equivalent rating. In addition, implementation of Mitigation Measures 3.4-1h and 3.4-1i identify that project design include ways to maximize use of sustainable products and services in construction and operation of the campus and include measures to reduce water use and encourage use of recycle water. These measures would also serve to reduce associated energy use and GHG emissions.	Yes, with implementation of Mitigation Measures 3.4-1f, 3.4-1h and 3.4-1i.
MS-16.2: Promote neighborhood-based distributed clean/renewable energy generation to improve local energy security and to reduce the amount of energy wasted in transmitting electricity over long distances.	Electricity to the SJCC campus is currently provided by San Jose Clean Energy's (SJCE) through PG&E infrastructure. SJCE is a Community Choice Program organized under California law. Community choice aggregation programs, known as CCA's, enable local governments to enroll their jurisdictions under a single energy supplier. CCAs also allow jurisdictions to support local supply that matches their values and regional needs and reduce their reliance on national or global energy markets.	Yes

TABLE 3.4-5
SJCC FMP CONSISTENCY WITH CITY OF SAN JOSÉ 2030 GHGRS CHECKLIST

General Plan Policy	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Policy?
Section A. General Plan Policy Conformance (cont.)		
3. Pedestrian, Bicycle and Transit Site Design Measures		
CD-2.1: Promote the Circulation Goals and Policies in the Envision San José 2040 General Plan. Create streets that promote pedestrian and bicycle transportation by following applicable goals and policies in the Circulation section of the Envision San José 2040 General Plan.	The SJCC FMP involves development only within the existing SJCC campus and would not affect the existing street network, pedestrian and bicycle facilities outside the campus boundary.	Not applicable
a. Design the street network for its safe shared use by pedestrians, bicyclists, and vehicles. Include elements that increase driver awareness.	The SJCC FMP involves development only within the existing SJCC campus and would not affect the existing street network, pedestrian and bicycle facilities outside the campus boundary.	Not applicable
b. Create a comfortable and safe pedestrian environment by implementing wider sidewalks, shade structures, attractive street furniture, street trees, reduced traffic speeds, pedestrian-oriented lighting, mid-block pedestrian crossings, pedestrian-activated crossing lights, bulb-outs and curb extensions at intersections, and on-street parking that buffers pedestrians from vehicles.	The SJCC FMP involves development only within the SJCC campus and would not affect the existing street network, pedestrian and bicycle facilities outside the campus boundary.	Not applicable
c. Consider support for reduced parking requirements, alternative parking arrangements, and Transportation Demand Management strategies to reduce area dedicated to parking and increase area dedicated to employment, housing, parks, public art, or other amenities. Encourage de-coupled parking to ensure that the value and cost of parking are considered in real estate and business transactions.	Mitigation Measures 3.4-1j identifies implementation of TDM measures to reduce automobile trips to the campus by encouraging the use of alternative modes of transportation. The SJCC FMP would incrementally add parking on-campus, however, this would be to address an existing parking shortfall issue.	Yes
CD-2.5: Integrate Green Building Goals and Policies of the Envision San José 2040 General Plan into site design to create healthful environments. Consider factors such as shaded parking areas, pedestrian connections, minimization of impervious surfaces, incorporation of storm water treatment measures, appropriate building orientations, etc.	Through the implementation of Mitigation Measures 3.4-1a through 3.4-1i, the SJCC FMP will incorporate green building measures as part of project design and operation, as feasible.	Yes, with the implementation of Mitigation Measures 3.4-1a through 3.4-1i.

TABLE 3.4-5
SJCC FMP CONSISTENCY WITH CITY OF SAN JOSÉ 2030 GHGRS CHECKLIST

General Plan Policy	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Policy?
Section A. General Plan Policy Conformance (cont.)		
3. Pedestrian, Bicycle and Transit Site Design Measures (cont.)		
CD-2.11: Within the Downtown and Urban Village Overlay areas, consistent with the minimum density requirements of the pertaining Land Use/Transportation Diagram designation, avoid the construction of surface parking lots except as an interim use, so that long-term development of the site will result in a cohesive urban form. In these areas, whenever possible, use structured parking, rather than surface parking, to fulfill parking requirements. Encourage the incorporation of alternative uses, such as parks, above parking structures.	This policy is not applicable to the SJCC FMP as the SJCC campus is not located within the Downtown and Urban Village Overlay areas.	Not applicable
CD-3.2: Prioritize pedestrian and bicycle connections to transit, community facilities (including schools), commercial areas, and other areas serving daily needs. Ensure that the design of new facilities can accommodate significant anticipated future increases in bicycle and pedestrian activity.	The SJCC campus is served by existing bike facilities on South Bascom Avenue, Leigh Avenue, and Parkmoor Avenue, The *San José Better Bike Plan 2025,* which the city is currently developing, is considering protected bike lanes on South Bascom Avenue, Moorpark Avenue, and Leigh Avenue, which would provide direct access to the campus. The existing and proposed network of bicycle facilities provide good connectivity to the residential neighborhoods near the SJCC campus. The SJCC FMP would not remove any existing bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. The SJCC FMP includes several on-site improvements to improve pedestrian safety. The proposed internal perimeter loop would include a bicycle lane to create a dedicated path for bicyclists to access all parts of the campus.	Yes
CD-3.4: Encourage pedestrian cross-access connections between adjacent properties and require pedestrian and bicycle connections to streets and other public spaces, with particular attention and priority given to providing convenient access to transit facilities. Provide pedestrian and vehicular connections with cross-access easements within and between new and existing developments to encourage walking and minimize interruptions by parking areas and curb cuts.	The SJCE campus is located on the block bounded by Leigh Avenue to the east, Moorpark Avenue to the north, South Bascom Avenue to the west and residential neighborhoods to the south. As discussed above, the campus is served by existing bicycle facilities and will also benefit from future protected bike lanes proposed as part of the *San José Better Bike Plan 2025,* which would provide direct access to the campus. The existing and proposed network of bicycle facilities provide good connectivity to the residential neighborhoods and transit stops near the SJCC campus. The SJCC FMP would not remove any existing bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. In addition, the SJCC FMP includes several on-site improvements to improve bicycle and pedestrian mobility and safety.	Yes
LU-3.5: Balance the need for parking to support a thriving Downtown with the need to minimize the impacts of parking upon a vibrant pedestrian and transit oriented urban environment. Provide for the needs of bicyclists and pedestrians, including adequate bicycle parking areas and design measures to promote bicyclist and pedestrian safety.	The SJCC campus is not located within the City's Downtown area.	Not applicable

TABLE 3.4-5
SJCC FMP CONSISTENCY WITH CITY OF SAN JOSÉ 2030 GHGRS CHECKLIST

General Plan Policy	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Policy?
Section A. General Plan Policy Conformance (cont.)		
3. Pedestrian, Bicycle and Transit Site Design Measures (cont.)		
TR-2.8: Require new development to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/ paths, or share in the cost of improvements.	Mitigation Measure 3.4-1j identifies the provision of secure bicycle parking facilities as part of the TDM program. The campus is already served by existing bicycle facilities and will also benefit from future improvements proposed as part of the *San José Better Bike Plan 2025,* to provide direct access to the campus. In addition, the SJCC FMP includes several on-site improvements to improve bicycle and pedestrian mobility and safety.	Yes
TR-7.1: Require large employers to develop TDM programs to reduce the vehicle trips and vehicle miles generated by their employees through the use of shuttles, provision for car sharing, bicycle sharing, carpool, parking strategies, transit incentives and other measures.	Mitigation Measure 3.4-1j identifies a number of potential TDM measures to encourage use of alternative modes of transportation to driving.	Yes, with the implementation of Mitigation Measure 3.4-1j.
TR-8.5: Promote participation in car share programs to minimize the need for parking spaces in new and existing development.	Mitigation Measure 3.4-1j identifies potential measures, including providing assistance with trip planning and ride share coordination, dedicated parking and curbside pickup areas for rideshare vehicles to reduce the demand for new parking spaces.	Yes, with the implementation of Mitigation Measure 3.4-1j.
4. Water Conservation and Urban Forestry Measures		
MS-3.1: Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial and developer-installed residential development unless for recreation needs or other area functions.	Landscaping proposed as part of the SJCC FMP would comply with the State's Model Water Efficient Landscape Ordinance which is implemented as part of building code related to landscape design and installation.	Yes
MS-3.2: Promote the use of green building technology or techniques that can help reduce the depletion of the City's potable water supply, as building codes permit. For example, promote the use of captured rainwater, graywater, or recycled water as the preferred source for non-potable water needs such as irrigation and building cooling, consistent with Building Codes or other regulations.	Implementation of Mitigation Measure 3.4-1i would help reduce depletion of potable water supply by encouraging measures to conserve water, throughout the campus, and promote the use of reclaimed or recycled water for all non-potable demands, as feasible.	Yes, with implementation of Mitigation Measure 3.4-1i.
MS-19.4: Require the use of recycled water wherever feasible and cost-effective to serve existing and new development.	Mitigation Measure 3.4-1i identifies use of recycled water for all non-potable demands such as toilet flushing, irrigation, and cooling, as feasible.	Yes, with implementation of Mitigation Measure 3.4-1i.

TABLE 3.4-5
SJCC FMP CONSISTENCY WITH CITY OF SAN JOSÉ 2030 GHGRS CHECKLIST

General Plan Policy	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Policy?
Section A. General Plan Policy Conformance (cont.)		
4. Water Conservation and Urban Forestry Measures (cont.)		
MS-21.3: Ensure that San José's Community Forest is comprised of species that have low water requirements and are well adapted to its Mediterranean climate. Select and plant diverse species to prevent monocultures that are vulnerable to pest invasions. Furthermore, consider the appropriate placement of tree species and their lifespan to ensure the perpetuation of the Community Forest.	The SJCC campus is a fully developed site and vegetation on-campus is in the form of existing landscaping. The SJCC FMP proposes development of a hierarchy of open spaces, ranging from large, active, formal and informal gathering spaces to smaller, intimate, and purpose-built spaces, all of which would include improved landscaping. Mitigation Measure 3.4-1i identifies use of plant species with low water needs to reduce water use associated with landscaping maintenance.	Yes, with the implementation of Mitigation Measure 3.4-1i.
MS-26.1: As a condition of new development, require the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.	The SJCC campus is a fully developed site. Implementation of the SJCC FMP would not substantially affect the tree coverage on- or off-campus.	Not applicable
ER-8.7: Encourage storm water reuse for beneficial uses in existing infrastructure and future development through the installation of rain barrels, cisterns, or other water storage and reuse facilities.	The SJCC FMP would be consistent with this policy with the implementation of Mitigation measure 3.4-1i, which identifies reuse of storm water for beneficial uses on-campus to the extent feasible.	Yes, with the implementation of Mitigation Measure 3.4-1i.

SOURCE: Table complied by Environmental Science Associates in 2021 based on City of San José, 2020.

TABLE 3.4-6
SJCC FMP CONSISTENCY WITH THE
CITY OF SAN JOSÉ 2030 GREENHOUSE GAS REDUCTION STRATEGIES

Strategy	Performance Standard	Existing or Proposed Implementation Mechanism	SJCC FMP Consistent with Strategy?
GHGRS 1 – San José Clean Energy	98 percent participation in San José Clean Energy with 100 percent carbon-free energy sources by 2030	Energy to the campus is currently provided by PG&E. Mitigation Measures 3.4-1a identifies that electricity used at the campus be provided from carbon-free renewable sources to the extent feasible.	Yes, with implementation of Mitigation Measure 3.4-1a.
GHGRS 2 – Zero Net Carbon Residential Construction	50 percent of all new residential construction from 2020-2030 will achieve zero net carbon use	The SJCC FMP would not include any residential uses and hence this strategy would not apply.	Not applicable
GHGRS 3 – Renewable Energy Development	472.1 net new MW of solar photovoltaics installed 2017-2030	Mitigation Measure 3.4-1c identifies that as feasible, on-site photovoltaic systems be installed at the SJCC campus to reduce the total energy needs of the new construction buildings as indicated in Mitigation Measure 3.4-1b.	Yes, with implementation of Mitigation Measure 3.4-1c.
GHGRS 4 – Existing Buildings Retrofits – Natural Gas	3 percent reduction citywide in natural gas use below 2017 levels	Mitigation Measure 3.4-1b identifies that as feasible, new buildings be constructed as Zero Net Energy.	Yes, with implementation of Mitigation Measure 3.4-1b.
GHGRS 5 – Zero Waste Goal	90 percent of waste diverted from landfills in 2030	Mitigation Measure 3.4-1g identifies a Solid Waste Reduction Plan be developed and implemented to divert 90 percent of waste generated at the campus from landfills by 2030.	Yes, with implementation of Mitigation Measure 3.4-1g.
GHGRS 6 – Caltrain Modernization Project	75 percent of diesel trains converted to electric power; reduction of approximately 33,000 daily VMT in San José from increased Caltrain ridership	This strategy is not applicable at a project level.	Not applicable
GHGRS 7 – Water Conservation	107 million gallons per day (MGD) water consumption in 2030	Mitigation Measure 3.4-1i identifies measures to conserve water use on campus.	Yes, with implementation of Mitigation Measure 3.4-1i.

SOURCE: Table complied by Environmental Science Associates in 2021 based on City of San José, 2020.

The SJCC FMP proposes to build the new CTE building as a Zero Net Energy building relying entirely on electricity. The other proposed buildings and facilities under the SJCC FMP do not include features that would ensure consistency with this goal. However, several mitigation measures identified in this section would ensure consistency with the goals of the *Climate Change and Sustainability Resolution and Policy* for California Community Colleges as shown in **Table 3.4-7**.

TABLE 3.4-7
SJCC FMP CONSISTENCY WITH GOALS OF THE BOARD OF GOVERNORS OF THE CALIFORNIA COMMUNITY COLLEGES CLIMATE CHANGE AND SUSTAINABILITY RESOLUTION AND POLICY

Goal (by 2030)	SJCC FMP Consistency
1. Reduce GHG emissions to 40 percent below 1990 levels	Reduce GHG emissions to 40 percent below 1990 levels
2. Increase renewable energy consumption to 50 percent	Consistent, with implementation of Mitigation Measures 3.4-1a and 3.4-1c.
3. 50 percent of fleet vehicles are zero-emission vehicles	Consistent, with implementation of Mitigation Measure 3.4-1d.
4. 100 percent of all new buildings and major renovations will be constructed as Zero Net Energy	Consistent, with implementation of Mitigation Measure 3.4-1b.
5. 100 percent of all new buildings and major renovations will achieve at least a LEED “Silver” or equivalent rating	Consistent, with implementation of Mitigation Measure 3.4-1f.
6. Increase procurement of sustainable products and services by 25 percent compared to existing levels	Consistent, with implementation of Mitigation Measure 3.4-1h.
7. Reduce municipal solid waste by 50 percent compared to current levels	Consistent, with implementation of Mitigation Measure 3.4-1g.

SOURCE: Table compiled by ESA in 2021.

Consistency with Other Plans and Policies

As noted earlier, CARB’s 2017 Scoping Plan Update describes how the State plans to achieve the 2030 GHG emission reduction goal for California of 40 percent below 1990 levels by 2030 as mandated by SB 32. By virtue of the SJCC FMP being consistent with the City’s 2030 GHGRS with the implementation of Mitigation Measures 3.4-1a through 3.4-1j, the SJCC FMP would also ensure consistency with CARB’s 2017 Scoping Plan Update and with Executive Order S-3-05, which establishes a goal of reducing California’s GHG emissions to 80 percent below the 1990 level by the year 2050.

Consistency of the SJCC FMP with respect to the BAAQMD 2017 Clean Air Plan is discussed under Impact 3.1-1 of Section 3.1, *Air Quality*. The analysis found that the SJCC FMP would be consistent with the 2017 Clean Air Plan with the implementation of Mitigation Measures 3.1-2 and 3.1-3 along with GHG Mitigation Measure 3.4-1e.

Implementation of Mitigation Measure 3.4-1f would ensure that the SJCC FMP would surpass regulatory requirements set forth in the Title 24 building standards. While these standards address energy conservation, they would also result in a reduction of GHG emissions associated with energy use.

The SJCC FMP would be consistent with *Plan Bay Area 2040*, which includes the Regional Transportation Plan, and was adopted as the Bay Area's Sustainable Communities Strategy pursuant to California Senate Bill 375. *Plan Bay Area 2040*'s core strategy is encouraging growth in existing communities along the existing transportation network, focusing new development in PDAs and TPAs within urbanized centers where there is more public transit and other mobility options available to reduce driving by cars and light trucks. Though not located within a PDA or a TPA, the SJCC campus is well served by transit services through VTA and includes three local bus routes, one rapid bus route, one express bus route, and one light rail train (LRT) route. The closest bus stop to the SJCC campus is located on South Bascom Avenue at Renova Drive, and is served by VTA bus routes 25 and 61. Leigh Avenue also has several bus stops present near the east campus boundary.

As detailed in Section 3.6, *Transportation*, though the implementation of the SJCC FMP would result in an increase in vehicle trips to the campus, the location of the SJCC campus in an area with access to a variety of transit options would result in a reduction in VMT/student.

With implementation of mitigation measures identified below, the SJCC FMP would not generate GHG emissions, directly or indirectly, that would lead to a significant impact on the environment or conflict with local, regional and State-level efforts toward achieving GHG reduction targets for 2030 and 2050. This impact would be **less than significant with mitigation**.

> **Mitigation Measure 3.4-1a: Carbon-free Electricity.** To the extent feasible, electricity used at the campus shall be from renewable carbon-free energy sources (San José Clean Energy provides the option to choose the TotalGreen program that includes electricity generated entirely from renewable, carbon-free sources like solar and wind).
>
> **Mitigation Measure 3.4-1b:** As feasible, **construct new buildings as Zero Net Energy** with no natural gas infrastructure and relying entirely on carbon-free renewable electricity either purchased (see Mitigation Measure 3.4-1a) or generated onsite (see Mitigation Measure 3.4-1c).
>
> **Mitigation Measure 3.4-1c:** As feasible, **install on-site photovoltaic systems** on building rooftops and parking lots to reduce the total energy needs of the proposed new buildings.
>
> **Mitigation Measure 3.4-1d:** As feasible, **zero emission vehicles** shall constitute at least 25 percent of the operation and maintenance vehicle fleet at the campus by 2025 and increased to 50 percent of the fleet by 2030.
>
> **Mitigation Measure 3.4-1e: Electric Vehicle Charging.** As feasible, as part of project design, allocate at least 10 percent of all parking spaces to be equipped with electric vehicle (EV) charging equipment to promote the use of zero-emission vehicles and plug-in electric passenger vehicles.
>
> **Mitigation Measure 3.4-1f: LEED Certification**. As feasible, new buildings and major renovations shall be constructed to achieve LEED Silver or equivalent rating.
>
> **Mitigation Measure 3.4-1g: Solid Waste Reduction Plan.** The District shall develop and implement a Solid Waste Reduction Plan that evaluates and quantifies current solid waste

generation levels at the campus and proposes measures to reduce waste generation. The Solid Waste Reduction Plan shall aim to divert 90 percent of waste from landfills by 2030.

Mitigation Measure 3.4-1h: Use of Sustainable products and methods. Maximize use of sustainable products and services in construction and operation of the campus. The design team (architect/engineer) shall recommend building materials and methods with life cycles (manufacture, installation, maintenance, repair, and replacement) of reduced environmental impacts. Considerations shall also include energy efficiency, energy required in the manufacturing process, life cycle duration, and maintenance and replacement costs.

Mitigation Measure 3.4-1i: Water Conservation Measures. Project design shall implement measures to conserve water, including such measures to install controls to optimize irrigation water, reduce water usage in restrooms and showers, and promote the use of reclaimed water. The use of decorative fountains shall be minimized. If feasible, campus uses shall use recycled water for all non-potable demands identified such as toilet flushing, irrigation, and cooling. Irrigation water use for landscaping shall be minimized by using plant species that have low water requirements and are well adapted to San Jose’s Mediterranean climate. To the extent feasible, storm water shall be reused for beneficial uses on-campus.

Mitigation Measure 3.4-1j: Implement Transportation Demand Management measures to reduce automobile trips to the campus by encouraging the use of alternative modes of transportation. As feasible, the TDM measures may include, but are not limited to, the following:

- Make available transit passes to staff and students to make transit an attractive, affordable mode of travel.
- Provide pre-tax commuter benefits for staff to exclude their transit or vanpooling expenses from taxable income or an alternate commuter benefit option consistent with the MTC/BAAQMD Commuter Benefits Program required for employers with 50 or more full-time employees.
- Use technology-based information, encouragement, and trip coordination services to encourage carpooling, transit, walking, and biking by staff and students. These can include third-party apps to distribute incentives to people who choose to use these modes.
- Provide dedicated parking for carpool and vanpool vehicles near building and garage entrances.
- Provide secure and convenient bicycle parking, such as lockers or secured bicycle rooms.
- Provide assistance in rideshare coordination, such as implementation of the 511 Regional Rideshare Program or equivalent, as recommended by the 2017 CAP.
- Dedicate curbside areas for passenger pickup by ride-hailing services, to minimize traffic intrusion and double-parking by rideshare vehicles.

Significance after Mitigation: Less than Significant. As shown in Tables 3.4-5 and 3.4-6, implementation of Mitigation Measures 3.4-1a through 3.4-1j would ensure consistency of the SJCC FMP with applicable policies and strategies in the City' s 2030 GHGRS included as part of the City's Checklist. Compliance of the SJCC FMP with the City's 2030 GHGRS would result in a less than significant impact with respect to GHG emissions. This impact would be **less than significant with mitigation**.

Cumulative Impacts

Climate change is the cumulative effect of all natural and anthropogenic sources of GHGs accumulated on a global scale. The GHG emissions from an individual project, even a very large development project, would not individually generate sufficient GHG emissions to measurably influence global climate change, and thus the assessment of GHG emissions impacts is inherently cumulative. Consideration of a project's climate change impact, therefore, is essentially an analysis of a project's contribution to a cumulatively significant global impact through its emission of GHGs. While it is possible to examine the quantity of GHGs that would be emitted from individual project sources, it is not currently possible to link these GHGs emitted from a specific source or location to particular global climate changes.

Both BAAQMD and the CAPCOA consider GHG impacts to be exclusively cumulative impacts, in that no single project could, by itself, result in a substantial change in climate (BAAQMD, 2012; CAPCOA, 2008). Therefore, the evaluation of cumulative GHG impacts presented above evaluates whether the SJCC FMP would make a considerable contribution to cumulative climate change effects.

As such, the analysis in Impact 3.4-1 considers the potential cumulative impacts of FMP-related GHG emissions. Implementation of the SJCC FMP, including Mitigation Measures 3.4-1a through 3.4-1j, would reduce projected annual GHG emissions to a less than significant level. As such, the SJCC FMP's contribution to the cumulative GHG impact would not be cumulatively considerable.

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3.5 Noise

This section assesses the potential for the proposed SJCC FMP to result in significant adverse noise impacts or expose people or structures to vibration impacts, and identifies feasible mitigation measures to avoid or reduce potential adverse impacts. Potential impacts are discussed and evaluated, and appropriate mitigation measures are identified, as necessary.

3.5.1 Environmental Setting

Noise Principles and Descriptors

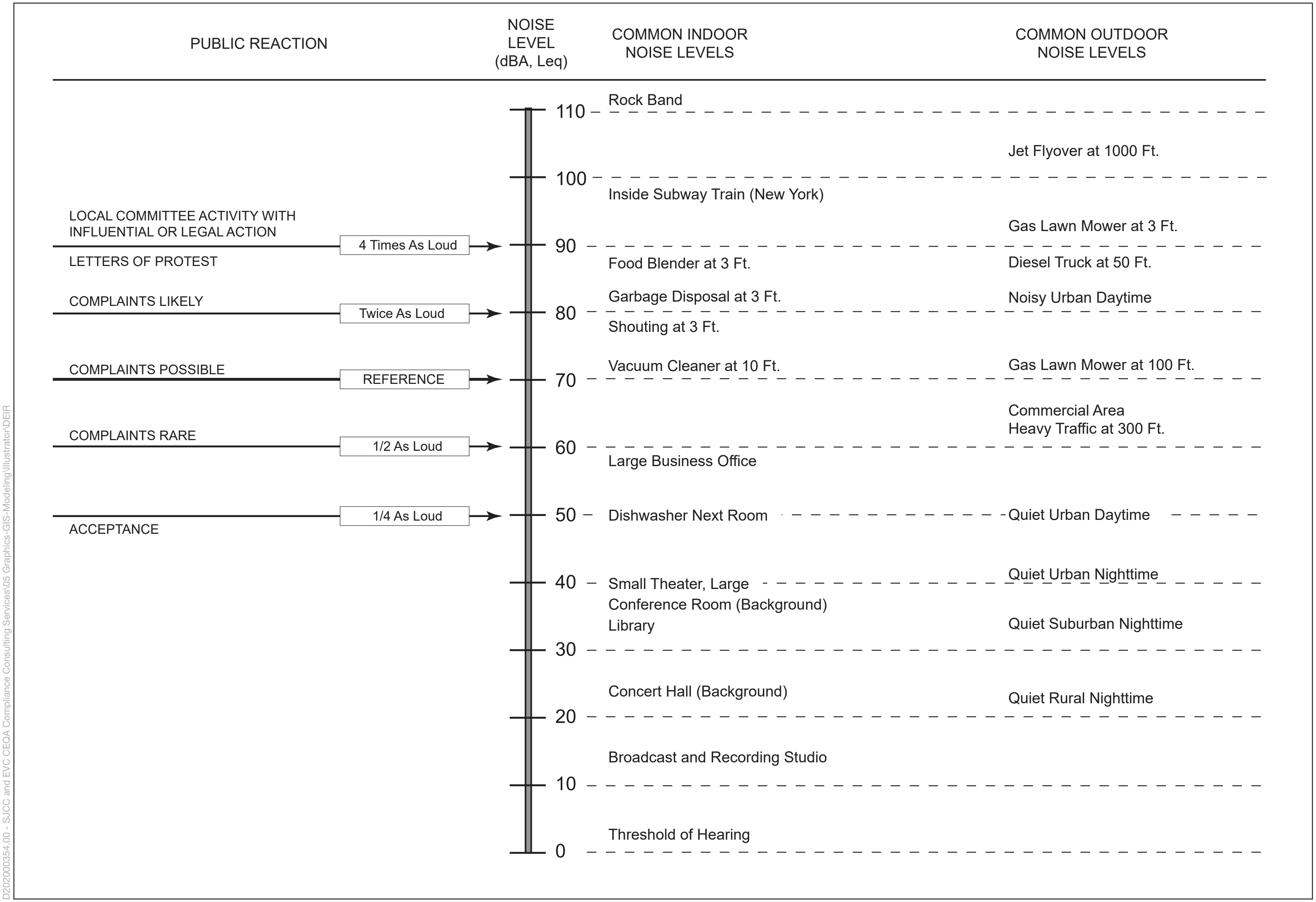
Noise is generally defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 and 140 dB corresponding to the thresholds of feeling and pain, respectively. Pressure waves traveling through air exert a force registered by the human ear as sound.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. When all audible frequencies of a sound are measured, a sound spectrum is plotted, consisting of a range of frequencies spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, during the assessment of potential noise impacts, sound is measured using an electronic filter that deemphasizes frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology for frequency de-emphasis and is typically applied to community noise measurements. **Figure 3.5-1** (Effects on Noise on People) shows some representative noise sources and their corresponding A-weighted noise levels. All noise levels presented in this report are A-weighted unless otherwise stated.

Noise Exposure and Community Noise

An individual's noise exposure is a measure of noise over a period of time. A noise level is a measure of noise at a given instant in time. The noise levels presented on Figure 3.5-1 are representative of measured noise at a given instant in time; however, these noise levels rarely persist consistently over a long period of time. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise



SOURCE: Caltrans Transportation Laboratory Noise Manual, 1982; and modification by ESA

San José City College Facilities Master Plan - San José Evergreen Community College District

Figure 3.5-1
Effects of Noise on People

sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.

These successive additions of sound to the community noise environment change the community noise level from instant to instant. Thus, noise exposure must be measured over a period of time to legitimately characterize a community's noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The following are the most frequently used noise descriptors:

- **L_{eq}:** The equivalent-continuous sound level, also referred to as the "average sound level" is used to describe noise over a specified period of time in terms of a single numerical value. The L_{eq} of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time.
- **L_{max}:** The maximum, instantaneous noise level experienced during a given period of time.
- **DNL:** The "day-night average noise level" (DNL) is the average A-weighted noise level during a 24-hour day that is obtained after 10 dBA are added to noise levels measured between 10 p.m. to 7 a.m. to account for nighttime noise sensitivity. DNL is the metric used by the Noise Element of the *Envision San José 2040 General Plan* (General Plan) for assessing the land use compatibility of non-aviation sources.
- **CNEL:** The community noise equivalent level. This is the average A-weighted noise level during a 24-hour day that is obtained after 5 dBA are added to noise levels measured between 7 and 10 p.m. and 10 dBA are added to noise levels between 10 p.m. and 7 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The CNEL metric is reported as a number and is generally understood to be in terms of A-weighted decibels. The CNEL is the metric generally used for assessment of aircraft noise. The result is normally about 0.5 dBA higher than DNL using the same 24-hour data (Caltrans, 2013a).

Noise Attenuation

Stationary "point" sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 to 7.5 dBA per doubling of distance from the source, depending on the topography of the area and environmental conditions (e.g., atmospheric conditions and noise barriers, vegetative or manufactured). Widely distributed noise, such as that generated by a large industrial facility spread over many acres, or by a street with moving vehicles (known as a "line" source) would typically attenuate at a lower rate—approximately 3 to 4.5 dBA each time the distance doubles from the source, which also depends on environmental conditions (Caltrans, 2013a). Noise from large construction sites exhibits characteristics of both "point" and "line" sources, and attenuation will therefore generally range between 4.5 and 7.5 dBA with every doubling of distance.

Effects of Noise on People

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance)
- Interference effects (e.g., communication, sleep, and learning interference)
- Physiological effects (e.g., startle response)
- Physical effects (e.g., hearing loss)

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects of environmental noise refer to those effects that interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

Overall, there is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual’s past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur (Caltrans, 2013a):

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived.
- Outside of the laboratory, a 3 dB change in noise levels is considered barely perceivable.
- A change in noise levels of 5 dB is considered readily perceivable.
- A change in noise levels of 10 dB is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dB, the combined sound level would be 53 dB, not 100 dB.

Fundamentals of Vibration

As described by the Federal Transit Administration (FTA) in the *Transit Noise and Vibration Impact Assessment* (FTA, 2018), groundborne vibration can be a serious concern for the neighbors of a transit system route or maintenance facility, which can cause buildings to shake and rumbling sounds to be heard. In contrast with airborne noise, groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, buses on rough roads, and construction activities such as blasting, pile driving, and operation of heavy earth-moving equipment.

Several different methods are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe the impacts of vibration on buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (in vibration decibels [VdB]) is commonly used to measure RMS.

The relationship of PPV to RMS velocity is expressed in terms of the “crest factor,” defined as the ratio of the PPV amplitude to the RMS amplitude. Peak particle velocity is typically a factor of 1.7 to 6 times greater than RMS vibration velocity (FTA, 2018). The decibel notation acts to compress the range of numbers required to describe vibration.

Typically, groundborne vibration generated by human activity attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.

The effects of groundborne vibration include movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, vibration can damage buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile driving during construction. Annoyance from vibration often occurs when the vibration levels exceed the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings. FTA’s measure of the threshold of architectural damage for conventional sensitive structures is 0.2 inches per second (in/sec) PPV (FTA, 2018).

In residential areas, the background vibration velocity level is usually around 50 VdB (approximately 0.0013 in/sec PPV, with a crest factor of 4). This level is well below the vibration-velocity-level threshold of perception for humans, which is approximately 65 VdB. A vibration velocity level of 75 VdB is considered to be the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (FTA, 2018).

Existing Ambient Noise Levels

The SJCC campus is located in central San José immediately south of Interstate 280 (I-280) and is bounded by Moorpark Avenue to the north; Rexford Way, Mansfield Drive, Kingman Avenue, and Fruitdale Avenue to the south; Laswell Avenue and South Bascom Avenue to the west; and Leigh Avenue to the east.

In addition to on-campus activities, traffic on the surrounding roadway network primarily influences the local noise environment. I-280 is located to the north of the campus boundary and the I-280/Interstate 880/State Route (SR) 17 junction is located approximately 2,400 feet west of the campus. The Norman Y. Mineta San José International Airport (Airport) is located approximately 2.5 miles north of the northern site boundary. The SJCC campus is not located within the 65 dBA CNEL noise contour for 2019.[1]

The primary existing noise source both on campus and off campus is motor vehicle traffic. Principal vehicular traffic routes near the campus include I-280, Moorpark Avenue, South Bascom Avenue, Fruitdale Avenue, and Leigh Avenue. As I-280 is separated from the campus by Moorpark Avenue, and the I-280 freeway segment immediately adjacent to the campus is depressed by approximately 30 feet, traffic on South Bascom Avenue, Moorpark Avenue and Leigh Avenue are the dominant sources of noise on, and in the vicinity of, the campus. Stationary and area noise sources on the campus include parking lots, mechanical equipment such as air conditioners, ventilation systems, pool pumps, and operational activities, including landscape maintenance, pedestrian traffic, and delivery trucks.

The campus also generates noise periodically from on-site athletic events, community activities and fundraising activities at the existing stadium and athletic facilities in the eastern and southern portions of the campus. The football and track stadium is located in the eastern portion of the campus approximately 100 feet from Leigh Avenue. During events, noise is generated from sources such as the use of a public address (PA) system, people talking and yelling, occasional school bands, referees' whistles, etc. Based on a study of a comparable stadium in Southern California, background noise levels preceding a football game can average 55 to 60 dBA just outside of the stadium. During the game, noise levels averaged 60 to 65 dBA when the PA system was not in use, 65 to 75 dBA during the use of PA equipment, and 70 to 75 dBA during the playing of amplified music. Instantaneous noise levels of up to 80 dBA were measured during to the blowing of whistles (SJECCD, 2010).

A multi-use athletic field is located in the southeastern corner of the campus adjacent to Leigh Avenue. The field is used for Physical Education classes during the day, late afternoon soccer practice by youth leagues on Monday through Friday, and weekend youth soccer league games. Peak hour noise levels associated with this type of facility range from 44 dB to 53 dB Leq at 100 feet, while 24-hour noise levels associated with this type of facility range from 39 dB to 48 dB DNL at 100 feet (SJECCD, 2010).

Due to restrictions on travel and activity imposed in response to the ongoing COVID-19 pandemic, current ambient noise levels at and around the SJCC campus are not representative of typical noise levels in the area. There has been a reduction in noise at and around the campus due to reduced traffic, reduced commercial activity and temporary closure of the SJCC campus during

1 The 2018 CNEL contours noise exposure map was published as part of the *Master Plan for Norman Y. Mineta San José International Airport*.

the pandemic. Therefore, noise monitoring was not conducted to establish baseline ambient noise levels. Instead, the analysis presented in this section relies on noise measurements collected in support of the District's SJCC 2025 Updated Facilities Master Plan Final EIR prepared in 2013 (SJECCD, 2013). Using this lower baseline noise level from 2013 would provide conservative results when estimating resultant increases in noise levels.

For the noise analysis in the SJCC 2025 Updated Facilities Master Plan Final EIR, ambient noise levels were monitored for 15-minute durations at six locations on and in the vicinity of the campus during the PM peak hours of 4:00 PM to 6:00 PM. These locations are identified on **Figure 3.5-2** (Noise Monitoring Locations). **Table 3.5-1** summarizes the measured average noise levels (L_{eq}).

TABLE 3.5-1
EXISTING NOISE ENVIRONMENTS IN THE SJCC CAMPUS VICINITY

Noise Measurement Location	Measured L_{eq} (dBA)
ST-1: Intersection of Moorpark Avenue and Leigh Avenue, near the Immanuel Lutheran Church	70.9
ST-2: 230 feet north of the Leigh Avenue and Kingman Avenue intersection along the eastern boundary of the campus	68.1
ST-3: Intersection of Kingman Avenue and Mansfield Drive	65.1
ST-4: Parking Lot E at the intersection of Kingman Avenue and Laswell Avenue	63.9
ST-5: On campus at the central green adjacent to the General Education buildings	71.0
ST-6: On campus at the Theater Building along the northern border of the campus	68.9

NOTES:
dBA = A-weighted decibels; L_{eq} = equivalent-continuous sound level

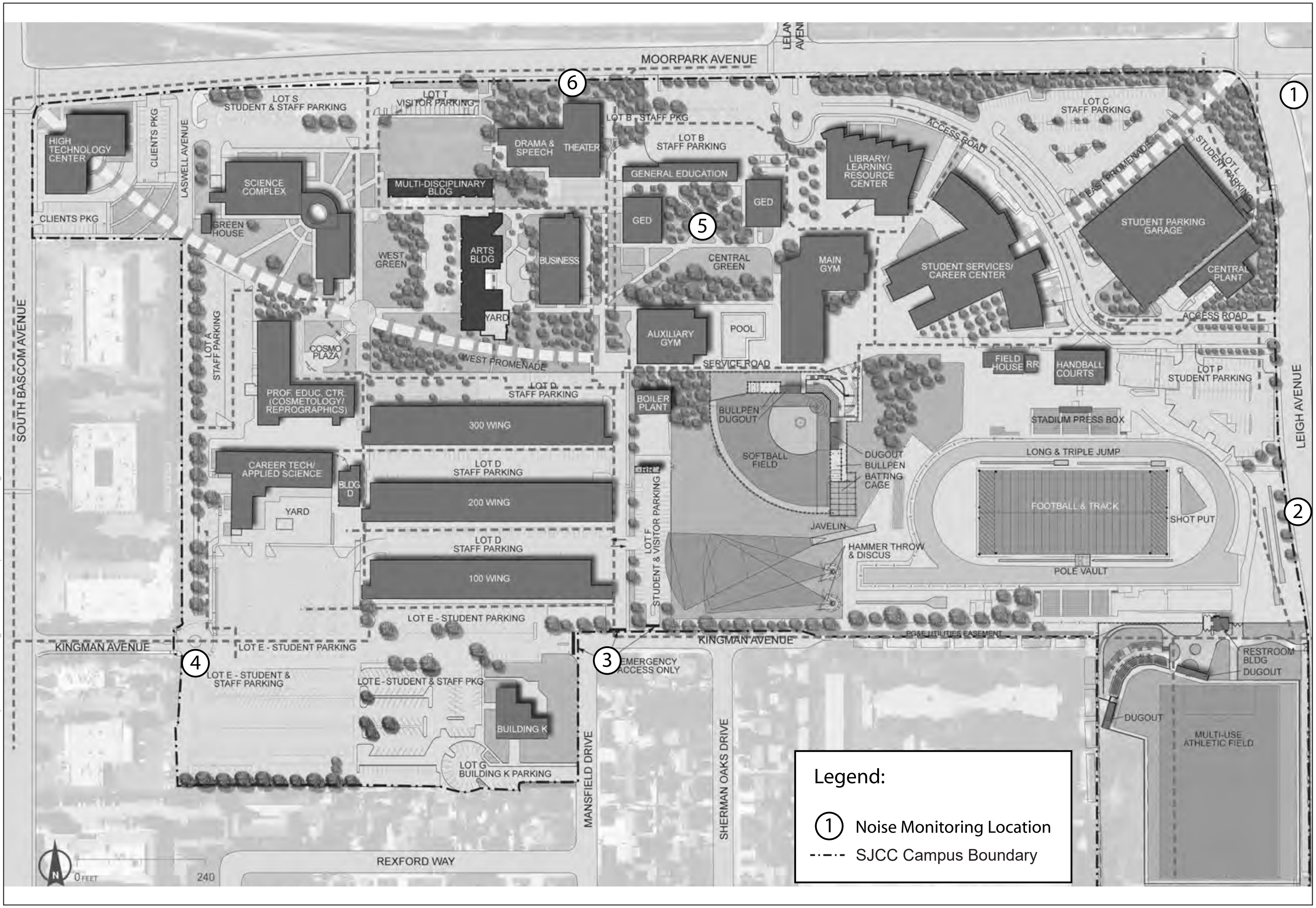
SOURCE: SJECCD, 2013.

Sensitive Receptors

Some land uses are considered more sensitive to noise levels than others because of the amount of noise exposure (in terms of both the duration of exposure and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, and auditoriums generally are more sensitive to noise than are commercial and industrial land uses.

SJCC is surrounded by sensitive receptors on all sides of the campus. The Santa Clara Valley Medical Center is located to the west across South Bascom Avenue; a residential neighborhood, senior housing, and a church to the east; a mixed single- and multi-family residential neighborhood to the south; and single-family residential uses to the north across I-280. Figure 2-2 of the *Project Description* shows the land uses in the SJCC campus vicinity. In addition, the users of the campus are also considered sensitive receptors.

Table 3.5-2 identifies the closest offsite sensitive receptors and their approximate distances to the campus buildings that would undergo either demolition, renovation or construction.



SOURCE: SJCC 2025 Facilities Master Plan, November, 2011

Figure 3.5-2
Noise Monitoring Locations

TABLE 3.5-2
EXISTING OFF-SITE NOISE-SENSITIVE RECEPTORS IN THE VICINITY OF SJCC FMP BUILDINGS

Building	Nearest Sensitive Receptor	Distance to Nearest Offsite Residential Receptor[a] (feet)
Renovation		
Student Center (SC)	Residences to the south of Kingman Avenue	680
Technology Center (T)	Residences to the north along Parkmoor Avenue	520
Reprographics and Cosmetology (R & C)	Residences to the south of Kingman Avenue	680
Jaguar Student Development and Multi-cultural Center (JMC)	Residences to the south of Kingman Avenue	640
CTE 200 Building	Residences to the south of Kingman Avenue	175
Central Plant (CP)	Residences to the east along Richmond Avenue	325
Demolition		
Business Building (B)	Residences to the north along Parkmoor Avenue	650
General Education Buildings (GE)	Residences to the north along Parkmoor Avenue	550
Building 100	Residences to the south of Kingman Avenue	95
Applied Sciences Building D	Residences to the south of Kingman Avenue	530
New Construction		
Career Technology Education Building (CTE)	Residences to the south of Kingman Avenue	430
Child Development Center (CD)	Residences to the south along Mansfield Drive	50
General Education / Business Complex (GE)	Residences to the north along Parkmoor Avenue	540
Aquatic Center	Residences to the east of Leigh Avenue	190
Parking Structure	Residences to the south of Kingman Avenue	150

NOTES:
[a] Minimum distance is estimated at 25 feet because individual building setbacks have not yet been determined.

SOURCES: Data compiled by Environmental Science Associates in 2020; Google Earth (imagery date July 21, 2020) for parcel data (address and distance to the site).

In addition to the off-site receptors identified in Table 3.5-2, on-site campus buildings where learning would take place and the proposed Child Development Center are also considered sensitive to noise.

3.5.2 Regulatory Setting

Federal

Federal Noise Standards

The primary federal noise standards that directly regulate noise related to the operation of the proposed SJCC FMP pertain to noise exposure and workers. The U.S. Occupational Safety and Health Administration (OSHA) enforces regulations to safeguard the hearing of workers exposed to occupational noise. OSHA has established worker noise exposure limits that vary with the duration of the exposure and require that a hearing conservation program be implemented if employees are exposed to noise levels in excess of 85 dBA.

Federal regulations also establish noise limits for medium and heavy trucks (more than 4.5 tons, gross vehicle weight rating) under Code of Federal Regulations Title 40, Part 205, Subpart B. The federal truck pass-by noise standard is 80 dBA at 15 meters from the vehicle pathway centerline. These controls are implemented through regulatory controls on truck manufacturers.

Federal Transit Authority Vibration Standards

FTA has adopted vibration standards that are used to evaluate potential building damage impacts from construction activities. **Table 3.5-3** shows FTA's vibration damage criteria.

TABLE 3.5-3
CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

NOTES:
in/sec = inches per second; PPV = peak particle velocity

SOURCE: FTA, 2018.

In addition, FTA has adopted standards related to human annoyance for groundborne vibration impacts for the following three land use categories: Vibration Category 1, High Sensitivity; Vibration Category 2, Residential; and Vibration Category 3, Institutional. FTA defines these categories as follows:

- *Category 1:* Buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes.

- *Category 2:* All residential land uses and any buildings where people sleep, such as hotels and hospitals.

- *Category 3:* Institutional land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Under conditions where there is an infrequent number of events per day, FTA has established thresholds of 65 VdB for Category 1 buildings, 80 VdB for Category 2 buildings, and 83 VdB for Category 3 buildings.[2] Under conditions where there is an occasional number of events per day, FTA has established thresholds of 65 VdB for Category 1 buildings, 75 VdB for Category 2 buildings, and 78 VdB for Category 3 buildings.[3] No thresholds have been adopted or recommended for commercial and office uses.

State

California Department of Public Health Noise Standards

The California Department of Health Services has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure (Governor's Office of Planning and Research, 2017). **Table 3.5-4** shows these guidelines for land use and noise exposure compatibility. In addition, California Government Code Section 65302(f) requires each county and city in the state to prepare and adopt a comprehensive long-range general plan for its physical development. Section 65302(g) requires the general plan to include a noise element. The noise element must:

- Identify and appraise noise problems in the community;
- Recognize Office of Noise Control guidelines; and
- Analyze and quantify current and projected noise levels.

The State of California also establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the state pass-by standard is consistent with the federal limit of 80 dBA. The State pass-by standard for light trucks and passenger cars (less than 4.5 tons, gross vehicle rating) is also 80 dBA at 15 meters from the centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by state and local law enforcement officials.

California Building Code

The California Building Code (CBC) requires that walls and floor/ceiling assemblies separating dwelling units from each other, or from public or service areas, have a sound transmission class[4] of 50 dB for all common interior walls and floor/ceiling assemblies between adjacent dwelling units, or between dwelling units and adjacent public areas for multifamily units and transient lodging. The code specifies a maximum interior performance standard of 45 dBA.

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[2] FTA defines "infrequent events" as fewer than 30 vibration events of the same kind per day.

[3] FTA defines "occasional events" as between 30 and 70 vibration events of the same source per day.

[4] The sound transmission class is used as a measure of a material's ability to reduce sound. The sound transmission class is equal to the number of decibels a sound is reduced as it passes through a material.

TABLE 3.5-4
COMMUNITY NOISE EXPOSURE (DNL OR CNEL)

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Single-Family Homes, Duplexes, Mobile Homes	50–60	55–70	70–75	above 75
Multifamily Homes	50–65	60–70	70–75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50–70	60–70	70–80	above 80
Transient Lodging—Motels, Hotels	50–65	60–70	70–80	above 75
Auditoriums, Concert Halls, Amphitheaters	—	50–70	—	above 70
Sports Arenas, Outdoor Spectator Sports	—	50–75	—	above 75
Playgrounds, Neighborhood Parks	50–70	—	67–75	above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50–75	—	70–80	above 80
Office Buildings, Business and Professional, Commercial	50–70	67–77	above 75	—
Industrial, Manufacturing, Utilities, Agriculture	50–75	70–80	above 75	—

NOTES:
CNEL = community noise equivalent level; DNL = day-night average noise level
[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

SOURCE: Governor's Office of Planning and Research, 2017.

The State has also established noise insulation standards for new multifamily residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards (California Code of Regulations, Title 24). The noise insulation standards set forth an interior standard of 45 dBA CNEL in any habitable room. They require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than 60 dBA CNEL. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

State Vibration Standards

No state vibration standards are applicable to the proposed SJCC FMP. Moreover, according to the California Department of Transportation's (Caltrans) *Transportation and Construction Vibration Guidance Manual* (Caltrans, 2013b), there are no official Caltrans standards for vibration. However, this manual provides guidelines for assessing the potential for vibration damage to various types of buildings, ranging from 0.08 to 0.12 in/sec PPV for extremely fragile historic buildings, ruins, and ancient monuments to 0.50 to 2.0 in/sec PPV for modern industrial/commercial buildings.

Regional

Santa Clara County Airport Land Use Commission Comprehensive Land Use Plan

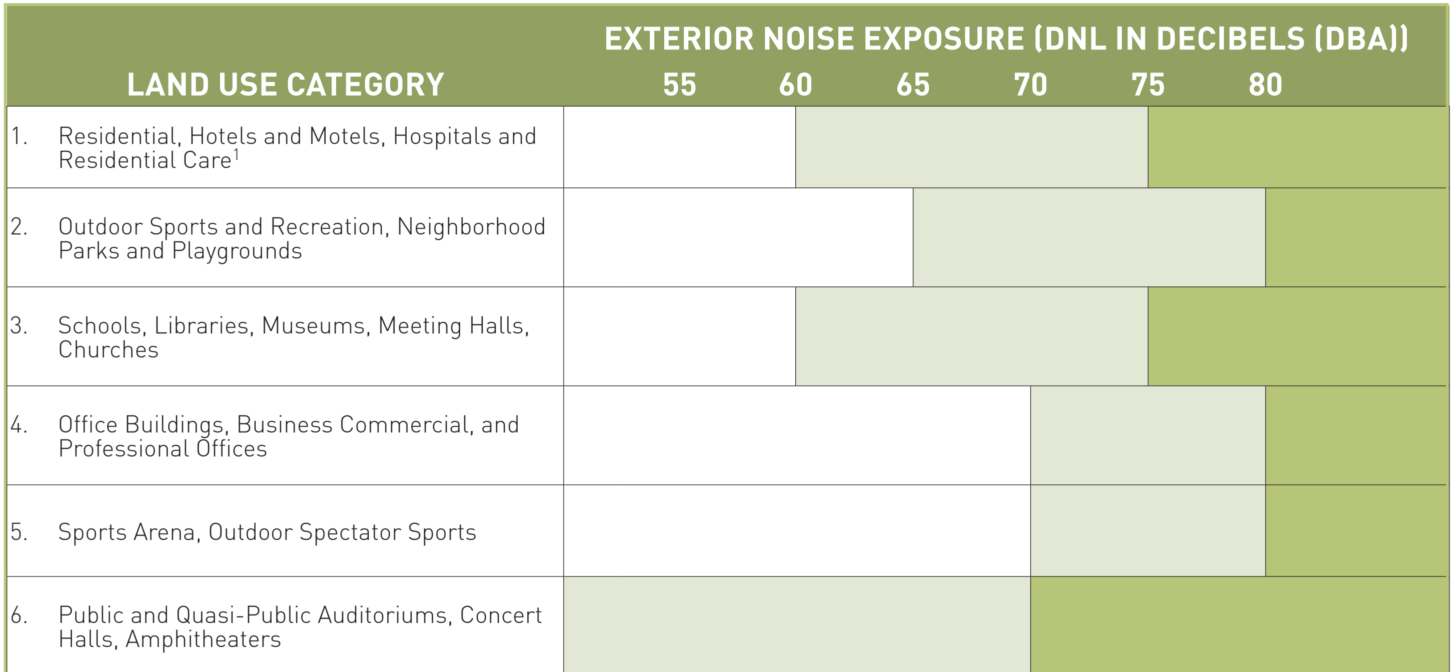
The SJCC campus is not located within the Airport Influence Area, as defined by the Norman Y. Mineta San José International Airport's Comprehensive Land Use Plan (CLUP), adopted by the Santa Clara County Airport Land Use Commission (ALUC) on May 25, 2011 (Santa Clara County ALUC, 2011). The Airport Influence Area includes areas around the Airport that are affected by noise, height, and safety considerations. The CLUP includes noise policies and standards for projects in the vicinity of the Airport, but would not apply to the SJCC FMP.

Envision San José 2040 General Plan

The District is the lead agency under CEQA. Therefore, General Plan policies would not apply to the SJCC FMP. However, the SJCC campus is located within the City of San José, with adjacent land uses that are likely to be subjected to noise impacts due to implementation of the proposed SJCC FMP. The externality of noise effects to the surrounding land uses is the basis for consideration of the City's noise policies and ordinances in this analysis.

The Environmental Considerations/Hazards chapter of the General Plan (City of San José, 2020) contains the following policies and actions regarding noise and vibration that are applied to the proposed SJCC FMP:

> **Goal EC-1: Community Noise Levels and Land Use Compatibility.** Minimize the impact of noise on people through noise reduction and suppression techniques, and through appropriate land use policies.
>
> > ***Policy EC-1.1*****:** Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review. Applicable standards and guidelines for land uses in San José include:
> >
> > - <u>Interior Noise Levels:</u> The City's standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. Include appropriate site and building design, building construction and noise attenuation techniques in new development to meet this standard. For sites with exterior noise levels of 60 dBA DNL or more, an acoustical analysis following protocols in the City-adopted California Building Code is required to demonstrate that development projects can meet this standard. The acoustical analysis shall base required noise attenuation techniques on expected 2040 General Plan traffic volumes to ensure land use compatibility and 2040 General Plan consistency over the life of this plan.
> >
> > - <u>Exterior Noise Levels:</u> The City's acceptable exterior noise level objective is 60 dBA DNL or less for residential and most institutional land uses [**Figure 3.5-3** (Land Use Compatibility Guidelines for Community Noise in San José)]. The acceptable exterior noise level objective is established for the City, except in the environs of the Norman Y. Mineta San José International Airport, Downtown (including the project site), and adjacent to elevated roadways. For the remaining areas of the City, the following standards apply:



[1]Noise mitigation to reduce interior noise levels pursuant to Policy EC-1.1 is required.

Normally Acceptable:

- Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable:

- Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.

Unacceptable:

- New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

N Not to Scale

SOURCE: San José, Envision San Jose 2040 General Plan Update, 2018

Figure 3.5-3
Land Use Compatibility Guidelines for Community Noise in San Jose

- For new multifamily residential projects and for the residential component of mixed-use development, use a standard of 60 dBA DNL in usable outdoor activity areas, excluding balconies and residential stoops and porches facing existing roadways. There will be common use areas available to all residents that meet the 60 dBA exterior standard. Use noise attenuation techniques such as shielding by buildings and structures for outdoor common use areas.
- For single-family residential uses, use a standard of 60 dBA DNL for exterior noise in private usable outdoor activity areas, such as backyards.

Policy EC-1.2**:** Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3, and 6 [residential, hotel, hospital, and residential care uses, parks and playgrounds, schools, libraries, museums, meeting halls, houses of worship, auditoriums and similar facilities]) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by 5 dBA DNL or more where the noise levels would remain "Normally Acceptable"; or
- Cause the DNL at noise sensitive receptors to increase by 3 dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level.

Policy EC-1.3**:** Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.

Policy EC-1.7**:** Require construction operations within San José to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:

- Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.

For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

Goal EC-1: Vibration. Minimize vibration impacts on people, residences, and business operations.

Policy EC-2.3: Require new development to minimize continuous vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, including ruins and ancient monuments or building that are documented to be structurally weakened, a continuous vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A continuous vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction. Equipment or activities typical of generating continuous vibration include but are not limited to: excavation equipment; static compaction equipment; vibratory pile drivers; pile-extraction equipment; and vibratory compaction equipment. Avoid use of impact pile drivers within 125 feet of any buildings, and within 300 feet of historical buildings, or buildings in poor condition. On a project-specific basis, this distance of 300 feet may be reduced where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction. Transient vibration impacts may exceed a vibration limit of 0.08 in/sec PPV only when and where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction.

City of San José Municipal Code

City of San José Municipal Code Section 20.100.450 establishes noise exposure limits for stationary noise sources (non-transportation sources) and specifies hours for project construction. The Municipal Code restricts construction within 500 feet of a residential unit to 7 a.m. to 7 p.m. Monday through Friday, with no construction on weekends; however, overnight and weekend construction is permitted if expressly allowed in a development permit or other planning approval. The Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the city.

Municipal Code Sections 20.20.300, 20.30.700, 20.40,600, and 20.50.300 establish performance standards for noise exposure associated with stationary/non-transportation sources at the property line of noise-sensitive uses. Specifically, noise exposure is limited to 55 dBA, 60 dBA, and 70 dBA at the property line of residential, commercial, and industrial receivers, respectively. Although the code is not explicit with respect to the acoustical descriptor assigned to these noise levels, it is a reasonable interpretation that these levels may be applied to an hourly average noise level (hourly L_{eq}). This assumption is consistent with other jurisdictions in the Bay Area and Northern California.

3.5.3 Analysis, Impacts, and Mitigation

Significance Criteria

For the purposes of this EIR, the SJCC FMP would result in a significant noise and vibration impact if it would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generate excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Methodology

The following is a description of the methodology used to evaluate the impacts of development proposed under the SJCC FMP relative to each of the significance thresholds listed above.

Criterion 1: Substantial Increase in Noise in Excess of Applicable Standards

The first threshold of significance examines whether construction and/or operations under the SJCC FMP would generate noise in excess of established noise standards, which are different for stationary, mobile, and construction noise sources.

Construction-related noise generated by the SJCC FMP (Impact 3.5-1) is evaluated based on the distance to sensitive receptors established in City of San José General Plan Policy EC-1.7 and indicated in Figure 3.5-2. Evaluation of operational impacts of the SJCC FMP relative to this threshold focuses first on increases in ambient noise levels from stationary sources during operation and their relationship to the City General Plan policies and Municipal Code noise limits (see Section 3.5.2, *Regulatory Framework*). In addition, the contribution of the SJCC FMP to localized increases in traffic-related noise along roadways in the vicinity of the campus was also evaluated relative to published measures of substantial increase in transportation noise, as discussed below. Operational noise impacts from stationary sources at the campus are discussed under Impact 3.5-2 and operational noise from increase in traffic is discussed under Impact 3.5-3.

Each of these approaches is described further below.

Construction Noise

The City of San José Municipal Code does not establish quantitative noise standards for construction noise. However, according to General Plan Policy EC-1.7, the City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would involve substantial noise-generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) that would continue for more than 12 months.

For large projects, the policy requires that the project implement a construction-noise logistics plan before the start of construction. The plan must specify hours of construction, identify noise and vibration minimization measures, include the posting or notification of construction schedules, and designate a noise disturbance coordinator who would respond to neighborhood complaints. The construction-noise logistics plan must be implemented during construction to reduce noise impacts on neighboring residents and other uses. Educational uses are considered sensitive to noise and because the SJCC FMP would be constructed in distinct phases over several years, the analysis also considers the construction noise impacts from later phases of construction on existing on-site sensitive receptors as well as new sensitive receptors introduced to the campus during the earlier phases of construction.

For the following analysis, construction noise levels are provided for standard construction equipment and for high-impact construction equipment for informational purposes. However, the level of significance of the impact was determined based on the duration and intensity of construction activities taking into account the standards in the City General Plan policies and Municipal Code.

Stationary-Source Noise

Development of the SJCC FMP would increase stationary sources of noise at the campus such as heating, ventilation, and air conditioning (HVAC) systems and backup generators, as well as from the expansion of the on-campus utility plant. Noise generated by this equipment could substantially increase noise levels at nearby noise-sensitive land uses and could expose sensitive receptors to noise levels exceeding standards established by City General Plan Policies EC-1.2, EC-1.3, and EC-1.6. Policy EC-1.6 requires compliance with noise standards in the City's Municipal Code, specifically Sections 20.20.300, 20.30.700, 20.40,600, and 20.50.300.

The following analysis considers the potential for noise from sources such as mechanical equipment, outdoor maintenance areas, truck loading docks and delivery activities, and parking lots by describing reference noise levels that are documented to be associated with these sources. Existing City General Plan policies and applicable restrictions in the City's Municipal Code that address such sources are identified. Finally, mitigation measures with performance standards to address the potential impacts are identified.

Traffic Noise

Based on Policy EC-1.2 of the City's General Plan, a significant impact would occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by 5 dBA DNL or more where the noise levels would remain "normally acceptable"; or
- Cause the DNL at noise sensitive receptors to increase by 3 dBA DNL or more where noise levels would equal or exceed the "normally acceptable" level.

Based on the General Plan's Land Use Compatibility Guidelines for Community Noise shown in Figure 3.5-3, a DNL of up to 60 dBA is considered "normally acceptable".

The 5 dBA and 3 dBA noise level increases also correlate directly with noise level increases that Caltrans considers to represent "readily perceivable" and "barely perceivable," respectively, for short-term noise increases. Thus, the significance of permanent increases in transportation noise levels is evaluated based on the increases identified in **Table 3.5-5**.

TABLE 3.5-5
MEASURES OF A SUBSTANTIAL INCREASE IN TRANSPORTATION NOISE EXPOSURE

Ambient Noise Level with Project (DNL)	Significant Impact Assumed to Occur if Project Site Development Increases Ambient Noise Levels by:
<60 dB	+ 5.0 dB or more
>60 dB	+ 3.0 dB or more

NOTES:
dB = decibels; DNL = day-night average noise level

SOURCE: City of San José, 2011.

Traffic noise levels were modeled using the algorithms of the Federal Highway Administration's (FHWA) Traffic Noise Model for the existing and 2030 with SJCC FMP scenarios. Noise levels with the SJCC FMP were then compared to existing modeled or monitored conditions (Table 3.5-1), depending on the contribution of other noise sources in the local environment, to determine significance.

Criterion 2: Groundborne Vibration

Impacts from groundborne vibration during construction under the SJCC FMP are assessed in Impact 3.5-4 relative to vibration-damage threshold criteria expressed in PPV for architectural damage. Upon completion of construction, the SJCC FMP would not include any sources of vibration; hence, vibration impacts during operation of the SJCC FMP are not discussed in the analysis presented below.

Construction equipment or activities that typically generate continuous vibration include but are not limited to excavation equipment, static compaction equipment, vibratory pile drivers, pile-extraction equipment, and vibratory compaction equipment. General Plan Policy EC-2.3 requires new development to minimize the impacts of continuous vibration on adjacent uses during demolition and construction. For sensitive historic structures, including ruins and ancient monuments or buildings that are documented to be structurally weakened, a continuous vibration limit of 0.08 in/sec PPV is the standard applied to minimize the potential for cosmetic damage to a building. A continuous vibration limit of 0.20 in/sec PPV is applied to minimize the potential for cosmetic damage at buildings of normal conventional construction.

Policy EC-2.3 also discourages the use of impact pile drivers within 125 feet of any buildings, and within 300 feet of historical buildings or buildings in poor condition. On a project-specific basis, this distance of 300 feet may be reduced, where warranted by a technical study by a qualified professional who verifies that there would be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction.

Transient vibration impacts may exceed a vibration limit of 0.08 in/sec PPV only when and where warranted by a technical study by a qualified professional who verifies that there would be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction.

Caltrans's measure of the threshold for architectural damage to conventional sensitive structures is 0.5 in/sec PPV for new residential structures and modern commercial buildings and 0.25 in/sec PPV for historic and older buildings (Caltrans, 2013b). However, because the General Plan's standards are more restrictive, the City's thresholds were applied in the analysis.

Vibration impacts were estimated using reference vibration levels for specific construction equipment in concert with the vibration propagation equations published by FTA, and estimating the potential for resultant vibration levels in excess of the General Plan standards.

Criterion 3: Exposure of People to Excessive Noise Levels

The SJCC campus is located approximately 2.5 miles south of the San José International Airport and is not located within the 65 dBA CNEL noise contour for the airport. Therefore, implementation of the SJCC FMP would not expose people residing or working in the project area to excessive noise levels from aircraft operations. There would be no impact and this would not be further discussed in the analysis presented below.

Cumulative Traffic Impacts

Construction of other projects proposed in the vicinity of the SJCC campus whose construction schedules overlap with the implementation of the SJCC FMP could also lead to cumulative noise and vibration impacts.

The significance of cumulative impacts related to operational traffic noise levels is determined using a two-step process. First, similar to the project-level assessment of traffic impacts, the increase in noise levels between cumulative (2030) conditions with the SJCC FMP and existing conditions is compared to an incremental 3 dBA or 5 dBA threshold, as applicable based on the existing noise level. If the roadside noise levels would exceed this incremental threshold, a significant cumulative noise impact would be identified.

The second step of the analysis of cumulative operational roadside noise impacts (if a significant cumulative noise impact is predicted based on the above methodology) is to evaluate whether the contribution of the SJCC FMP to roadside noise levels would be cumulatively considerable. This second step (if necessary) involves assessing whether the SJCC FMP's contribution to roadside noise levels (i.e., the difference between cumulative conditions with and without the SJCC FMP) would exceed a 1.5 dBA incremental contribution; this is a threshold that is considered to be cumulatively considerable. As stated above, except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived. Consequently, a cumulatively considerable contribution would reasonably be more than 1 dBA.

Impacts and Mitigation Measures

Impact 3.5-1: Construction activities associated with the implementation of the SJCC FMP could result in temporary increases in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies. *(Significant and Unavoidable)*

Construction activities associated with the SJCC FMP would begin in 2021 and is conservatively assumed to continue through 2030. Renovation, demolition and new construction would take place according to the schedule described in Section 2.6, *Implementation and Phasing Schedule*, within Chapter 2, *Project Description*. Noise would be generated by construction activities and equipment used for these activities.

Construction, though typically temporary, short-term, and/or intermittent, can be a substantial source of noise. Chances for noise impacts from construction activities tend to be greatest when construction activities occur during the noise-sensitive times of the day (early morning, evening, or nighttime hours), in areas immediately adjacent to sensitive receptors, or when construction activities last for extended periods of time. The following analysis addresses the SJCC FMP's potential construction impacts on off-site receptors using standards established in the City's noise ordinances and General Plan policies identified in Section 3.5.2, *Regulatory Framework*. In addition, educational uses such as schools, colleges and universities are also considered sensitive to noise. Therefore, the following analysis also considers impacts to receptors on the campus from exposure to construction noise.

Major noise-generating construction activities associated with the SJCC FMP would include demolition of existing pavement and structures; site clearing and excavation; installation of utilities; construction of building foundations, cores, and shells; paving; and landscaping. Noise levels would be loudest during demolition of existing structures, which would require the use of impact tools (e.g., jackhammers, hoe rams) and during construction of building foundations, especially if impact pile driving would be required to support the structures. Excavation and grading would also generate high noise levels, as these phases often require the simultaneous use of multiple pieces of heavy equipment such as dozers, excavators, scrapers, and loaders. Building construction would involve the operation of cranes, man lifts, gradall/forklifts, and pneumatic hand tools. Noise levels are typically lower when building construction activities move indoors and require less heavy equipment to complete tasks. Similarly, noise from renovation activities would be lower as most of the activities would take place indoors with the exception of the operation of forklifts, loaders and dump trucks that would be used to transport construction materials and demolition rubble.

Table 3.5-6 shows maximum noise levels associated with various types of construction equipment, including pile drivers, which may potentially be required for the construction of the proposed parking structure only.

The City of San José has not established quantitative noise limits for demolition or construction activities occurring in the city. According to the San José Municipal Code, the legal hours of construction within 500 feet of a residential unit are limited to 7 a.m. to 7 p.m., Monday through Friday. According to City of San José General Plan Policy EC-1.7, a significant construction noise impact would occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would involve substantial noise-generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) that would continue for more than 12 months. In such cases, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints is required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents. These standards from the City of San José General Plan are used in the analysis below in the absence of noise impact thresholds adopted by the District.

TABLE 3.5-6
TYPICAL MAXIMUM NOISE LEVELS FROM CONSTRUCTION EQUIPMENT

Construction Equipment	Noise Level (dBA, L_{max} at 50 feet)
Backhoe	78
Excavator	81
Compactor	83
Scraper	84
Air Compressor	78
Pneumatic Tools	85
Pumps	77
Dozer	82
Crane	81
Grader	85
Paver	77
Roller	80
Front-End Loader	79
Truck	76
Concrete Crusher	79
Drill Rig	85
Impact and Vibratory Pile Drivers	101

NOTES:
dBA = A-weighted decibels; L_{max} = maximum, instantaneous noise level experienced during a given period of time
These are maximum field measured values at 50 feet as reported from multiple samples.

SOURCE: FHWA, 2006.

Based on distances indicated in Table 3.5-3, construction of the Child Development Center, the CTE building, the Aquatic Center, and the Parking Structure, demolition of CTE 100 building, renovation of CTE 200 building and the Central Plant would take place within 500 feet of residential uses. Based on the construction timeline for the SJCC FMP extending over 9 years, the presence of off-site residential receptors within 500 feet and onsite sensitive receptors as close as 50 feet of construction activities, and the standard provided by City General Plan Policy EC-1.1, the impact of construction noise would be **potentially significant**, and would therefore warrant implementation of mitigation measures to reduce and restrict construction noise levels. Implementation of **Mitigation Measure 3.5-1, Construction Noise Reduction Plan** would reduce this impact.

Mitigation Measure 3.5-1: Construction Noise Reduction Plan

The District shall prepare a Construction Noise Reduction Plan, to be implemented as development occurs throughout the campus to address noise from demolition, renovation and construction of buildings within 500 feet of residential uses (construction of the Child Development Center, the CTE building, the Aquatic Center, and the parking Structure, demolition of CTE 100 building, renovation of CTE 200 building and the

Central Plant). This Construction Noise Reduction Plan shall include, at a minimum, the following noise reduction measures:

1. **Construction Schedule:** Construction hours shall be limited to between 7 a.m. and 7 p.m., Monday through Friday. No construction activities shall take place on weekends at sites within 500 feet of a residence. Beyond 500 feet of residential uses, weekend construction shall be limited to the hours to 10 a.m. to 6 p.m. Extreme noise generating activities such as pile driving (if required) and other activities with the potential to create extreme noise levels exceeding 90 dBA shall be conducted only between 10 a.m. and 4 p.m. The loudest construction activities, such as demolition and pile driving, shall be considered for scheduling during academic breaks when fewer people would be present on campus and be disturbed by construction noise.

2. **Site Perimeter Barrier:** To reduce noise levels from construction occurring within 500 feet of residential uses, a noise barrier shall be constructed along the perimeter of the construction site facing the receptor(s). Barriers shall be constructed either with two layers of 0.5-inch-thick plywood (joints staggered) and K-rail or other support, or with a limp mass barrier material weighing 2 pounds per square foot. If commercial barriers are employed, such barriers shall be constructed of materials with a Sound Transmission Class rating of 25 or greater.

3. **Stationary Equipment:** Stationary noise sources, such as generators and air compressors, shall be located as far from onsite receptors and adjacent properties as possible. These noise sources shall be muffled and enclosed within temporary sheds, or shall incorporate insulation barriers to provide additional noise reduction. For stationary equipment that will operate for more than one week within 500 feet of a noise-sensitive land use, additional localized barriers around such equipment shall be incorporated, that break the line of sight[5] to neighboring receptors.

4. **Temporary Power:** Temporary power poles shall be used instead of generators, where feasible.

5. **Construction Equipment:** All internal combustion–driven equipment shall be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment. Exhaust mufflers shall be provided on pneumatic tools when in operation for more than one week within 500 feet of a noise-sensitive land use. All equipment shall be properly maintained.

6. **Truck Traffic:** Individual truck idling shall be restricted to no more than two consecutive minutes per trip end. Trucks shall load and unload materials in the construction areas, rather than idling on local streets. If truck staging is required, to the extent possible, the staging areas shall be located along major roadways with higher traffic noise levels or away from the noise-sensitive receivers.

7. **Methods:** The construction contractor(s) shall consider alternative, less noise generating equipment and methods wherever feasible. Utilize “quiet” air compressors and other stationary noise sources where technology exists. Consider alternative methods of pile installation, such as drilling, if pile installation is required. Piles could be pre-drilled, as practicable, and a wood block placed between the hammer

[5] If a barrier does not block the line of sight between the source and the observer, the barrier will provide little or no attenuation (U.S. Department of Housing and Urban Development, *The Noise Guidebook*, prepared by The Environmental Planning Division, Office of Environment and Energy, March 2009, p. 24).

and pile to reduce metal-to-metal contact noise and "ringing" of the pile. Unnecessary idling of internal combustion engines shall be prohibited.

8. **Signals:** The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety and warning purposes only. Noise from public address loudspeakers, two-way radio, or music system used during construction shall not be audible at any adjacent noise-sensitive receptor except for emergency uses.

9. **Notification Requirements:** Businesses and residents within 500 feet shall be notified by mail at least one month before the start of construction activities. The notification shall include, at a minimum, the estimated duration of the construction, construction hours, and contact information. The same information shall be posted at construction site boundaries. Onsite academic and administrative uses shall be notified at least a week ahead of construction activities scheduled nearby.

10. **Complaint Protocol and Noise Complaint Liaison:** Protocols shall be implemented for receiving, responding to, and tracking received complaints. A noise complaint liaison shall be identified to field complaints regarding construction noise and interface with the SJCC FMP construction team. The liaison shall determine the cause of the noise complaint and require that measures to correct the problem be implemented. Signage that includes the community liaison's telephone number shall be posted at the construction site and the liaison's contact information shall be included in the notice sent to neighboring businesses and residents regarding the construction schedule.

Significance after Mitigation: Significant and Unavoidable. Mitigation Measure 3.5-1 would implement a Construction Noise Reduction plan, consistent with the requirements of General Plan Policy EC-1.7 to ensure that noise levels at offsite receptors would comply with the standards specified in General Plan Policy EC-1.1.

However, as onsite receptors could be located as close as 50 feet from construction sites, these measures would not reduce the impact to onsite receptors to a less than significant level. This impact would be **significant and unavoidable**.

Impact 3.5-2: Stationary sources associated with operation of the proposed SJCC FMP could result in generation of a permanent increase in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies. ***(Less than Significant with Mitigation)***

As there are no noise standards or thresholds adopted by the District, the analysis presented below uses noise standards specified in the City of San José's General Plan policies and Municipal Code for the evaluation of impacts from the SJCC FMP's stationary sources.

Noise from Central Plant

The cooling and heating needs of the majority of the facilities at the SJCC campus are met by the Central Plant located on the east side of the campus. The Central Plant building is approximately 7,700 square feet in area and houses a variety of equipment including three water-cooled centrifugal chillers, three natural gas boilers, chilled hot- and cold-water pumps, condenser pumps, expansion tanks, switchgear and transformers. There are cooling towers in an exterior screened yard area adjacent to the building.

The SJCC FMP would not increase the size of the building or add equipment to increase the capacity of the Central Plant. Instead, it would upgrade existing, older, equipment with newer equipment. While the complete list of equipment to be upgraded is not known at this time, the existing boilers would be replaced with newer equipment as part of an agreement with the BAAQMD with equipment compliant with Regulation 9, Rule 7. As neither the number nor the size of the equipment housed within the Central Plant would increase, and as newer equipment tend to be more efficient and less noise-generating, changes to equipment in the Central Plant would not result in increased noise levels. In addition, all new equipment would be located within the Central Plant building which would further attenuate noise from these sources.

The nearest receptors to the Central Plant would be the residences located to the east of Leigh Avenue approximately 325 feet away, and are not likely to experience noise levels in excess of the City's acceptable exterior noise level objective of 60 dBA DNL or less for residential and most institutional land uses, according to the City's General Plan, Table EC-1: Land Use Compatibility Guidelines for Community Noise in San José. Further, the nearest receptors to the Central Plant are also not likely to experience noise levels in excess of 55 dBA standard as established in Table 20-45 of the City's Municipal Code Section 20.30.300 from changes in equipment at the Central Plant.

Nevertheless, as equipment details are not available at this time, this impact is conservatively considered to be **potentially significant**. Implementation of **Mitigation Measure 3.5-2a, Operational Noise Performance Standard** would mitigate this impact to a less than significant level through a project-specific performance standard consistent with the City's standards.

Noise from Stationary Sources

Operation of the proposed SJCC FMP would increase ambient noise levels in the immediate vicinity primarily through the on-site use of stationary equipment, such as heating, ventilation, and air conditioning (HVAC) systems and emergency generators. **Table 3.5-7** presents representative reference noise levels for stationary noise sources associated with the operation of the SJCC FMP.

Though the cooling and heating needs of majority of the facilities at the SJCC campus are met by the Central Plant, a few of the buildings are served by dedicated package systems. Because the mechanical equipment is commonly available with noise-attenuating enclosures designed to meet local noise ordinances, the noise generated by this equipment would not be expected to exceed the established standards in the City's Municipal Code or General Plan policies. In addition, it can be reasonably anticipated that building mechanical equipment would be roof-mounted and shielded by screens or parapets, which would generally reduce noise levels for receptors.

TABLE 3.5-7
REFERENCE NOISE LEVELS FOR STATIONARY NOISE SOURCES ASSOCIATED WITH THE SJCC FMP

Stationary Noise Source	Documented Sound Levels (dBA)	Source
HVAC Equipment	72–78 dBA at 30 feet without acoustical treatments	Trane, *Sound Data and Application Guide*, 2002
Standby Diesel Generator	75–90 dBA at 23 feet (size dependent) without acoustical enclosure	Cummins Power Generation, *Sound Attenuated and Weather Protective Enclosures*, 2008
Parking Lot (four stories)	53–58 dBA at 75 feet	Illingworth and Rodkin, *Environmental Noise Assessment Vallco Fashion Park – North Parking Garage, Cupertino, California*, 2006

NOTES:
dBA = A-weighted decibels; HVAC = heating, ventilation and air conditioning

SOURCE: Table compiled by ESA in 2020 based on sources noted above.

Emergency backup generators, if required, would be tested regularly and operated occasionally, as needed. The only emergency generator currently exists in the General Education building. It is likely that the new General Education/Business complex as well as the career Technology Education buildings could house emergency generators. The BAAQMD permit for emergency backup generators allows a maximum operation of up to 50 hours per year, or on average about 1 hour per week, for testing and maintenance purposes. As shown in Table 3.5-7, noise generated during the one hour every week of testing would be approximately 75 – 90 dBA at 23 feet. As generators would be located within enclosures or structures, an additional attenuation would occur. In addition, both the General Education/Business complex as well as the career Technology Education buildings are located towards the center of the campus and at a minimum 430 feet from the nearest offsite residential receptors. Therefore, this occasional testing would not result in a substantial permanent increase in noise levels over ambient conditions.

San José Municipal Code Sections 20.20.300, 20.30.700, 20.40,600, and 20.50.300 establish performance standards for exposure to noise from stationary/non-transportation sources at the property line of noise-sensitive uses. Specifically, noise exposure is limited to 55 dBA, 60 dBA, and 70 dBA at the property lines of residential, commercial, and industrial receivers, respectively.

General Plan Policies EC-1.2, EC-1.3, EC-1.6, and EC-1.9 direct the City to reduce potential impacts of noise-generating land uses facilitated by the City General Plan. Policy EC-1.2 limits noise generation by requiring the use of noise attenuation measures such as acoustical enclosures and sound barriers. Policy EC-1.3 requires that new non-residential land uses mitigate noise generation to 55 dBA DNL at the property line when located adjacent to existing or planned noise-sensitive residential and public/quasi-public land uses. Policy EC-1.6 requires operational noise impacts from new industrial and commercial development on adjacent residential, commercial, and industrial uses by requiring compliance with noise standards in the City's Municipal Code. Lastly, Policy EC-1.9 requires land use proposals that include known or suspected loud intermittent noise sources that may affect adjacent existing or planned land uses to prepare a noise study and provide mitigation such that recurring maximum instantaneous noise levels would not exceed 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms.

Based on the noise reference levels in Table 3.5-7 and the possibility that receptors could be as close as 50 feet away from the HVAC equipment at the Child Development Center, the potential exists for unobstructed noise levels to be 70 dBA or higher at the nearest receptor locations, which would exceed exterior noise standards and result in a **potentially significant**. **Mitigation Measure 3.5-2a, Operational Noise Performance Standard for Stationary Sources** establishes a project-specific performance standard which would ensure that the SJCC FMP's stationary equipment would not result in noise levels to receptors that exceed the City's standards.

Noise from Proposed Parking Structure

Typical noises from the proposed parking structure would come from vehicle circulation, engines starting and accelerating, and closing of car doors. Other occasional noises include tire squeal noise, loud stereos, backup beepers and car alarms. As shown in Table 3.5-7, based on a noise study conducted by Illingworth & Rodkin for a four-story parking structure in Cupertino, noise from the operation of the parking structure was measured to be approximately 53 to 58 dBA at 75 feet (Illingworth & Rodkin, 2006). Sounding of car horns typically ranged from 62-70 dBA. The nearest offsite sensitive receptors to the proposed parking structure at the SJCC campus are the residences located to the south of Kingman Avenue, approximately 80 feet away. At this distance, noise from the parking structure would attenuate to 51 to 56 dBA while noise form car horns would attenuate to 60-68 dBA 9. As shown in Table 3.5-1, the existing noise level at these residences is 65.1 dBA, L_{eq}. While noise from the operation of the parking structure would not be audible over existing ambient noise levels, instantaneous noise levels from infrequent events such as auto horns could be audible at these residences. However, these infrequent events would not be expected to cause an increase in daytime hourly average noise levels at these residences. As the parking structure would be operational during the daytime hours when the campus is open, there would be no nighttime impacts. Therefore, the operational noise from the proposed parking structure would result in a less than significant impact.

Noise from Outdoor Activities

The SJCC FMP would include replacement of the existing Track & Field and softball fields at the campus. However, there is no change in the level of usage of these facilities anticipated as a result. The fields would continue to serve the campus needs and host events as they currently do and would therefore not create any additional noise impacts.

The proposed Aquatic Center that would be located approximately 190 feet from the residential receptors east of Leigh Avenue would be a new source of operational noise. The proposed Aquatic Center would host water polo matches, swim meets and other training events. Noise from such events may include cheers and chants, whistles and the use of amplified sound to signal start of races, end of water polo periods, announcements and music played during competitions and events. Given the proximity of offsite residential receptors to the east, such events could generate noise in excess of local standards. In addition, noise generated would be more noticeable as swim events tend start early in the day during the noise sensitive morning hours.

General Plan Policy EC-1.3 limits noise generated by new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses. Based on a noise measurements conducted during a varsity water polo game at the Castilleja School in Palo Alto, the average noise level was found to be 69 dBA at a distance of 70 feet from the center of the pool over the duration of the game. The loudest individual noise events were from team cheers, referee whistles, coaches shouting, and the buzzer noise signaling the end of a quarter. Maximum noise levels were approximately 81 dBA (Charles M Salter Associates, 2018). Swim meets are expected to generate similar noise levels. The average noise level of 69 dBA would attenuate to 60 dBA at the nearest offsite receptors, the residences to the east of Leigh Avenue. The noise environment at the residences east of Leigh Avenue is dominated by traffic noise from Leigh Avenue. However, noise from events at the proposed Aquatic Center could be more noticeable when events begin early in the day when traffic noise levels on Leigh Avenue would be lower.

The attenuated noise level at these residences would exceed the 55 dBA standard in the General Plan Policy EC-1.3 and lead to a **potentially significant** impact. Implementation of **Mitigation Measure 3.5-2b, Noise Reduction Measures for the Aquatic Center** would reduce this impact to a less than significant level.

Mitigation Measure 3.5-2a: Operational Noise Performance Standard for Stationary Sources

The District shall ensure that all mechanical equipment is selected and designed to reduce impacts on surrounding uses by limiting noise from stationary sources such as mechanical equipment, loading docks, and the Central Plant to 55 dBA and 60 dBA at the property lines of residential and commercial, receivers, respectively.

Methods of achieving these standards include using low-noise-emitting HVAC equipment, locating HVAC and other mechanical equipment within a rooftop mechanical penthouse, and using shields and parapets to reduce noise levels to adjacent land uses. For emergency generators, industrial-grade silencers can reduce exhaust noise by 12 to 18 dBA, and residential-grade silencers can reduce such noise by 18 to 25 dBA (American Society of Heating, 2006). Acoustical screening can also be applied to exterior noise sources of the Central Plant which can achieve up to 15 dBA of noise reduction (Environmental Noise Control, 2014).

An acoustical study shall be prepared by a qualified acoustical engineer during final building design to evaluate the potential noise generated by building mechanical equipment and to identify the necessary design measures to be incorporated to meet the City’s standards at adjacent offsite receptors.

Mitigation Measure 3.5-2b: Noise Reduction Measures for the Aquatic Center

The District shall incorporate the following measures in the final design of the aquatic center to reduce noise impacts to offsite receptors:

- The line of sight between the pool and the residences to the east of Leigh Avenue shall be blocked either by structures associated with the Aquatic Center or a noise barrier along the eastern boundary of the proposed Aquatic Center.

- Placement of speakers shall be adjusted such that the line of sight from the speakers to neighbors to the east is obstructed by the wall.
- The audio system shall be designed to direct speakers away from the offsite neighbors to the east.
- Use of narrow coverage directional speakers shall be considered to direct sound primarily towards the spectators.

Significance after Mitigation: Less than Significant. Mitigation Measures 3.5-2a and 3.5-2b would ensure that noise levels from the SJCC FMP's operational sources onsite at nearby receptors would be consistent with standards in the City's Municipal Code and General Plan policies. Implementation of these mitigation measures would reduce the SJCC FMP's operational impacts to **less than significant with mitigation**.

Impact 3.5-3: SJCC FMP-generated traffic noise would result in permanent increases in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies. ***(Less than Significant)***

Increase in vehicle trips to the campus generated by the SJCC FMP would increase traffic-related noise along roadway segments in the vicinity of the SJCC campus and surrounding environment. Increases in traffic noise gradually degrade the environment in noise-sensitive areas. The analysis below evaluated the significance of traffic noise levels by comparing the increase in noise levels (from the traffic contribution only) to increments recognized by City of San José General Plan Policy EC-1.2 as significant.

Traffic noise levels were estimated at ten study intersections based on the transportation analysis (Hexagon Transportation Consultants Inc., 2021).

Traffic noise levels at the ten intersections were assessed for the following scenarios:

1. Existing traffic conditions during the weekday A.M and P.M. peak commute hours, as estimated in the transportation analysis – As discussed in Section 3.6, Transportation, due to COVID-19 and regional shelter-in-place orders, a growth rate of 1 percent per year was applied to the traffic counts that were more than two years old to estimate existing traffic volumes would be considered more representative of typical traffic conditions in the area.

2. Existing plus FMP conditions during the weekday A.M. and P.M. peak commute hours, which includes projected traffic volumes with completion of the SJCC FMP.

Modeled estimates of weekday peak hour noise levels for the most affected roadway segments near the SJCC campus are presented in **Table 3.5-8**. Noise increase along other affected roadway segments would be less than 0.5 dBA and hence not shown in Table 3.5-8.

TABLE 3.5-8
TRAFFIC NOISE LEVELS ALONG STREETS
AFFECTED BY SJCC FMP-RELATED TRAFFIC

	Traffic Noise Level from a distance of 50 feet from Center of Roadway, dBA, DNL[1]				
Roadway Segment	**Existing (A)**	**Existing plus SJCC FMP (B)**	**Incremental Increase over Existing (B – A)**	**Incremental Increase Significance Threshold[2]**	**Cumulative Impact Significant? (Yes or No)[2]**
Weekday P.M. Peak-Hour Noise Levels					
Leland Ave.					
North of intersection with Moorpark Ave.	61.2	63.0	+1.8	3	No
South of intersection with Moorpark Ave.	58.3	59.6	+1.3	5	No
North of intersection with Parkmoor Ave.	59.8	61.0	+1.2	5	No
South of intersection with Parkmoor Ave.	61.2	63.0	+1.8	3	No
Weekday A.M. Peak-Hour Noise Levels					
Leland Ave.					
North of intersection with Moorpark Ave.	60.2	62.2	+2.0	3	No
South of intersection with Moorpark Ave.	58.2	60.0	+1.8	5	No
North of intersection with Parkmoor Ave.	60.4	61.5	+1.1	3	No
South of intersection with Parkmoor Ave.	60.2	62.2	+2.0	3	No
Leigh Ave.					
South of intersection with Kingman Ave.	64.5	65.0	+0.5	3	No
North of intersection with Fruitdale Ave.	64.4	64.8	+0.4	3	No
Leigh Ave.					
North of intersection with Fruitdale Ave.	64.4	64.9	+0.5	3	No
Moorpark Ave.					
East of intersection with S Bascom Ave.	65.5	64.8	-0.7	1.5	No [3]
S Bascom Ave.					
North of intersection with Fruitdale Ave.	69.4	66.4	-3.0	1.5	No [3]
South of intersection with Fruitdale Ave.	68.6	65.0	-3.6	1.5	No [3]

NOTES:
dBA = A-weighted decibels

1 Noise levels were determined using algorithms from the FHWA's *Traffic Noise Model Technical Manual*.
2 Traffic noise increases at an existing sensitive use exceeding the allowed incremental noise increase per General Plan Policy EC-1.2 and shown in Table 3.5-7 would result in a significant impact.
3 Negative values indicate a decrease in roadway noise at these locations that results when traffic distribution changes reduce future traffic volumes compared to the existing conditions, as predicted in the transportation analysis.

SOURCES: Modeling performed by Environmental Science Associates in 2020 based on traffic data compiled by Hexagon Transportation Consultants, Inc. in 2021.

Table 3.5-8 shows that the increase in traffic-related noise due to the SJCC FMP would be less than the respective incremental thresholds along all analyzed study roadway segments. The largest increase in roadway noise would occur along segments of Leland Avenue to the north of its intersection with Moorpark Avenue and south of its intersection with Parkmoor Avenue. However, the increase in traffic due to the SJCC FMP would not increase roadside noise levels in the vicinity of the SJCC campus beyond standards established in City General Plan Policy EC-1.2. Therefore, this impact would be **less than significant**.

The SJCC FMP proposes the addition of a new driveway at Leigh Avenue and Kingman Avenue which would add traffic noise along the driveway. However, this addition would not be considered significant as this is a campus driveway and there are no sensitive receptors located adjacent to it that would be affected by the addition of traffic-related noise.

Mitigation: None required.

Impact 3.5-4: Construction activities associated with the implementation of the SJCC FMP could result in the generation of excessive groundborne vibration or groundborne noise levels. ***(Less than Significant with Mitigation)***

Construction equipment or activities that typically generate vibration include but are not limited to excavation equipment, impact pile drivers, static compaction equipment, vibratory pile drivers, pile-extraction equipment, and vibratory compaction equipment.

City of San José General Plan Policy EC-2.3 requires new development to minimize impacts of continuous vibration on adjacent uses during demolition and construction. For sensitive historic structures, including ruins and ancient monuments or buildings that are documented to be structurally weakened, a continuous vibration limit of 0.08 in/sec PPV is the standard applied to minimize the potential for cosmetic damage to a building. A continuous vibration limit of 0.20 in/sec PPV is applied to minimize the potential for cosmetic damage at buildings of normal conventional construction. Policy EC-2.3 also discourages the use of impact pile drivers within 125 feet of any buildings, and within 300 feet of historical buildings or buildings in poor condition. On a project-specific basis, this distance of 300 feet may be reduced where warranted by a technical study by a qualified professional who verifies that there would be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction. In the absence of vibration thresholds adopted by the District, vibration limits from the City of San José General Plan has been used for the analysis presented below.

Pile driving is anticipated to be required as part of construction only for the proposed parking structure. The City's General Plan Policy EC-2.3 discourages the use of impact pile drivers within 125 feet of any existing buildings. As shown in Table 3.5-3, the proposed parking structure is located approximately 150 feet from the nearest offsite residential receptors south of Kingman Avenue. Therefore, vibration impacts from the potential pile driving to the nearest offsite receptors located 150 feet away are not likely.

However, onsite receptors in other campus buildings in the vicinity could experience impacts. The analysis below relies on a vibration matrix that shows vibration levels from construction equipment at different distances to receiving buildings. This matrix, presented in **Table 3.5-9**, uses shading to indicate the distances at which vibration levels would exceed the criterion for conventional structures.[6] As shown in Table 3.5-9, cosmetic damage could result from pile driving closer to a conventionally constructed building than 75 feet.

TABLE 3.5-9
VIBRATION LEVELS FROM CONSTRUCTION EQUIPMENT

	Estimated Peak Particle Velocity (inches per second)				
Equipment	**At 25 Feet (reference)**	**At 50 Feet**	**At 75 Feet**	**At 100 Feet**	**At 170 Feet**
Jackhammer	0.035	0.016	0.010	0.008	0.004
Loaded Trucks	0.076	0.035	0.023	0.017	0.009
Caisson Drilling	0.089	0.041	0.027	0.019	0.011
Large Bulldozer	0.089	0.041	0.027	0.019	0.011
Vibratory Roller	0.20	0.100	0.063	0.046	0.025
Impact Pile Driver	0.65	0.303	0.194	0.141	0.079
Vibratory Pile Driver	0.65	0.303	0.194	0.141	0.079

NOTE:
Shaded areas indicate distances where vibration levels would exceed the criterion for conventional structures.

SOURCES: Caltrans, 2013b; FTA, 2018.

Activities associated with renovation of buildings would not involve the use of heavy equipment that would generate vibration. Vibration velocity levels for the types of construction equipment that would operate on the campus during demolition and construction are shown in Table 3.5-9.

Demolition and construction activities would primarily affect occupants of existing buildings within the campus as construction sites could be within 25 feet to the other existing buildings. The primary and most intensive vibration source associated with the SJCC FMP would be the use of bulldozers during demolition and construction. The use of pile drivers if necessary during construction would also result in intense vibration.

Based on the information presented in Table 3.5-9, maximum vibration levels could reach up to threshold of 0.2 in/sec PPV at buildings located within 25 feet of demolition and construction not involving pile driving. However, there are no buildings located within 25 feet of construction and demolition activities not involving pile driving. Buildings located within 75 feet of pile driving activities at the proposed parking structure, primarily the CTE 200 building, would experience vibration levels exceeding the 0.2 in/sec PPV threshold specified in City General Plan Policy EC-2.3 for buildings of normal conventional construction. Therefore, this would be considered a **potentially significant** impact.

[6] As detailed in *Section 3.2, Cultural Resources*, there are no known historic structures located on the SJCC campus.

Where demolition and construction not involving pile driving occurs more than 25 feet from campus classroom buildings and where construction involving pile driving occurs more than 75 feet from campus classroom buildings, the vibration level would be below the threshold and no impact would occur.

With respect to off-campus receptors, as described above, single-family and multi-family residential uses are located to the east and south of the campus, and single-family residential uses are located to the north across I-280. Other sensitive receptors in the vicinity of the campus include Immanuel Lutheran Church, Crossroads Bible Church, and Neighborhood Christian Preschool to the east, the Valley Medical Center to the west, and the Sherman Oaks Community Charter School to the south. With the exception of the single-family and multi-family residential uses to the south, all of these sensitive uses are located sufficiently distant from the SJCC campus as to not be negatively affected by demolition and construction activity on campus including pile driving. Single-family and multi-family residential uses to the south of the SJCC campus are located about 50 feet from the nearest potential construction site (the proposed Child Development Center). The nearest construction activity involving pile driving would be at 150 feet away from these residential uses. As detailed in the vibration matrix presented in Table 3.5-9, vibration impacts from pile driving would not be significant beyond a distance of 75 feet. Therefore, residential uses located 150 feet away from proposed pile driving activities would not be negatively affected by construction activities on the campus.

Furthermore, in compliance with Mitigation Measure 3.5-1, construction activities associated with the proposed Child Development Center would be restricted to the hours of 7 a.m. and 7 p.m. on weekdays. Therefore, construction associated with the implementation of the SJCC FMP would not expose off-campus persons to excessive groundborne vibration levels.

Mitigation Measure 3.5-3: Construction Vibration Avoidance and Reduction Plan

The District shall incorporate the following measures to reduce vibration impacts to onsite receptors:

- Pile driving activities associated with the proposed parking structure shall be scheduled to occur on weekends or during periods when instruction is not occurring on the campus, if feasible.
- If pile driving activities are scheduled to occur during periods when instruction is occurring on the campus, a notice shall be posted in the vicinity of the affected classroom buildings notifying the campus community of the upcoming construction activities.
- Vibration from pile driving shall be minimized using the following measures:
  - Foundation pile holes shall be pre-drilled to minimize the impacts required to seat the pile.
  - Piles shall be jetted[7] or partially jetted into place to minimize the number of impacts required to seat the piles.

[7] "Pile jetting" is a technique that is frequently used in conjunction with, or separate from, pile driving equipment for pile placement. Pile jetting uses a carefully directed and pressurized flow of water to assist in pile placement. This

- A construction vibration monitoring plan shall be implemented to document conditions before, during, and after pile driving. All plan tasks shall be undertaken under the direction of a Professional Structural Engineer licensed in the State of California, in accordance with industry-accepted standard methods. The construction vibration monitoring plan shall include the following tasks:
  - Identify the sensitivity of nearby structures to groundborne vibration. A vibration survey (generally described below) would need to be performed.
  - Perform a pre-construction photo survey, elevation survey, and crack monitoring survey for each of these structures. Surveys shall be performed before any pile driving activity, at regular intervals during pile driving, and after completion. The surveys shall include monitoring for internal and external cracks in structures, settlement, and distress, and shall document the condition of foundations, walls, and other structural elements in the interior and exterior of the structures.
  - Develop a vibration monitoring and construction contingency plan. The plan shall identify structures where monitoring is to be conducted, establish a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document conditions before and after pile driving.
  - Identify alternative construction methods for when vibration levels approach the limits stated in the General Plan, such as in Policy EC-2.3.
  - If vibration levels approach the limits, suspend construction and implement alternative construction methods to either lower vibration levels or secure the affected structures.
  - Conduct a post-construction survey on structures where either monitoring has indicated high vibration levels or complaints have been received regarding damage. Make appropriate repairs where damage has resulted from construction activities.

Significance after Mitigation: Less than Significant. Implementation of Mitigation Measure 3.5-3 would reduce vibration impacts to onsite receptors to a less than significant level. This impact would be **less than significant with mitigation**.

Cumulative Impacts

Impact C-3.5-5: Construction activities associated with the SJCC FMP combined with cumulative construction noise in the vicinity of the SJCC campus would result in a substantial temporary or periodic increase in ambient noise levels in excess of standards established in the City of San José General Plan or Noise Ordinance. *(Significant and Unavoidable)*

The geographic scope of analysis for cumulative noise and vibration construction impacts encompasses sensitive receptors within approximately 1,000 feet of the campus boundaries.

greatly decreases the bearing capacity of the soils below the pile tip, causing the pile to descend toward its final tip elevation with much less soil resistance, largely under its own weight.

Beyond 1,000 feet, the contributions of noise from other projects would be greatly attenuated by both distance and intervening structures, and their contribution would be expected to be minimal.

The SJCC campus, surrounded on the east and immediate south by City of San José land uses and to the west and north by the County of Santa Clara is within a growing urbanized part of the region. The existing Santa Clara Valley Medical Center, part of the County has recently added the Sobrato Pavilion Bed Tower Project facing South Bascom Avenue and west of the SJCC campus. It is not known if there will be any other future construction at this site simultaneously with the implementation of SJCC FMP.

Reasonably foreseeable future projects within a mile of the SJCC campus include residential and mixed use developments at 2323 Moorpark Avenue and 1710 Moorpark Avenue, respectively.

However, these and all future projects proposed and constructed simultaneously with the SJCC FMP would be subject to General Plan and noise ordinance noise limits and standard conditions of approval imposed by the applicable jurisdiction to mitigate noise impacts to achieve those standards. This would reduce noise levels from construction activity associated with these cumulative projects.

Mitigation: Implement **Mitigation Measure 3.5-1, Master Construction Noise Reduction Plan** (refer to Impact 3.5-1).

Significance after Mitigation: Significant and Unavoidable.

As discussed under Impact 3.5-1, even with the implementation of Mitigation Measure 3.5-1, the residual impact of SJCC FMP-related construction activities would be significant. Therefore, the SJCC FMP's contribution to the cumulative noise impacts in the campus vicinity will also be considered **significant and unavoidable**.

Impact C-3.5-6: Operation of the SJCC FMP when considered with other cumulative development would cause a substantial permanent increase in ambient noise levels in excess of standards established in the City of San Jose General Plan or Noise Ordinance. *(Less than Significant)*

Operational noise impacts of the SJCC FMP would result primarily from increased traffic on the local roadway network. Increase in noise from SJCC FMP-related traffic in combination with traffic noise from other proposed developments in the area could lead to a cumulative increase in roadside noise levels in the vicinity of the SJCC campus.

The significance of cumulative impacts related to traffic noise levels is determined using a two-step process, as discussed in the *Methodology* section. If a cumulative impact is identified, the second step is to evaluate whether the contribution of the SJCC FMP to roadside noise levels would be cumulatively considerable.

The roadway segments analyzed and the results of the noise increases resulting from modeling are shown in **Table 3.5-10** for 2030 background conditions and 2030 with the full buildout of the SJCC FMP.

**TABLE 3.5-10
CUMULATIVE TRAFFIC NOISE LEVELS ALONG STREETS
AFFECTED BY SJCC FMP-RELATED TRAFFIC**

Roadway Segment	Traffic Noise Level from a distance of 50 feet from Center of Roadway, dBA, DNL[1]					
	Existing (A)	Background without SJCC FMP (B)	Background plus SJCC FMP (C)	Incremental Increase over Existing (C – A)	Incremental Increase Significance Threshold[2]	Cumulative Impact Significant? (Yes or No)[2]
Weekday P.M. Peak-Hour Noise Levels						
Leland Ave.						
North of intersection with Moorpark Ave.	61.2	61.2	63.0	+1.8	3	No
South of intersection with Moorpark Ave.	58.3	58.3	59.6	+1.3	5	No
North of intersection with Parkmoor Ave.	59.8	59.8	61.0	+1.2	5	No
South of intersection with Parkmoor Ave.	61.2	61.2	63.0	+1.8	3	No
Weekday A.M. Peak-Hour Noise Levels						
Leland Ave.						
North of intersection with Moorpark Ave.	60.2	60.2	62.2	+2.0	3	No
South of intersection with Moorpark Ave.	58.2	58.2	60.0	+1.8	5	No
North of intersection with Parkmoor Ave.	60.4	60.4	61.5	+1.1	3	No
South of intersection with Parkmoor Ave.	60.2	60.2	62.2	+2.0	3	No
Leigh Ave.						
South of intersection with Kingman Ave.	64.5	64.5	65.0	+0.5	3	No
North of intersection with Fruitdale Ave.	64.4	64.4	64.9	+0.5	3	No
Moorpark Ave.						
East of intersection with S Bascom Ave.	65.5	65.7	65.1	-0.4	1.5	No [3]
S Bascom Ave.						
North of intersection with Fruitdale Ave.	69.4	69.4	66.4	-3.0	1.5	No [3]
South of intersection with Fruitdale Ave.	68.6	68.7	65.1	-3.5	1.5	No [3]

NOTES:
dBA = A-weighted decibels

1 Noise levels were determined using algorithms from the FHWA's Traffic Noise Model Technical Manual.
2 Traffic noise increases at an existing sensitive use exceeding the allowed incremental noise increase per General Plan Policy EC-1.2 and shown in Table 3.5-7 would result in a significant impact.
3 Negative values indicate a decrease in roadway noise at these locations that results when traffic distribution changes reduce future traffic volumes compared to the existing conditions, as predicted in the transportation analysis.

SOURCES: Modeling performed by Environmental Science Associates in 2020 based on traffic data compiled by Hexagon Transportation Consultants, Inc. in 2021.

As shown in Table 3.5-10, SJCC FMP-related traffic in combination with traffic from other approved development in the vicinity would not result in a significant cumulative increase in traffic noise levels. This impact would be **less than significant**.

Mitigation: None required.

3.5.4 References

American Society of Heating, Refrigeration, and Air Conditioning Engineers, 2006. Technical Committee on Sound and Vibration, *Generator Noise Control—An Overview*, 2006.

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San José/Evergreen Community College District (SJECCD), 2013. *San Jose City College 2025 Updated Facilities Master Plan Final EIR*, May 2013. Prepared by Impact Sciences, Inc.

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Santa Clara County Airport Land Use Commission, 2011. *Norman Y. Mineta San José International Airport: Comprehensive Land Use Plan, Santa Clara County*, prepared by Walter B. Windus, PE, adopted May 25, 2011 (amended November 16, 2016). Available at https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_SJC_CLUP.pdf.

3.6 Transportation

This section describes the potential for the proposed project to affect transportation, such as through a plan, ordinance, or policy; long-term changes to the operability and function of transportation facilities; increased hazards from geometric design or incompatible uses; or inadequate emergency access. This section presents the regional and local transportation regulatory framework, identifies criteria used to determine impact significance, and provides analysis of the potential transportation impacts associated with the implementation of the SJCC FMP as well as identifies feasible mitigation measures that could mitigate any potentially significant impacts.

The District received a small number of transportation-related comments on the NOP. All comments received during the NOP public review period are included in the Draft EIR in **Appendix B**. NOP comments related to the scoping of transportation impacts analysis were included in a letter from the County of Santa Clara Roads and Airports Department. The first comment suggests that the District consider potential future improvements to the South Bascom Avenue corridor as part of the Santa Clara Valley Transportation Authority (VTA) Complete Streets Program in its analysis of transportation impacts. In addition, the County Roads and Airports Department identified facilities within its jurisdiction that are accessible from the SJCC campus and suggests that the EIR evaluate potential accessibility impacts to individuals using or serving County facilities. The County Roads and Airports Department comment letter was taken into consideration when developing the analysis methodology, and this chapter addresses each of these comments.

The analysis in this chapter is based a transportation analysis prepared by Hexagon Transportation Consultants, Inc. (Transportation Analysis), for the proposed SJCC FMP, included in **Appendix E** of the Draft EIR.

3.6.1 Environmental Setting

This section describes the existing transportation and circulation setting; the existing regional roadway network, regional transit service, the local roadway network, local transit service, the SJCC shuttle system, existing SJCC transportation demand management programs, pedestrian conditions, bicycle conditions, loading conditions, emergency vehicle access, vehicle miles traveled, and parking conditions. **Figure 3.6-1** shows the study area and SJCC campus.

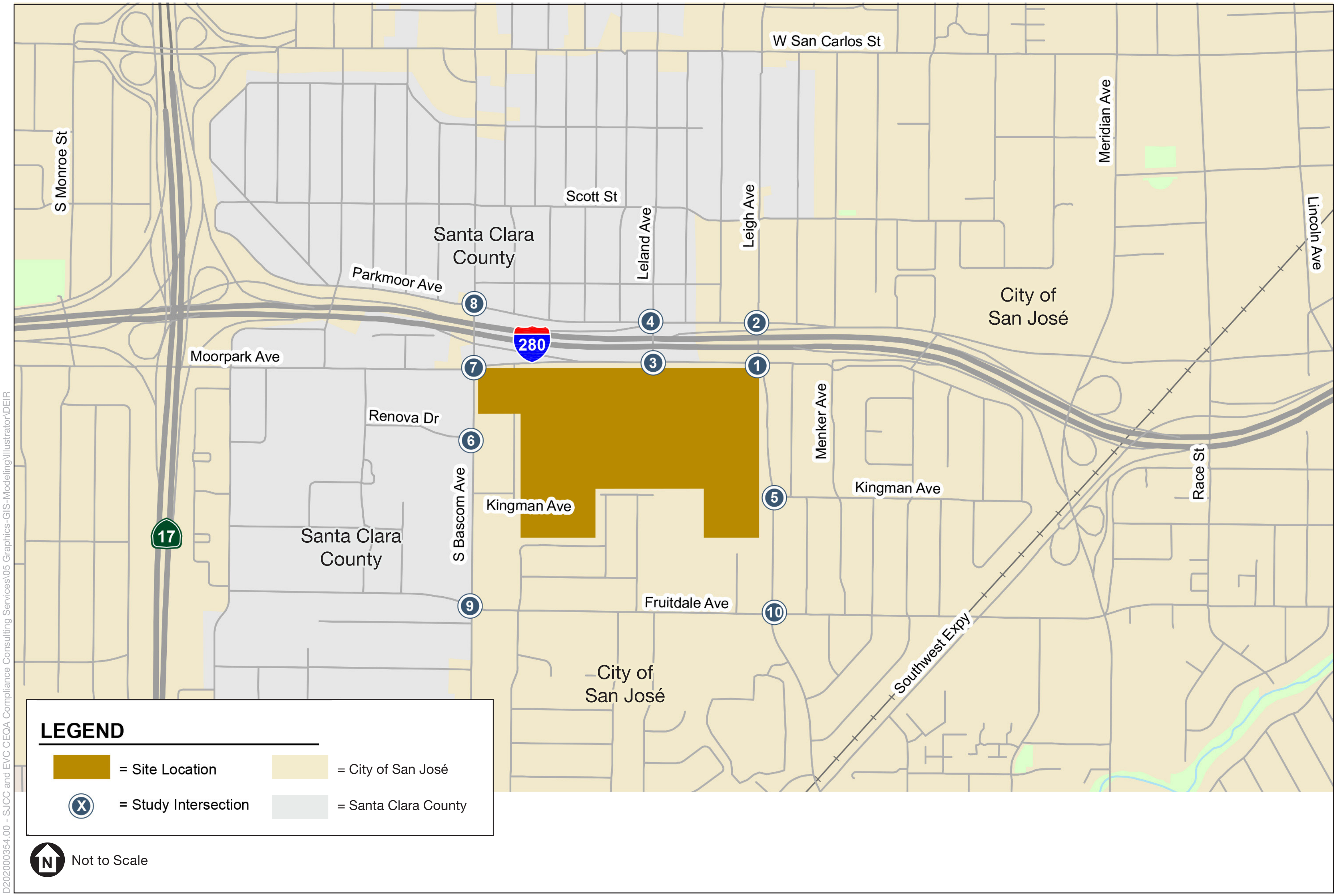
Regional Setting

Regional Roadway Network

Regional roadway access to SJCC campus is provided by several major regional freeways and roadways, as discussed below.

California State Route 17

California State Route 17 (SR-17) is a six-lane freeway in the vicinity of the SJCC campus. SR-17 extends northward to the I-280 and I-880 interchange in San José and southward to State Route 1 (SR-1) to Santa Cruz. North of the I-280 and I-880 interchange, SR-17 transitions to I-880 which continues north to Oakland and points beyond.



SOURCE: Hexagon, 2020

Figure 3.6-1
Site Location and Study Intersections

Interstate 280

Interstate 280 (I-280) is an eight-lane freeway in the vicinity of the SJCC campus. I-280 extends northward on the Peninsula terminating in San Francisco, and southward to US-101 in San José. East of US-101, I-280 transitions into I-680 which continues north through the East Bay. Access to and from the SJCC campus is provided via I-880 at on-/off-ramps at Moorpark Avenue and Parkmoor Avenue.

Interstate 880

Interstate 880 (I-880) is a six-lane freeway in the vicinity of the SJCC campus. I-880 extends northward through Oakland and southward to SR-17 and I-280 interchange. South of the SR-17 and I-280 interchange, I-880 transitions to SR-17.

Regional Transit Service

Santa Clara Valley Transportation Authority

The VTA provides bus, light rail, and paratransit services to areas throughout the County of Santa Clara, including Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San José, Santa Clara, Saratoga, and Sunnyvale. VTA operates 17 routes with 15-minutes or shorter headways. VTA transit riders have access to Fruitdale and South Bascom Avenues via the Green Line of the VTA light rail system.

Bay Area Rapid Transit

Bay Area Rapid Transit (BART) is a public transit system that provides commuter rail service between the San Francisco Peninsula and communities within East Bay and South Bay (i.e., Millbrae, Richmond, Antioch, Dublin/Pleasanton, and Berryessa/North San José. Weekday hours of operation are currently 5 AM to 9 PM for service hours, and 8 AM to 9 PM Saturday and Sunday. The closest BART station to the SJCC campus is the Berryessa/North San José Station, approximately 5 miles northeast of the campus.

Caltrain

Caltrain provides passengers rail service for dozens of stations between San Francisco and Gilroy. Weekday and weekend hours of operation vary depending on the day and service; however, services typically range between 4:30 AM through 2 AM the following day. The closest Caltrain station to the SJCC campus is the San José Diridon Station located approximately 2 miles northeast of the campus.

Local Setting

Local Roadway Network

The SJCC campus is located within the City of San José's South Bascom commercial corridor and South Bascom Urban Village Plan area. The roadways used to access the SJCC campus include South Bascom Avenue, Moorpark Avenue, Leigh Avenue, Fruitdale Avenue, Laswell Avenue, Kingman Avenue, and Leland Avenue. The local roadways serving the SJCC campus range from one to six-lanes, with on-street parking provided on both sides of the streets in most areas. Project area roadways are described in detail below:

South Bascom Avenue

South Bascom Avenue is a six-lane arterial road that runs in a north-south direction in the vicinity of the SJCC campus, extending northward to Newhall Street where it transitions to Washington Street, and southward to Samaritan Drive where it transitions to Los Gatos Boulevard. South Bascom Avenue has left-turn pockets provided at intersections, center medians, and parking allowed on both sides of the street. South Bascom Avenue includes sidewalks on both sides of the street and has a posted speed limit of 35 miles per hour (mph) near the SJCC campus. South Bascom Avenue provides access to the campus via its intersections with Moorpark Avenue and Kingman Avenue, and direct access to the campus via the driveway at the Technology Center (near the southeast corner of the South Bascom Avenue/Moorpark Avenue intersection).

Moorpark Avenue

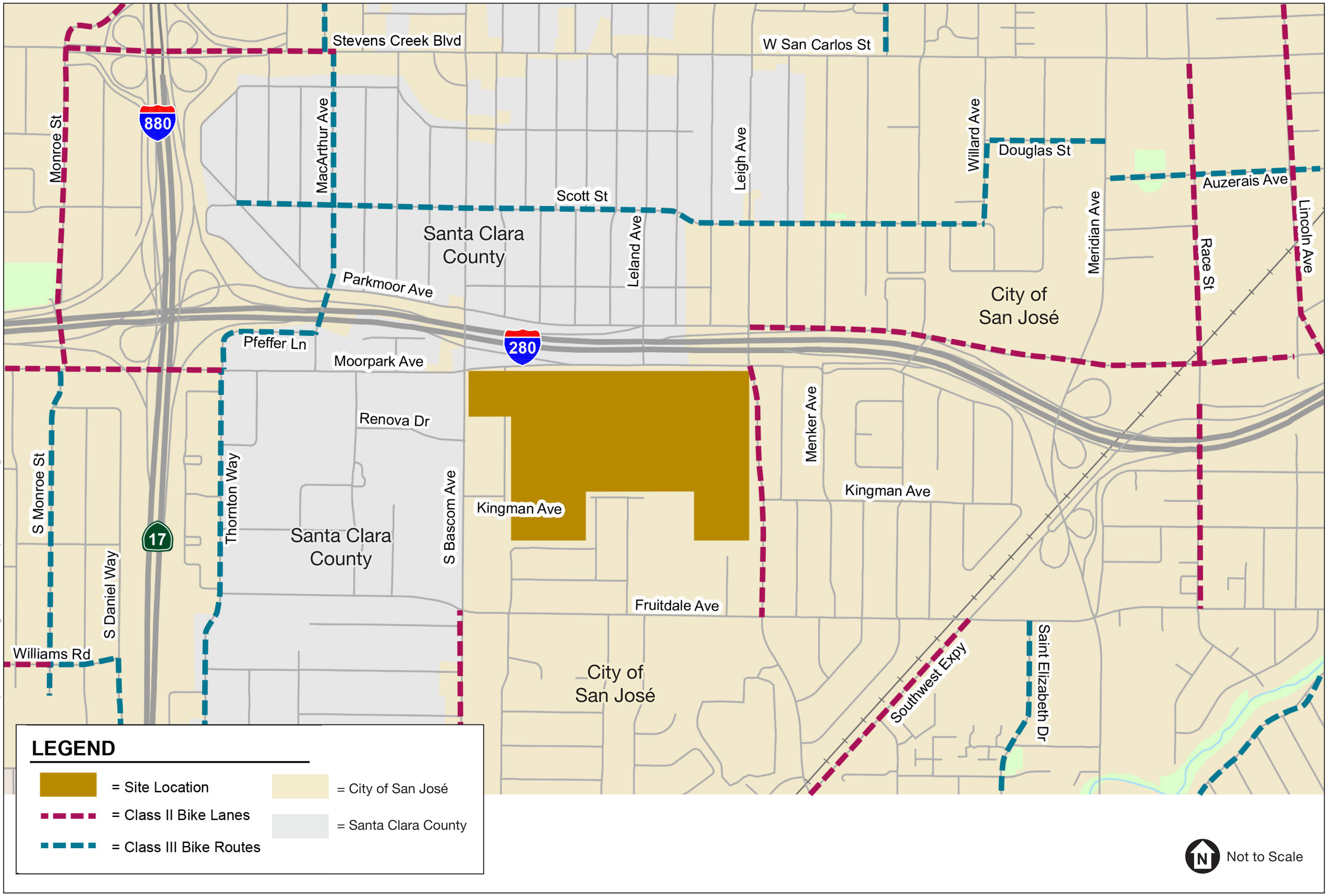
Moorpark Avenue is an east-west arterial located immediately north of the SJCC campus from east of South De Anza Boulevard in the west to Kingman Avenue in the east. Moorpark Avenue is a two-way four-lane road to the west of the Moorpark Avenue/South Bascom Avenue intersection, and a one-way three-lane road between its intersections with South Bascom Avenue and Menker Avenue; where it becomes a two-way two-lane road to the east of the Moorpark Avenue/Menker Avenue intersection. Moorpark Avenue has continuous sidewalks along the south side of the street, and gaps in sidewalks along the north side of the street near the SJCC campus. East of South Bascom Avenue, Moorpark Avenue has a posted speed limit of 35 mph, and parking is allowed along the south side of the road and on the north side of the road, with the exception of the segment of road between the I-280 off-ramp and Leland Avenue. Class II (on-street) Bicycle lanes are present west of Thornton Way. Moorpark Avenue provides direct access to the SJCC campus via three driveways and its intersections with Laswell Avenue and Leland Avenue (Ceremonial Entry).

Leigh Avenue

Leigh Avenue is a two- to four lane north-south street in the vicinity of the SJCC campus to the east, extending from West San Carlos Street in the north to Blossom Hill Road in the south. Leigh Avenue has continuous sidewalks and on-street parking on both sides of the road, and has a designated speed limit of 35 mph. Class II Bicycle lanes are present on both sides of Leigh Avenue near the SJCC campus. Leigh Avenue provides direct access to the SJCC campus via a right in-right-out driveway on the east side of the SJCC campus.

Fruitdale Avenue

Fruitdale Avenue is an east-west arterial located south of the SJCC campus, extending from South Bascom Avenue in the west to Avis Drive in the east. Fruitdale Avenue is a four-lane street east of the its intersection with South Bascom Avenue, and continues as Enborg Lane west of the intersection. East of South Bascom Avenue, Fruitdale Avenue includes left-turn pockets provided at intersections, continuous sidewalks and on-street parking on both sides of the street, and a posted speed limit of 35 mph. Fruitdale Avenue provides access to the SJCC campus via its intersections with South Bascom Avenue and Leigh Avenue.



SOURCE: Hexagon, 2020

San José City College Facilities Master Plan - San José Evergreen Community College District

Figure 3.6-2
SJCC Area Bicycle Facilities Network

ESA

Leland Avenue

Leland Avenue is a two-lane north-south road, that extends from West San Carlos Street in the north and Moorpark Avenue in the south, adjacent to the SJCC main driveway. Leland Avenue has continuous sidewalks and on-street parking on both sides of the road and has a posted speed limit of 25 mph. Leland Avenue provides direct access to the SJCC campus via its intersection with Moorpark Avenue.

Laswell Avenue

Laswell Avenue is a two-lane north-south internal street, which extends from Moorpark Avenue in the north to the SJCC student parking lot E in the south. This internal driveway provides access to the parking lots on the west side of the SJCC campus.

Kingman Avenue

Kingman Avenue is a two-lane east-west internal street that extends from South Bascom Avenue in the west to the SJCC student parking lot E in the east. This internal driveway provides access to SJCC's west side campus parking lots.

Existing Traffic Volumes

Due to the temporary effects of the COVID-19 pandemic on traffic volumes, traffic counts under existing conditions may not provide an accurate baseline for the modeling of traffic conditions at the completion of the SJCC FMP (Hexagon Transportation Consultants, Inc., 2021). For this reason, existing traffic volumes at study intersections were estimated using historical traffic counts, and count balancing. To distinguish these calculated traffic volumes from existing conditions, they are referred to as the "Existing Baseline" throughout this analysis.

Existing Baseline traffic volumes were analyzed in the Transportation Analysis (Appendix E) for both weekday AM and weekday PM peak hours of adjacent street traffic. The AM peak hour is anticipated to occur between 7:00 AM and 9:00 AM and the PM peak hour is anticipated to occur between 4:00 PM and 6:00 PM on a regular weekday.

Existing Intersection Traffic Operations

The Transportation Analysis (Appendix E) estimated that the South Bascom Avenue/Moorpark Avenue intersection operates at LOS E during the PM peak hour, under Existing Baseline conditions, as shown in **Table 3.6-1**. This level is considered unacceptable by City of San José standards. All other signalized intersections within the study area operate at acceptable levels (LOS D or better), under Existing Baseline conditions, during the AM and PM peak hours, also shown in Table 3.6-1.

Local Transit Service

The SJCC campus area is provided transit service by VTA and includes three local bus routes (Routes 23, 25, and 61), one rapid bus route (Route 523), one express bus route (Route 103), and one light rail train (LRT) route (Green Line). The closest bus stop to the SJCC campus is located on South Bascom Avenue at Renova Drive, and is served by VTA bus routes 25 and 61. Leigh Avenue also has several bus stops present near the east campus boundary. Transit service routes are discussed further in **Table 3.6-2**, Existing Transit Service.

TABLE 3.6-1
EXISTING BASELINE INTERSECTION LEVELS OF SERVICE

# Intersection	Peak Hour	Count Date[2]	Avg. Delay (sec)[1]	LOS[3]
1. Leigh Avenue and Moorpark Avenue	AM PM	10/12/16 10/12/16	28.6 18.2	C B-
2. Leigh Avenue and Parkmoor Avenue	AM PM	10/12/16 10/12/16	28.4 22.4	C C+
3. Leland Avenue and Moorpark Avenue	AM PM	9/14/11 9/14/11	9.5 13.5	A B
4. Leland Avenue and Parkmoor Avenue	AM PM	10/26/16 10/26/16	20.7 23.9	C+ C
5. Leigh Avenue and Kingman Avenue	AM PM	9/13/18 9/13/18	13.4 13.5	B B
6. South Bascom Avenue and Renova Drive	AM PM	10/4/12 10/4/12	16.2 21.1	B C+
7. South Bascom Avenue and Moorpark Avenue	AM PM	11/7/17 12/11/18	39.0 63.7	D+ **E**
8. South Bascom Avenue and Parkmoor Avenue	AM PM	5/7/15 5/6/15	44.4 37.1	D D+
9. South Bascom Avenue and Fruitdale Avenue	AM PM	5/7/15 12/11/18	45.5 45.7	D D
10. Leigh Avenue and Fruitdal Avenue	AM PM	5/7/15 5/6/15	34.9 28.9	C- C

NOTES:
1. Delays based on average delay for signalized intersections.
2. A growth factor of 1% was applied per year from previous existing count date if older than 2018 to estimate new count data.
3. Bold indicates a substandard level of service.

SOURCE: Hexagon Transportation Consultants, Inc., 2021

TABLE 3.6-2
EXISTING VTA TRANSIT SERVICE

VTA Transit Route	Route Description	Closest Stop and Distance to the SJCC campus	Weekday Hours of Operation[1]	Headway (minutes)[1]
Local - 23	De Anza College – Alum Rock Station via Stevens Creek	West San Carlos & Blossom; 3100 ft	5:30 AM – 12:40 AM	15
Local - 25	De Anza College – Alum Rock Station via Valley Med	South Bascom & Renova; 780 ft Fruitdale & Blossom; 1,250 ft	5:25 AM – 11:55 PM	15
Local - 61	Sierra & Piedmont – Good Samaritan Hospital	South Bascom & Renova; 200 ft	5:20 AM – 10:55 PM	20
Express - 103	Eastridge – Stanford Research Park	Fruitdale Station; 2500 ft	5:05 AM – 8:25 AM 2:40 PM – 6:35 PM	25 to 80
Rapid - 523	Berryessa BART – Lockheed Martin via De Anza College	West San Carlos & Blossom; 3100 ft	6:00 AM – 10:25 PM	30
LRT Green Line	Old Ironside - Winchester	Fruitdale Station; 2500 ft	5:20 AM – 12:40 AM	19 to 27

NOTES:
1 Approximate weekday operation hours and headways during peak commute periods in the proposed Project vicinity, as of October 2020.

Source: Hexagon Transportation Consultants, Inc., 2021

Pedestrian Circulation

The existing network of sidewalks and crosswalks in the SJCC campus vicinity provides pedestrians connectivity from pedestrian facilities within the campus boundary to nearby transit stops and other uses in the SJCC campus vicinity. Pedestrian facilities within or adjacent to the SJCC campus include: sidewalks present along the east side of Laswell Avenue and the south side of Kingman Avenue; marked crosswalks with pedestrian signal heads and push buttons located at a minimum of three legs at all of the adjacent signalized intersections; and marked crosswalks at all unsignalized intersections.

Bicycle Circulation

Bicycle facilities that exist within one mile of the SJCC campus include Class II (on-street) and Class III (shared bicycle and motor vehicle) bikeways. Bicycle facilities in the SJCC campus vicinity are marked with special lane markings, pavement legends, and signage. Bicycle facilities near the SJCC campus are shown in Figure 3.6-2. Bicycle facilities providing connectivity to the campus are limited to Class II bicycle lanes on both sides of Leigh Avenue. There are no marked bicycle facilities along South Bascom Avenue, Moorpark Avenue, or Fruitdale Avenue near the SJCC campus.

Emergency Vehicle Access

Emergency transport vehicles within the SJCC campus vicinity use major streets, including South Bascom Avenue, Fruitdale Avenue, Leigh Avenue, and Moorpark Avenue, heading to and from an emergency and/or emergency facility. San José Fire Department (SJFD) Station 4 is located directly across Leigh Avenue from the SJCC campus, and the Station primarily uses the roadway to access other major streets.

Emergency access to the SJCC campus is provided via internal driveways and parking lots. Access to the SJCC campus interior is provided to emergency vehicles at gated entry points or through removal of vehicle entry barriers, including bollards, where pedestrian pathways intersect driveways and parking areas.

3.6.2 Regulatory Setting

Federal

There are no federal transportation-related regulations applicable to the SJCC FMP.

State

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for the planning, designing, constructing, operating, and maintaining all state-owned roadways, and for implementing federal highway standards for interstate highways. In the project area, Caltrans maintains the freeways (I-280 and I-880), and SR-17, SR-87, and SR-82. The Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002) provides guidance on the evaluation of traffic impacts to State highway facilities. The document outlines when a traffic impact study is needed and what should be included in the scope of the study. Caltrans is in the process of revising the guidelines to comply with the requirements set in Senate Bill (SB) 743.

Senate Bill 743

SB 743, passed in 2013, established vehicle miles traveled (VMT) as the primary metric to be used to identify transportation impacts. The VMT standard for evaluating transportation impacts under CEQA became mandatory statewide on July 1, 2020. SB 743 also eliminated level of service (LOS) impacts as a determinant of significance. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

Regional

Santa Clara Valley Transportation Authority

The VTA is the designated congestion management agency (CMA) for the County of Santa Clara. VTA is responsible for countywide transportation planning, including congestion management, design and construction of specific highway, pedestrian, and bicycle improvement projects. As the CMA for the County of Santa Clara, VTA establishes the transportation impact analysis (TIA) guidelines that local agencies use when analyzing the transportation impacts of land development projects on the transportation system. For projects that would generate greater than 100 new peak-hour vehicle trips, VTA requires transportation studies to follow the guidelines set forth by VTA's Congestion Management Program (CMP).

VTA also maintains the Traffic Level of Service Analysis Guidelines (2003), which presents analysis methodologies and the County's standards that must be used to evaluate LOS on CMP roadway facilities within the County of Santa Clara.

Local

City of San José

The SJCC campus is located east of a pocket of unincorporated County of Santa Clara (located across South Bascom Avenue), but otherwise, is surrounded by the City of San José. As discussed in Chapter 2, Project Description, the District has the approval authority for the SJCC FMP and is the CEQA lead agency for the environmental review of impacts resulting from implementation of the SJCC FMP. However, any project transportation impacts would occur in the City of San José's transportation system. Thus, this transportation analysis considers City of San José policies and standards, as well as methodologies established in the City of San José's Transportation Analysis Handbook, adopted in April 2020.

San José Bike Plan 2025

The City of San José is updating the San José Bike Plan 2020 to develop the Better Bike Plan 2025. The purpose of the update is to plan improvements to the City's bicycle facilities throughout the City, to improve safety, improve access to bicycle facilities and the connectivity of the bicycle facilities network, and provide incentives for more users to utilize the City's bicycle facilities.

The Better Bike Plan 2025 includes a number of proposed bicycle facilities network improvements in the vicinity of the SJCC campus, including the following improvements:

- A proposed protected bicycle lane along South Bascom Avenue, to the west of the campus, providing access to the campus from areas to the north, across I-280 and areas to the south;
- A protected bicycle lane on Moorpark Avenue, providing bicycle access along the SJCC frontage to Moorpark Avenue, and extending bicycle facilities to areas to the east and to the existing facilities to the west of I-880;
- Conversion of the existing Class II bicycle lane on Leigh Avenue to a protected bicycle lane that extends to area south of Fruitdale Avenue and continues as an anticipated Class II bicycle lane, from Moorpark Avenue to areas to the north; and
- Construction of a protected bicycle lane along Fruitdale Avenue, to the south of the SJCC campus.

The above improvements to the bicycle network would be anticipated to substantially improve connectivity to the SJCC campus. As of the publishing of the Draft EIR, the timing of these improvements has not been identified by the City. However, it is reasonably foreseeable that these improvements may be implemented during the planning horizon of the SJCC FMP.

Transportation Level of Service Policy (1978)

The City's Transportation Level of Service Policy describes mitigation measures to satisfy the transportation level of service policies in the City's General Plan.

Multi-Modal Transportation Policy (2005)

The City's Multi-Modal Transportation Policy is a set of policies set forth to address automobile traffic flow and provide mitigation, as necessary, to accommodate increases in vehicular traffic associated with new development. These policies would either prevent development or allow it only with road expansions that were in other ways counter to the City's goals.

3.6.3 Analysis, Impacts, and Mitigation

This section provides the impact analysis related to transportation for the SJCC FMP. It describes the methods used to determine the impacts of the plan and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminated, or compensate for) significant impacts accompany the discussion of each identified significant impact, as needed.

Significant Criteria

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in significant, adverse impacts on the environment. For purposes of this analysis, an impact is considered significant if implementation of the proposed SJCC FMP would have the effects described below.

Would implementation of the SJCC FMP:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?[1]

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

d) Result in inadequate emergency access?

Approach to Analysis

Consistent with the CEQA Guidelines and the City of San José Guidelines, the transportation impact analysis in this EIR analyzes the change to VMT that would result from the implementation of the SJCC FMP. Changes to traffic operations in the proposed project area (i.e., the level of service of project area intersections) and transit operations (e.g., project generated transit ridership and effect on capacity utilization, potential delta to transit vehicles) is outside the scope of the CEQA analysis and are not discussed below. However, an analysis of the SJCC FMP effect on traffic and transit operations has been completed and is present in the Transportation Analysis (Appendix E) for informational purposes only. This appendix is provided for decisions-makers' consideration, independent of the environmental review process.

Methodology and Assumptions

Traffic Study Area

The traffic study area was selected based on a review of the SJCC campus location and the amount of traffic that could be added to transportation network components in the area.

Study Scenarios

The analysis examines four scenarios: 'Existing/Existing Baseline,' 'Proposed SJCC FMP,' 'Cumulative,' and 'Cumulative plus Proposed SJCC FMP.' Each scenario is described below.

- Existing/Existing Baseline – This scenario represents existing conditions at the SJCC campus and is based on existing population numbers and existing travel behavior. Where data from periods prior to existing are utilized to control for the effects to transportation caused by the COVID-19 pandemic, this scenario is identified as "Existing Baseline"
- Proposed SJCC FMP – This scenario represents full buildout, when the SJCC FMP has been fully implemented. This analysis uses the projected future SJCC student, faculty and non-educational staff populations and adjusted mode split numbers.

[1] CEQA Guidelines Section 15064.3, subdivision (b) refers to the discontinuation of vehicle level of service (LOS) as an impact metric for transportation analysis and instead recommends the use of vehicle miles traveled (VMT); this section gives lead agencies discretion to choose the most appropriate methodology to evaluate a project's VMT.

- Cumulative – The Cumulative scenario represents past, present, and reasonably foreseeable future projects in the vicinity of the SJCC campus, including development pursuant to the SJCC FMP through the 2030 development horizon.

Traffic Impact Analysis Methodology

Vehicle Miles Traveled Analysis Methodology

VMT per capita (per person), is the total miles of travel by a personal motorized vehicle. Generally, VMT is a measurement of the amount and distance of vehicle travel (i.e., resident, employee, or visitor drives) within a geographic region over a given amount of time that accounts for the number of passengers within a vehicle. A higher VMT corresponds with more air pollution (i.e., vehicle emissions and energy usage) than lower VMT areas. VMT is typically calculated using the Origin-Destination VMT method, which measures the full distance of personal motorized vehicle-trips with one end within the projects vicinity. The VMT is then compared to the appropriate thresholds of significance based on the project location and type of development. The SJCC VMT was divided by the number of students to determine VMT per student. As a result, if the VMT per student under the proposed SJCC FMP would be equal to or lower than the VMT per student under existing conditions (without implementation of the proposed Project), then the SJCC FMP would be considered to have a less than significant VMT impact.

The Transportation Analysis (Appendix E) evaluated the increasing SJCC student enrollment by 2,029, from 2020’s existing 8,706 to 10,735 by the year 2030 under the SJCC FMP with the City of San José’s Travel Demand Forecasting model using Existing Baseline (2015) and year 2030 land use and demographic projections. **Table 3.6-3** shows projected VMT for the SJCC FMP.

As shown in Table 3.6-3, the existing daily VMT per student is 5.65 miles. With implementation of the proposed project, the daily VMT by each student would decrease by 0.21 miles, from the current 5.65 VMT by each student to 5.44 VMT.

TABLE 3.6-3
VMT ANALYSIS

VMT Analysis	Existing Baseline (2015)	Proposed SJCC FMP	Difference
Number of Students	8,708	10,735	2,029
Vehicle Mode Share	81%	78%	-3%
Number of Daily Vehicle Trips to Campus	6,569	7,780	1,211
Daily Campus VMT	49, 178	58,435	9,257
Daily VMT per Student	5.65	5.44	-0.21

Source: Hexagon Transportation Consultants, Inc., 2021

The reason for this reduction in VMT is two-fold: (1) The expected improved transit service in the area by 2030 would result in higher transit and lower vehicle mode shares (see Appendix E), and (2) the student population in the area would grow at a higher rate than the student enrollment at SJCC; that is, the enrollment at SJCC would increase by 23 percent, while the number of students living within 10 miles of the SJCC campus would increase by 34 percent by 2030. This is expected to lead to a decrease in student trip lengths and, hence, an overall decrease in VMT per student. Therefore, implementation of the SJCC FMP would not cause a significant VMT impact.

Project Trip Estimates

Trip Generation

Vehicle trips generated by the SJCC FMP were estimated using the trip rates published in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition (2017) for "Junior/Community College" (Land Use 540) located in a general Urban/Suburban area. **Table 3.6-4** shows that the SJCC FMP would generate 223 trips (181 inbound and 42 outbound) during the AM peak hour and 223 trips (125 inbound and 98 outbound) during the PM peak hour.

TABLE 3.6-4
SJCC FMP TRIP GENERATION ESTIMATES

Land Use	Size	AM Peak Hour				PM Peak Hour			
		Rate	Trip In	Trip Out	Trip Total	Rate	Trip In	Trip Out	Trip Total
Proposed Land Uses									
Junior/Community College Location-Based Vehicle Mode Share (9%)[2]	2,029 Students 156 Staff[3]	0.110	181 (16)	42 (4)	223 (20)	0.110	125 (11)	98 (9)	223 (20)
Net Project Trips			**165**	**38**	**203**		**114**	**89**	**203**

NOTES:
1. Junior/Community College (Land Use 540), average rates expressed in trips per student are used.
2. The SJCC campus is located within an urban low-transit area based on the City of San José VMT Evaluation Tool (February 28, 2019). A 9percent reduction was applied based on the office location-based vehicle mode share percentage outputs from Table 6 of the City of San José Transportation Analysis Handbook 2020 (TA Handbook). It is assumed that the SJCC will have similar commute travel patterns to an office.
3. The staff generation estimate is based on a student-staff ratio of 13:1, which supports a conservative estimate of the service population for the SJCC during existing and 2030 conditions. The actual 2030 service population is likely be lower than is assumed here. For the purposes of this analysis, a conservative estimate is used for the analysis of potential impacts.

Source: ITE Trip Generation Manual, 10th Edition 2017; Hexagon Transportation Consultants, Inc., 2021.

Trip Adjustments and Reductions

In accordance with the City of San José's Transportation Analysis Handbook (April 2020, Section 4.8, "Intersection Operations Analysis"), the SJCC FMP is eligible for adjustments and reductions to the baseline trip generation. Based on the 2020 San José guidelines, the SJCC FMP qualifies for a location-based adjustment. The location-based adjustment reflects the SJCC FMP vehicle mode share based on the "place type" in which the campus is located per the San José Travel Demand Model. The SJCC place type was obtained from the San José VMT Evaluation Tool. Based on the VMT Evaluation Tool, the SJCC campus is located within a designated Urban Low-Transit place type. Therefore, the baseline project trips were adjusted to reflect an Urban Low-Transit mode share.

Office developments within Urban Low-Transit areas have a vehicle mode share of 91 percent (according to Table 6 of the City's *Transportation Analysis Handbook*). It is assumed that the SJCC will have similar commuting patterns as that of an office. Thus, a 9 percent reduction was applied to the project trip generation estimates based on the location-based vehicle mode share outputs produced from the San José Travel Demand Model.

Net Trips

After applying the ITE trip rates to the proposed SJCC FMP and applying the appropriate trip adjustments, it is estimated that the SJCC FMP would generate a net of 203 trips (165 inbound and 38 outbound) in the AM peak hour and 203 trips (114 inbound and 89 outbound) in the PM peak hour (See Table 3.6-4).

Trip Distribution and Assignment

The trip distribution pattern for the SJCC FMP was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The peak-hour vehicle trips associated with the SJCC FMP were added to the roadway network in accordance with the trip distribution pattern, the roadway network connections, and the locations of the SJCC campus driveways. Driveways providing access to campus parking are located along South Bascom Avenue, Moorpark Avenue, and Leigh Avenue. SJCC FMP trips were assigned to the campus driveways based on the proportion of parking spaces to which each of the driveways would provide access. Trip distribution and trip assignment are shown in Appendix E. Appendix E also shows the trip assignment at the campus driveways.

Impacts and Mitigation Measures

Impact 3.6-1: Implementation of the SJCC FMP could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (No Impact)

Vehicle Traffic

Intersection Operations

The transportation analysis prepared for the SJCC FMP evaluated intersection traffic operations at study intersections against the City of San José level of service standard (LOS D), to determine if implementation of the SJCC FMP would conflict with the City's LOS policy (see Appendix E). As noted above, level-of-service impacts are not considered significant under CEQA. The District's consideration of LOS impacts in the transportation analysis is limited to the determination of consistency with the City of San José and County of Santa Clara policies addressing the circulation system.

The results of the intersection LOS analysis show that the intersection of South Bascom Avenue and Moorpark Avenue would operate unacceptably at LOS E during the PM peak hour under Existing Baseline conditions. Under Existing Baseline Plus SJCC FMP conditions, the intersection would continue to operate at an LOS E with an increase in critical delay of approximately 1.2 seconds and a reduction in critical volume-to-capacity ratio (V/C) of 0.058. The changes in critical delay and critical V/C resulting from implementation of the SJCC FMP at the intersection do not meet the City of San José's criteria for adverse effect. All of the other signalized study intersections would operate at an acceptable level of service, LOS D or better, during the AM and PM peak hours under Existing Baseline and Existing Baseline Plus SJCC

FMP conditions. For this reason, the implementation of the SJCC would not be anticipated to conflict with the City of San José LOS policy for intersection operations.

Freeway Segments

The results of the freeway segment level of service analysis included in the Transportation Analysis prepared for the SJCC FMP show that the proposed SJCC FMP would not cause substantial increases in traffic volumes (one percent or more of freeway capacity) on any of the study freeway segments currently operating at an unacceptable LOS F, and none of the study freeway segments currently operating at an acceptable LOS E or better would worsen to LOS F as a result of the project (see Table 10 in Appendix E). Therefore, implementation of the proposed SJCC FMP would not conflict with VTA's CMP policy regarding freeway congestion.

Freeway Ramp Queuing

The Transportation Analysis prepared for the SJCC FMP evaluated the capacities of affected freeway ramps, to determine if implementation of the SJCC FMP would cause queuing on freeway ramps to exceed ramp capacity, thereby violating CMP policies related to freeway congestion (see Appendix E). The analysis concluded that implementation of the SJCC FMP would not cause freeway ramp queuing to degrade to levels of service that conflict with CMP policies. This impact would be less than significant.

Pedestrian Facilities

The SJCC FMP proposes several improvements that would expand or make improvements to existing pedestrian facilities and increase pedestrian safety within the SJCC campus. Improvements or changes to pedestrian facilities surrounding the campus would include the creation of a break in the existing sidewalk on Leigh Avenue, for the construction of the new project driveway access to the proposed South Perimeter Loop driveway, on the western side of the Leigh Avenue/Kingman Avenue intersection. The proposed driveway would become part of the signalized intersection and would include a marked and signal-controlled pedestrian crossing that would sustain pedestrian facilities along the west side of Leigh Avenue. Improvements to the Leigh Avenue/Kingman Avenue intersection would be constructed to City of San José standards and all improvements within the City of San José right-of-way would be designed and executed in consultation with and with approval of the City of San José. No other impacts to existing or planned pedestrian facilities would be anticipated to result from implementation of the SJCC FMP. This would include no impacts to facilities anticipated to be developed as part of the South Bascom Avenue Complete Streets project. Therefore, Implementation of the SJCC FMP would not conflict with an applicable program, plan, ordinance, or policy addressing pedestrian facilities.

Bicycle Facilities

The SJCC campus is near existing bike facilities on South Bascom Avenue, Leigh Avenue, and Parkmoor Avenue. The *San José Better Bike Plan 2025,* currently under preparation, is considering protected bike lanes on South Bascom Avenue, Moorpark Avenue, and Leigh Avenue, which would provide direct access to the campus. The County is also in the process of the planning the South Bascom Complete Streets project, which would be anticipated to construct a protected bicycle lane along the east Side of South Bascom Avenue, to the west of the SJCC campus, which would be anticipated to run along the existing campus driveway to South Bascom Avenue.

The existing and proposed network of bicycle facilities provide connectivity to the residential neighborhoods near the SJCC campus. The proposed SJCC FMP, would construct the new driveway at the Leigh Avenue/Kingman Avenue intersection, which would place a driveway intersection in the existing Class II bicycle lane along the west side of Leigh Avenue. As described for pedestrian facilities impacted by improvements to this intersection, bicycle facilities would be maintained through this intersection. Improvements would be constructed to City of San José standards for the provision of bicycle travel through the improved intersection. Therefore, bicycle facilities would not be adversely affected by operation of the SJCC FMP.

The project would not remove any existing bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. Further, implementation of the SJCC FMP would not make improvements to the transportation system that would conflict with bicycle facilities improvements anticipated to be developed pursuant to the City of San José Better Bike Plan 2025 or the anticipated facilities to be developed as part of the South Bascom Avenue Complete Streets project.

Transit Service

Existing transit service to the campus is provided by VTA bus routes 25 and 61. The bus stops closest to the SJCC campus are located near the South Bascom Avenue/Moorpark Avenue intersection for route 61 and the Leigh Avenue/Fruitdale Avenue or South Bascom Avenue/ Fruitdale Avenue intersections for Route 25. The campus frontage along South Bascom Avenue is located close to the Route 61 stops and provides a near direct pedestrian access to the campus. Students using Route 25 have to walk along South Bascom Avenue or Leigh Avenue before they can access either the Moorpark or the Leigh Avenue entrances, or travel through the residential neighborhood between the campus and Fruitdale Avenue.

The SJCC FMP does not make any recommendations to improve pedestrian access to these bus stops. However, implementation of the SJCC FMP would not interrupt service to those stops or require temporary relocation of VTA stops during construction of projects pursuant to implementation of the SJCC FMP.

Summary

As described above, implementation of the SJCC FMP would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This would result in **no impact** related to this criterion.

Mitigation: None required.

Impact 3.6-2: Implementation of the SJCC FMP could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivisions (b). (Less than Significant)

As discussed above, CEQA Guidelines Section 15064.3, subdivisions (a) and (b) refer to the discontinuation of vehicle level of service (LOS) as an impact metric for transportation analysis and instead states that VMT is the most appropriate measure of transportation impacts.

As shown in Table 3.6-3, the daily VMT per student would decrease by 0.21, from 5.65 VMT with implementation of the SJCC FMP to 5.44 VMT by 2030. The reason for this reduction in VMT is two-fold: (1) The expected improved transit service in the area by 2030 would result in higher transit and lower vehicle mode shares, and (2) the student population in the area would grow at a higher rate than the student enrollment at SJCC: that is, the enrollment at SJCC would increase by 23 percent, while the number of students living within 10 miles of the SJCC campus would increase by 34 percent by 2030. This is expected to lead to a decrease in student trip lengths and, hence, an overall decrease in VMT per student. Therefore, implementation of the SJCC FMP would result in a less-than-significant impact related to VMT.

Mitigation: None required.

Impact 3.6-3: Implementation of the SJCC FMP could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less than Significant)

The SJCC FMP would change the roadway network in the vicinity of the SJCC campus through the addition of the South Perimeter Loop driveway to the west side of the Leigh Avenue/Kingman Avenue intersection. This intersection would be within City of San José right of way and would be subject to design, funding, and approval standards of the City. Therefore, these proposed improvements would be designed and constructed to maintain safe travel for all transportation modes utilizing the intersection and no geometric design features or incompatible uses would be introduced, resulting in a less than significant impact related to the introduction of such features.

Mitigation: None required.

Impact 3.6-4: Implementation of the SJCC FMP could result in inadequate emergency access. (Less than Significant)

Under the proposed SJCC FMP, facilities requiring service vehicle access would be distributed in multiple locations on campus as shown in Appendix E. Based on the location of these facilities, service vehicle access would be provided from the perimeter loop road in the north and the Kingman Avenue extension in the south. Service vehicles would share the roadway with pedestrians along the main pedestrian spine along Laswell Avenue.

As shown in Appendix E, emergency access to the SJCC campus would continue to be provided via internal driveways and parking lots. Access to the SJCC campus interior is provided to emergency vehicles at gated entry points or through removal of vehicle entry barriers, including bollards, where pedestrian pathways intersect driveways and parking areas. Implementation of the SJCC FMP would not create new obstacles for emergency vehicle access or inhibit existing access points. For this reason, implementation of the SJCC FMP would have a less-than-significant impact related to the adequacy of emergency access.

Mitigation: None required.

Impact 3.6-5: Construction activities under the SJCC FMP could temporarily impact travel conditions along sidewalks and roadways serving the SJCC site. (Potentially Significant; Less than Significant with Mitigation)

The discussion of construction impacts is based on currently available information from the District, as summarized in Chapter 2, *Project Description*; local and state regulations regarding use of the public right-of-way; and experience with typical construction practices by the District in the City of San José.

Also, as discussed in Chapter 3, implementation of the SJCC FMP would be spread over the next nine years and would preserve the SJCC's operations at the campus site during the construction period. Construction would begin in late-2021, with projects anticipated to be completed by the horizon year 2030.

Buildout of the SJCC FMP would include improvements to the Leigh Avenue/Kingman Avenue intersection for the creation of a new campus driveway for the South Perimeter Loop road. Construction of these improvements would be anticipated to require temporary closure of existing City of San José transportation facilities including closure of the sidewalk and Class II bicycle lane along the west side of the intersection, in the footprint of the proposed driveway. Additional facilities closures may include restriping or minor construction in the roadway medians to create turn pockets to accommodate vehicle access to the proposed driveway. These improvements may be anticipated to require temporary lane closures during construction. These temporary closures and impacts to City of San José transportation facilities would create obstacles for ongoing pedestrian, bicycle, and vehicle travel and would be considered potentially significant.

Construction activities at the campus site pursuant to the SJCC FMP would result in truck trips associated with the delivery of construction equipment and materials and the off haul of demolition debris, excavated soil and construction wastes, and vehicle trips to and from the site by construction workers. These trips would have the potential to cause temporary disruptions to nearby streets, transit services, and pedestrian and bicycle facilities. Specifically, construction of individual projects or phases of the SJCC FMP, including the arrival or departure of construction vehicles and delivery of construction materials may inhibit vehicle, transit, bicycle and pedestrian movement and access both intermittently and through the duration of their construction if sidewalk and walkway closures, street closures, temporary relocation of a transit stops, or bicycle route detours are required. These could also result in a temporary parking supply reduction, whether off- or on-street due to construction staging. Construction workers who drive to the site and potential temporary parking restrictions would cause a temporary increase in parking demand. Construction workers would park within SJCC parking facilities, either in available or designated parking spaces.

Prior to construction of certain phases or projects associated with the implementation of the SJCC FMP, the District and their construction contractor(s) would meet with the County of Santa Clara and City of San José Public Works staff to develop and review truck routing plans and any required temporary roadway or sidewalk closures or detours. For any work in the public right-of-way, the construction contractor would be required to comply with the policies and requirements of the entity with jurisdiction over the affected right-of-way, including the regulations regarding sidewalk and lane closures, and would meet with relevant City or County staff to determine if any special traffic permits would be required. Prior to construction, the project contractor would coordinate with VTA to coordinate construction activities and reduce any impacts to transit operations. Additionally, any temporary traffic controls implemented as part of a construction project would be required to conform to the California Manual of Uniform Traffic Control Devices.

Although construction activities pursuant to implementation of the SJCC FMP would be temporary, construction impacts would be considered **potentially significant** given the magnitude and duration of the work and the need for on-going coordination and monitoring.

Mitigation Measure 3.6-1: Construction Coordination and Monitoring Measures

a) **Construction Traffic Control Plan** – In order to reduce potential conflicts between construction activities and pedestrians, transit and autos during construction activities at the SJCC campus, the District shall require construction contractor(s) to prepare a traffic control plan for major phases of project construction (e.g., demolition, construction, or renovation of individual buildings). The District and their construction contractor(s) will meet with relevant City and County agencies to coordinate feasible measures to reduce traffic congestion and potential traffic and transit disruption and pedestrian circulation effects during major phases of construction of the SJCC FMP projects.

b) **Reduce Drive Alone Mode Share for Construction Workers** – In order to minimize parking demand and vehicle trips associated with construction workers, the District shall require the construction contractor to include in the Construction Traffic Control Plan methods to encourage walking, bicycling, carpooling, and transit access to the campus site by construction workers.

c) **Project Construction Updates for Adjacent Residents and Businesses –** In order to minimize construction impacts on access for nearby residences, institutions, and businesses, the District shall provide nearby residences and businesses with regularly-updated information regarding project construction, including construction activities, peak construction vehicle activities (e.g., concrete pours, excavation),and travel lane closures via a newsletter, website, and/or construction update meetings with neighbors.

Significance after Mitigation: With the implementation of the construction traffic control plan for the construction the SJCC FMP, the local roadways and freeway facilities would continue to operate acceptably and there would not be increased frequency of multimodal conflicts. Temporary impacts to City of San José transportation facilities, including lane closures and closure of pedestrian and bicycle facilities would be mitigated through the provision of alternative routes or accesses during construction, the placement of appropriate signs and notices, and the control of traffic flow around temporary closures.

Reduction of construction worker trips through rideshare and the encouraged use of multimodal transportation would further reduce potential conflicts.

In addition, the provision of construction updates to adjacent land uses would inform residents and workers in those areas, who may opt to avoid peak construction traffic, where feasible. Implementation of these measures would reduce potential temporary impacts from construction pursuant to implementation of the SJCC FMP to **less than significant**.

Cumulative Impacts

Cumulative Operational VMT Impact Analysis

The City of San José employs a VMT methodology that requires projects to demonstrate consistency with the *Envision San José 2040 General Plan* to address cumulative VMT impacts. Consistency with the City's General Plan is based on a project's density, design, and conformance to the City General Plan goals and policies. If a project is determined to be inconsistent with the City General Plan, a cumulative impact analysis is required as part of the City's *Transportation Analysis Handbook*. As VMT impacts from the SJCC FMP would take place on the City of San José's roadway system, surrounding the project site, the District has chosen to utilize the City's methodology in analyzing cumulative VMT impacts for the SJCC FMP.

Cumulative Construction Projects

There are approximately 25 approved or reasonably foreseeable construction projects within one (1) mile of the SJCC campus site in the City of San José, as shown in Table E-1 in Appendix E of the Draft EIR. This development would include approximately 2,718 new residential units and approximately 1,900,000 square feet of non-residential development (City of San José, 2021).

Impact C-3.6-6: Implementation of the SJCC FMP, in combination with other development, could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivisions (b). (Less than Significant Cumulative Impact)

Implementation of the SJCC FMP would be consistent with the *Envision San José 2040 General Plan* goals and policies for the following reasons:

- The SJCC campus is located adjacent to bus stops on South Bascom Avenue and Leigh Avenue.
- Implementation of the SJCC FMP would slightly increase the employment density in the SJCC campus area, and the proposed density would be consistent with the General Plan Land Use Designation.
- The SJCC FMP would provide improvements to pedestrian connectivity in the vicinity of the SJCC campus.

Therefore, based on the SJCC FMP, it would be consistent with the *Envision San José2040 General Plan*. Consistent with the City's VMT methodology, the District is not required to prepare a cumulative VMT impact analysis.

Implementation of the SJCC FMP would be considered as part of the cumulative solution to meet the City General Plan's long-range transportation goals and would result in a **less-than-significant** cumulative impact.

Mitigation: None required.

Impact C-3.6-7: Implementation of the SJCC FMP, in combination with other development, could result in inadequate emergency access. (Less than Significant Cumulative Impact)

As addressed in the discussion of Impact 3.6-4, above, facilities requiring service vehicle access would be distributed in multiple locations on campus. Based on the location of these facilities, service vehicle access would be provided from the perimeter loop road in the north and the Kingman Avenue extension in the south. Service vehicles would share the roadway with pedestrians along the main pedestrian spine along Laswell Avenue.

As under existing conditions, emergency access to the SJCC campus under the SJCC FMP would continue to be provided via internal driveways and parking lots. Access to the SJCC campus interior is provided to emergency vehicles at gated entry points or through removal of vehicle entry barriers, including bollards, where pedestrian pathways intersect driveways and parking areas. Implementation of the SJCC FMP would not create new obstacles for emergency vehicle access or inhibit existing access points.

Implementation of the SJCC FMP would not result in elimination of vehicular access points to the campus from perimeter roads (i.e., South Bascom Avenue, Moorpark Avenue, and Leigh Avenue).

As discussed in the Environmental Setting, SJFD Station 4 is located directly across Leigh Avenue from the east campus driveway. Under cumulative conditions, no known projects would be anticipated to inhibit emergency access in the project area. No roadway improvements in the project area would eliminate existing emergency access points. Therefore, implementation of the SJCC FMP would not result in a cumulative contribution to a significant cumulative impact related to emergency access. This cumulative impact would be **less than significant**.

Mitigation: None required.

Impact C-3.6-8: The proposed SJCC FMP would cause construction-related traffic impacts that would be cumulatively considerable under cumulative conditions. (Cumulatively Significant; Less than Cumulatively Considerable)

The cumulative context for construction impacts would be other projects in the immediate vicinity that would be constructed concurrently with the SJCC FMP. These include known or anticipated development projects in the SJCC campus area. In addition, known or anticipated infrastructure projects in the SJCC campus area could include the South Bascom Avenue

Complete Streets Project and construction of bicycle facilities as described in the City's Better Bike Plan 2025 along the major roadways surrounding the campus.

These cumulative projects would be anticipated to add additional construction traffic to roadways that would be affected by construction traffic from projects pursuant to implementation of the SJCC FMP. The specific periods of construction or periods when construction traffic from cumulative projects within the City or unincorporated County would be at their peak would vary by project and cannot be specifically planned over the planning and development horizon of the SJCC FMP. For this reason, construction pursuant to implementation of the SJCC FMP in combination with cumulative construction could have a **potentially-significant cumulative impact**.

As implementation of the SJCC FMP would take place through the year 2030 and include a notable amount of new construction, demolition, and renovation/remodeling, the contribution of the SJCC FMP development to cumulative development in the SJCC campus area could be considered **cumulatively considerable**.

> **Mitigation:** Implement **Mitigation Measure 3.6-1: Construction Coordination and Monitoring Measures.**
>
> **Significance after Mitigation:** With the implementation of the construction traffic control plan for the SJCC FMP, the local roadways and freeway facilities would continue to operate acceptably and there would not be increased frequency of multimodal conflicts. Reduction of construction worker trips through rideshare and the encouraged use of multimodal transportation would further reduce potential conflicts. In addition, the provision of construction updates to adjacent land uses would inform residents and workers in those areas, who may opt to avoid peak construction traffic, where feasible.
>
> As the specific periods in which the implementation of the proposed project would overlap cumulative projects in the SJCC campus area, there is both potential for a substantial amount of overlapping traffic and difficulty in predicting when project construction activities may overlap with cumulative traffic.
>
> Implementation of these measures to reduce and manage the impacts of construction traffic may not be sufficient to reduce the cumulative impact from construction traffic to less than significant. However, implementation of this measure would be anticipated to reduce potential temporary impacts from construction pursuant to implementation of the SJCC FMP to **less than cumulatively considerable**.

3.6.4 References

City of San José, 2016. Citywide Traffix Database. Updated December 1, 2016. As cited in Hexagon Transportation Consultants, Inc., 2021. San José City College Vision 2030 Draft Transportation Analysis. November 24, 2020.

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Hexagon Transportation Consultants, Inc., 2021. *San José City College Vision 2030 Transportation Analysis*. May 18, 2021.

Santa Clara Valley Transportation Authority (VTA), 2003. Traffic Level of Service Analysis Guidelines. October 2014.

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3.7 Utilities and Service Systems

This section describes and evaluates potential impacts of the SJCC FMP on public utilities and service systems such as water supply, wastewater, solid waste, and related infrastructure. This section relies in part on a water supply evaluation that was conducted by West Yost Associates, in support of this EIR, included as EIR **Appendix F**. Section 3.3, *Energy*, discusses potential impacts related to electricity and natural gas supply and demand.

3.7.1 Environmental Setting

SJWC Water Supply

San Jose Water Company (SJWC) supplies potable water to approximately 1 million residents of Santa Clara County. SJWC service area spans 139 square miles, including most of the City of San Jose and Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, Town of Los Gatos, and parts of unincorporated Santa Clara County (City of San José, 2016).

SJWC has three sources of potable water supply: groundwater, imported treated surface water and local surface water. On average, groundwater from the major water-bearing aquifers of the Santa Clara Subbasin comprise one third of SJWC's potable water supply. These aquifers are recharged naturally by rainfall and streams and artificially mainly by recharge ponds operated by the Santa Clara Valley Water District (Valley Water). SJWC is under contract with the Valley Water for the purchase of just over 50 percent of the needed water supply. This water originates from several sources including local reservoirs, the State Water Project, and the federally funded Central Valley Project San Felipe Division. Water is piped into SJWC's system after it is treated at one of three Valley Water treatment plants. SJWC's final source of potable supply is from surface water in the local watersheds of the Santa Cruz Mountains. Surface water typically provides about seven percent of total water supply depending on the amount of annual rainfall. This water is collected in a series of lakes and streams and then directed to the SJWC treatment plants prior to entering the distribution system (City of San José, 2016).

SJWC delivers potable water to the SJCC campus through water distribution lines in the surrounding streets, including Moorpark Avenue, Mansfield Drive, Kingman Avenue, and Leigh Avenue.

A fourth and growing source of water supply is non-potable recycled water from South Bay Water Recycling (SBWR). Recycled water is wastewater that has been processed and treated to a suitable quality for non-drinking use, such as for irrigation of landscaped areas in schools, parks, business parks, golf courses and for agricultural land. The recycled water is sourced from effluent treated at the San José-Santa Clara Regional Wastewater Facility (RWF) (City of San José, 2016). SJWC maintains a wholesaler-retailer agreement with the City of San José to provide recycled water to SJWC's existing and new customers located near SBWR recycled water distribution facilities; wherein the City of San José is the wholesaler and SJWC is the retailer. Recycled water, though available in other parts of San José, is not currently delivered to the SJCC campus.

SJWC Water Demand

SJWC's 2015 Urban Water Management Plan (UWMP) provides demand projections for 2020 to 2040 for SJWC's water service area, which includes the SJCC campus. Demand projections are provided by use type (e.g., single family, multi-family, commercial, industrial, institutional, etc.). SJWC's potable water demand projection in 2020 was 45,817 million gallons, in 2030 is 48,928 million gallons, and in 2040 is 52,486 million gallons. SJWC's non-potable water demand in 2020 was 1,327 million gallons, in 2030 is 2,721 million gallons, and in 2040 is 2,727 million gallons.

SJWC's 2015 UWMP does not specifically identify water demand projections for specific customers, such as SJCC. However, it is assumed that projected water demands for the SJCC campus are included in SJWC's demand projections and are classified by SJWC as institutional/ governmental. Per SJWC's demand projections, institutional/ governmental water use makes up less than 5 percent of SJWC's overall projected water demands through 2040.

SJWC Water Supply Reliability

SJWC's 2015 UWMP evaluated the reliability of its water supplies and the ability to meet projected water demands through 2040 under average year conditions, single dry year conditions and multiple dry year conditions. SJWC's water sources are constrained by factors that include hydrologic conditions, water quality, and legal restrictions.

SJWC projected adequate supplies for years 2020 to 2040 to meet system demand under average year conditions. SJWC also projected adequate supplies for years 2020 to 2035 to meet system demand under single dry year conditions; a supply shortage of about 6 percent was projected in 2040. SJWC projected adequate supplies for 2020 to 2040 to meet system demands under the first year of a multiple year drought, but projected shortages during the second and third years of a multiple year drought from 2020 to 2040. The projected supply shortages reach almost 41 percent in the third year of a drought in 2040.

SJWC's 2015 UWMP stated that Valley Water's then current (2015) water supply reserves were insufficient to meet SJWC needs throughout an extended drought, and that there were increasing concerns about the reliability of imported treated surface water during average years, driven by risks associated with climate change, reductions in imported water supplies, revenue requirements, and threats to infrastructure.

In January 2019, the Valley Water Board of Directors approved an updated long-term water supply reliability level-of-service goal. The goal is to develop supplies to meet at least 100 percent of annual water demand identified in the Valley Water's Master Plan during non-drought years and at least 80 percent of annual water demand in drought years.

In November 2019, Valley Water completed its Water Supply Master Plan 2040 (WSMP 2040) which provides a strategy for meeting future water demands consistent with Valley Water's updated level of service goal. Valley Water's Ensure Sustainability water supply strategy relies on the following three elements to provide a reliable supply of water to meet needs through 2040: (1) secure existing supplies and infrastructure; (2) increase water conservation and water reuse;

and (3) optimize the use of existing supplies and infrastructure. With the phased implementation of planned future projects, Valley Water's available supplies are projected to increase over time. Planned future projects include Transfer Bethany Pipeline (2025); Anderson Dam Seismic Retrofit and Potable Reuse (2030); Guadalupe, Calero, and Almaden Dam Seismic Retrofits and Pacheco Reservoir Expansion (2035); and an additional 35,000 acre-feet per year of water conservation.

With Valley Water's Ensure Sustainability water supply strategy in place, for a six-year drought similar to the 1987 to 1992 drought at a 2040 demand level, the supplies would be sufficient to meet 100 percent of demand during the first five years of drought and more than 90 percent in the last year. Implementation of the Ensure Sustainability water supply strategy would also reduce the frequency and magnitude of short-term water use reductions under 2040 demands. With full implementation of all elements of the water supply strategy, short-term water use reductions would occur only 3 percent of the time, and the maximum call for water use reductions would be 20 percent.

Both SJWC and Valley Water are currently preparing their 2020 UWMPs which are due to the California Department of Water Resources by July 1, 2021. The final 2020 UWMPs were not available for consideration at the time of preparation of this EIR. However, based on Valley Water's updated long-term water supply reliability level-of-service goal and the recommendations in its WSMP 2040, it is anticipated that SJWC's 2020 UWMP will show improved water supply reliability as compared to the 2015 UWMP.

SJWC's 2015 UWMP includes a Water Shortage Contingency Plan which outlines water shortage stages and actions to be taken under each stage to reduce water demands in the event of a supply shortage. It is assumed that SJWC will update its Water Shortage Contingency Plan in conjunction with its 2020 UWMP. As a customer of SJWC, the District will be subject to the water demand reduction actions enacted by SJWC in the event of a water shortage.

Existing SJCC Water Demand

Existing SJCC campus water consumption for 2018 and 2019 was evaluated to understand existing campus water use and trends. Water consumption for the SJCC campus in 2020 was not considered as it would not be representative of typical campus operations due to the COVID-19 pandemic.

A summary of campus water use in 2018 and 2019 is provided in **Table 3.7-1**. As shown, water use on the SJCC campus in 2018 and 2019 was very similar in both years with total water use of about 20 million gallons per year, or about 55,000 gallons per day (gpd). That water use equates to a little under 6 gpd per person, based on the estimated student enrollment and campus staff for each year, or about 0.09 gpd per the existing gross square footage of campus buildings.

Based on the SJWC projections for institutional/governmental water use, the existing (2019) SJCC annual water use is less than one percent of SJWC's projected 2020 institutional water demand (and less than 0.04 percent of SJWC's projected 2020 overall demand). The projected 2030 SJCC water use of 25.2 million gallons per year is about one percent of SJWC's projected 2030 institutional water demand (and less than 0.05 percent of SJWC's projected overall demand).

**TABLE 3.7-1
SJCC WATER CONSUMPTION – 2018 AND 2019**

Water Consumption Variables	2018	2019	Units
Total Annual Water Use [a]	20,070,336	20,422,644	Gallons per Year
Average Daily Water Use	54,987	55,952	Gallons per Day
Estimated Service Population [b]	9,304	9,376	Students and Staff
Average Daily Water Use per Person	5.91	5.97	Gallons per Day / Person
Building Gross Square Footage	634,693	634,693	Gross Square Feet
Average Daily Water Use per Gross Square Feet	0.087	0.088	Gallons per Day / Gross Square Feet

NOTES:
a Based on San José Water Company water bills for SJCC water use accounts in 2018 and 2019.
b Estimated service population includes full-time equivalent student enrollment and staff

Wastewater

Wastewater generated on campus is discharged to City of San José wastewater collection lines, and conveyed to and treated at the RWF located approximately 8.4 miles north of the SJCC campus. The RWF is the largest advanced wastewater treatment facility in the western United States, treating an average of 110 million gallons per day (mgd) of wastewater with a capacity of 167 mgd. The RWF is owned by the cities of San José and Santa Clara, and serves 1.4 million residents and over 17,000 businesses in eight cities and four sanitation districts in the region (City of San José, 2020).

Existing SJCC Wastewater Generation

Wastewater generated on the campus is collected into 4- to 6-inch pipes and flows into the City's 4- to 6-inch pipes at Moorpark Avenue, Mansfield Drive, and Leigh Avenue. Existing peak wastewater generation associated with the campus is estimated to be approximately 55,690 gpd or 0.05 mgd[1] based on the 2019 service SJCC service population (combined student enrollment and staff).[2]

Stormwater

The campus is served by stormwater infrastructure, which is owned and maintained by the City of San José. An existing 54-inch storm gravity main in Moorpark Avenue drains stormwater serves the campus along the northern perimeter of the campus; an 18-inch diameter storm gravity main in Kingman Road drains the southern portion of the campus (City of San José, 2020a).

1 Estimated wastewater is based on 90 percent of SJCC campus water demand [61,878 gpd (existing) X 90 percent = 55,690 gpd or 0.05 mgd]. For details regarding water demand, refer to Appendix F, Water Supply Evaluation.

2 Note: 2019 is used as the baseline year for existing conditions as 2020 is not representative of typical campus operations due to the COVID-19 pandemic and corresponding stay-at-home orders that were in effect.

Solid Waste

Solid waste generated on the campus is collected by a private hauler and is disposed at any of four privately owned landfills in San José or at other landfills outside the County. Landfills serving the City include Kirby Canyon. Closure dates for these facilities range from 2025 to 2048 and these facilities have approximately 16,191,600 cubic yards to 21,200,000 cubic yards of remaining capacity (California Department of Resources Recycling and Recovery, 2019a,b,c).

It is estimated that the campus generates approximately 6,965 pounds of solid waste per day based on a demand factor obtained from a comparable college campus.[3] However, this estimate is conservative as it does not take into account on going recycling programs on the campus such as source separating paper products.

Other Utilities

Pacific Gas and Electric Company (PG&E) provides electricity and natural gas to the campus, which is discussed in more detail in Section 3.3, *Energy*.

3.7.2 Regulatory Setting

Federal

There are no federal regulations pertaining to public utilities and service systems that are applicable to the SJCC FMP.

State

Urban Water Management Planning Act

All public water systems that provide water for municipal purposes to more than 3,000 customers, or that supply more than 3,000 acre-feet per year (AFY) are required to prepare an Urban Water Management Plan (UWMP), pursuant to California Water Code Section 10610 et seq. UWMPs are key water supply planning documents for municipalities and water purveyors in California. The intent of the UWMP is to support water agencies and water suppliers with resource planning to meet existing and anticipated future water demands. UWMPs must be updated every 5 years.

Senate Bill 610

Senate Bill (SB) 610 adopted by the California Legislature in 2002 requires that cities and counties, when evaluating large development and redevelopment projects, to request an assessment of the availability of water supplies from the water supply entity that will provide water to a project. The Water Supply Assessment (WSA) is performed in conjunction with the land use approval process associated with a project, and includes an evaluation of whether there will be adequate projected water supply over a 20-year timeframe, based on normal, single, and multiple dry years, to meet a project's water demands. When a new development project is

3 Based on an estimated solid waste generation rate of 0.8 pounds/day/student [8,706 students (existing 2020) X 0.8 pounds/day/student = 6,965 pounds].

accounted for in the demand projections of an UWMP, the WSA can refer to UWMP and no further analysis is necessary.

Water Code 10910 and 14 CCR 15155 (entitled "City or County Consultation with Water Agencies") apply only to cities and counties. Water Code Section 10910(a) states: "Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part."

2018 Bay-Delta Plan Amendment

In December 2018, the State Water Resources Control Board adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, which establishes water quality objectives to maintain the health of the rivers and the Bay-Delta ecosystem.[4] Among the goals of the adopted Bay-Delta Plan Amendment is to increase salmonid populations in the San Joaquin River, its tributaries (including the Tuolumne River), and the Bay-Delta. Specifically, the plan amendment requires increasing flows in the Stanislaus, Tuolumne, and Merced Rivers to 40 percent of unimpaired flow[5] from February through June every year, whether it is wet or dry. During dry years, this would result in a substantial reduction in the water supplies from the Tuolumne River watershed.

Assembly Bill 325

Assembly Bill (AB) 325, the Water Conservation in Landscaping Act of 1990, directs local governments to require the use of low-flow plumbing fixtures and the installation of drought-tolerant landscaping in all new development. Pursuant to the Water Conservation in Landscaping Act, the California Department of Water Resources developed a Model Water Efficient Landscape Ordinance.

Assembly Bill 939

The California Integrated Waste Management Act of 1989 (AB 939) requires municipalities to divert to recycling facilities at least 50 percent of all solid waste generated by the year 2000 and establishes the goal of diverting at least 75 percent of generated waste (based on per capita disposal rates) by 2020.

California Universal Waste Rule

Under CCR Title 22, Division 4.5, Chapter 23 Standards pertaining to the management of universal wastes are established in California. Universal wastes are hazardous wastes that are widely produced such as: televisions, computers and other electronic devices as well as batteries, fluorescent lamps, mercury thermostats, among others. As universal wastes may contain hazardous substance such as mercury, lead cadmium, copper, or other substances hazardous to

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4 State Water Resources Control Board Resolution No. 2018-0059, *Adoption of Amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and Final Substitute Environmental Document,* December 12, 2018, available at https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf.

5 "Unimpaired flow" represents the water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds.

human and environmental health, such items may not be discarded in municipal landfills and must be recycled, where valuable metals may be recovered and reused (DTSC, 2016).

California Green Building Standards Code

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, conserve natural resources, and promote the use of energy-efficient materials and equipment. Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state.

Mandatory measures related to water conservation include water-conserving plumbing fixture and appliance requirements, including flow rate maximums, compliance with state and local water-efficient landscape standards for outdoor potable water use in landscape areas, and recycled water systems, where available.

The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the 2019 amendments to the CALGreen Code became effective January 1, 2020. Updates include a requirement that all residential and non-residential developments adhere to a local water efficient landscape ordinance or to the State of California's Model Water Efficient Landscape Ordinance, whichever is more stringent.

General Construction Activity Stormwater Permit

In accordance with National Pollutant Discharge Elimination System (NPDES) regulations, to minimize the potential effects of construction runoff on receiving water quality, the State requires that any construction activity affecting one acre or more obtain coverage under a General Construction Activity Stormwater Permit (Construction General Permit). The current Construction General Permit is the modified 2017 NPDES Construction General Permit (CGP) for Storm Water Discharges from Construction Activities, effective June 27, 2019. CGP applicants are required to prepare and implement a storm water pollution prevention plan (SWPPP) which includes implementing best management practices (BMPs) to reduce construction effects on receiving water quality by implementing erosion and sediment control measures and reducing or eliminating non-stormwater discharges. Examples of typical construction BMPs in SWPPPs include, but are not limited to: using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment so as to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; and installing sediment control devices such as gravel bags, inlet filters, fiber rolls, or silt fences to reduce or eliminate sediment and other pollutants from discharging to the local drainage system or receiving waters.

The CGP includes what are known as Construction and Development rule requirements which have non-numeric effluent limitations that apply to all permitted discharges from construction sites (40 CFR 450.21). The effluent limitations are structured to require construction operators to first prevent the discharge of sediment and other pollutants through the use of effective planning and erosion control measures; and second, to control discharges that do occur through the use of effective sediment control measures. Operators must implement a range of pollution control and prevention measures to limit or prevent discharges of pollutants, including those from dry weather discharges as well as wet weather (i.e., stormwater).

Phase II General Stormwater Permit (SWRCB Order Nos. 2003-0005-DWQ and 2013-0001-DWQ)

In 2003, the State Water Resources Control Board (SWRCB) adopted the General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer System (MS4s), SWRCB Order No. 2003-0005-DWQ (Phase II General Stormwater Permit), which applies to small municipal separate storm water systems. A revised permit was approved in 2013 (Order No. 2013-0001-DWQ).

The SWRCB is developing a proposed reissuance of the General Permit for consideration of adoption by the SWRCB in 2021. It is expected that community college districts will be designated in this iteration of the permit.

Local

San Jose Water Company Urban Water Management Plan

The SJWC adopted its 2015 UWMP in June 2016. The 2015 UWMP includes projected water supplies required to meet existing and future demands through the year 2040. The 2015 UWMP serves two primary purposes: the UWMP is a master plan to inform water supply resource management, and serves as a reporting document for compliance with California Water Code and California Urban Water Management Planning Act of 1983.

The 2015 UWMP includes water demand projections for the SJWC service area through the year 2040 based on population and use projections. The UWMP also takes into account anticipated demand decreases due to current conservation efforts in the service area. Additionally, future retail water supply projects including recycled water projects are considered in the UWMP (SJWC, 2016).

SJWC is currently updating its UWMP, and the SJWC 2020 UWMP anticipated to completed and adopted by June 2021.

Refer to Section 3.7.1 for a summary of relevant information from SJWC’s UWMP pertaining to SJWC water supply, water demand, and water system reliability.

City of San José Post-Construction Urban Runoff Management Policy

The City of San José established specific requirements in its Post-Construction Urban Runoff Management Policy (Policy 6-29) to minimize and treat stormwater runoff from new development and redevelopment projects, which is consistent with the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (or MRP) the City participates in. As the SJCC FMP would create or replace 10,000 square feet or more of impervious surface area, the project would be considered a “regulated project” and would be required to utilize site design and source control measures and numerically-sized Low Impact Development (LID) stormwater treatment measures to minimize (reduce volume) and treat stormwater runoff through LID measures and source control of pollution (City of San José, 2011).

Construction Demolition Diversion Deposit Program

Chapter 9.10, Part 15 of the City of San José Municipal Code establishes a construction and demolition (C&D) debris deposit program to ensure that at least 50 percent of such waste is recovered and diverted from landfills. Chapter 9.10 of the San José Municipal Code also outlines solid waste management regulations in the City. Pursuant to Municipal Code 9.10.2480(c), notwithstanding any other provision to the contrary, a building permit (filed on or after 2013) documenting completion of a construction waste management plan shall be deemed in compliance at a 75 percent level as determined by the director, in accordance with California Green Building Standards Code (City of San José, 2021).

SJECCD

Climate Change and Sustainability Resolution and Policy

In January 2020, the Board of Governors of the California Community Colleges adopted a *Climate Change and Sustainability Resolution* and *Climate Change and Sustainability Policy* (California Community Colleges, 2020) as part of their ongoing commitment to environmental sustainability and providing California community college students and their communities sustainable and safe learning environments. Together the resolution and policy acknowledge the urgency of climate change and its impact on community college campuses, communities and state.

Adoption of this policy and resolution aligns the efforts of the California Community Colleges on climate change and sustainability with California's *Climate Change Strategy*. The policy and resolution provide a set of seven goals to be achieved by 2030, with incremental progress for each expected by 2025. Goal 7 is for California Community Colleges is by 2025, to reduce municipal solid waste by 25 percent compared to current levels; and by 2030 to reduce municipal solid waste by 50 percent compared to current levels.

SJECCD District Standards + Campus Guidelines Handbook

The SJECCD District Standards + Campus Guidelines Handbook provides guidelines and standards for new development intended to be considered in conjunction with applicable building codes and regulations (SJECCD, 2014).

Part B, Sustainable Design Guidelines includes guidance on, among other topics, water efficiency and conservation. Three important consideration included in Part B includes:

- Achieve water efficiency and conservation through efficient use of water indoors, outdoors and in waste water conveyance.
- By employing a variety of water-wise strategies, limited water resources may be conserved and safeguarded.
- Landscape management best practices, such as drought-tolerant native plants, aid in water conservation and protection of local watersheds.

Part C Hardscape Elements, Part H, Landscape elements, and Park K, Irrigation Standards includes guidance on, among other topics, stormwater management and water conservation, including:

- Opportunities for sustainable stormwater management include the use of permeable paving and bioswales where appropriate.
- Site drainage shall be directed into planted bio-swales where appropriate to minimize run-off to storm drains and meet CalGreen stormwater guidelines.
- Permeable pavers are an excellent solution for allowing site water to infiltrate without the use of storm basins.
- Quads and plazas can be planted with water conserving grass and large trees for shade.
- Individual irrigation systems around the campus shall be designed to water the entire landscaped area within that area in one evening between the hours of 10 pm and 8 am.
- Irrigation systems and plans shall be designed to meet the requirement of the State of California Assembly Bill AB 1881 and the Model Water Efficient Landscape Ordinance (MWELO) of the City of San Jose.

3.7.3 Analysis, Impacts, and Mitigation

Standards of Significance

The impact from the implementation of the SJCC FMP to the utilities and service systems would be considered significant if it would:

a. require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power or natural gas or telecommunications facilities, the construction of which could cause significant environmental effects;

b. (not) have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;

c. result in a determination by the wastewater treatment provider that it has (in)adequate capacity to serve the project’s projected demand in addition to the providers existing commitments;

d. generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair attainment of solid waste reduction goals; or

e. fail to comply with federal, State, or local management and reduction statutes and regulations related to solid waste.

Methodology

This evaluation of potential impact to utilities and service systems is based on a comparison of the existing and projected demand for utilities and the resulting need, if applicable, for any new expanded or modified facilities to meet the projected increased demand. Under CEQA, impacts are typically considered to be significant if a project will require new or expanded utilities service facilities, the construction of which will result in significant environmental effects.

Impacts and Mitigation Measures

Impact 3.7-1: The SJCC FMP would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. ***(Less than Significant)***

Utility infrastructure improvements would be required within or adjacent to the SJCC campus to serve proposed development under the proposed SJCC FMP. Improvements may include those for campus domestic and emergency water, wastewater, stormwater, electric and natural gas, and/or telecommunications utility infrastructure. In addition, the SJCC proposes to replace the existing chillers (used for heating and cooling the campus) with three (3) 375-ton chillers installed within its Central Plant building.

Construction activities associated with these utility improvements would have the potential to result in significant or potentially significant impacts. However, compliance with mitigation measures and other construction-related regulatory requirements discussed in other sections of this EIR, including Section 3.1, *Air Quality*; Section 3.5, *Noise and Vibration*, and Initial Study sections for *Biological Resources*, *Geology and Soils*, *Hazards and Hazardous Materials*, and *Hydrology and Water Quality*, would reduce construction-related effects associated with utility improvements to a less than significant level. As a result, the impacts associated with the construction of new utilities to serve the proposed SJCC FMP would be less than significant.

Mitigation: None required.

Impact 3.7-2: Sufficient water supplies would be available to serve the SJCC FMP and reasonably foreseeable future development during normal, dry, and multiple dry years. ***(Less than Significant)***

Implementation of the SJCC FMP would result in an increased demand for water at the SJCC campus, which is supplied to the campus by the SJWC. The water supply evaluation prepared for the SJCC FMP is provided as Appendix F.

The SJCC FMP would accommodate an increase in student enrollment and faculty/staff at the SJCC campus over the course of its implementation (i.e., estimated increase in students from 8,806 in 2019 to 9,376 students in 2030; and increase in staffing from 670 in 2019 to 826 in 2030). **Table 3.7-2** presents the estimated existing (2019) SJCC water use and the projected 2030 SJCC water use based on the proposed 2030 service population and using the 2019 average daily water use per person. Using the existing average daily water use rate provides a conservative water use estimate, as it does not reflect future water conservation requirements and measures that would be expected to be implemented at the SJCC campus over time that would have the effect of providing additional water use efficiency.[6] As shown in Table 3.7-2, the projected future

6 It should also be noted that for comparison purposes, the projected SJCC water use under the proposed SJCC FMP was separately estimated based on the estimated increase in building square footage that would have a water demand (e.g., excluding the proposed parking garage). This approach yielded a similar, although slightly lower, projected water use than the method based on population. Consequently, as a conservative approach, the projection method based on population increase was used for this EIR.

SJCC campus water use under the SJCC FMP of 25.2 million gallons per year would be approximately 4.8 million gallons per year over the existing campus water use – an increase of approximately 24 percent.

TABLE 3.7-2
SJCC WATER CONSUMPTION IN 2030 UNDER SJCC FMP

Water Consumption Variables	2019	2030	Units
Estimated Service Population	9,376	11,561	Students and Staff
Average Daily Water Use per Person	5.97	5.97	Gallons per Day / Person
Estimated Average Daily Water Use	55,952	69,000	Gallons per Day
Estimated Total Annual Water Use	20,422,644	25,200,000	Gallons per Year

As discussed in the Environmental Setting, the existing SJCC water use of about 20.4 million gallons per year accounted for less than one percent of SJWC's projected 2020 institutional water demand, and less than 0.04 percent of SJWC's projected 2020 overall demand. The projected 2030 SJCC water use of 25.2 million gallons per year under the SJCC FMP would represent approximately one percent of SJWC's projected 2030 institutional water demand and less than 0.05 percent of SJWC's projected overall demand.

SJWC's 2015 UWMP indicated that SJWC had adequate supplies to meet projected demands in its service area for average years through 2040, single dry years through 2035, and the first year of a multiple year drought through 2040. However, supply shortages were projected by SJWC for a single dry year in 2040 and the second and third years of a multiple year drought from 2020 to 2040. Although not reflected in the SJWC 2015 UWMP, it is anticipated that implementation of the Bay-Delta Plan Amendment would result in further system-wide water supply shortfalls in dry years. These shortfalls would occur with or without the SJCC FMP, and the SJCC FMP's incremental increase in potable water demand would have a negligible effect of the levels of rationing that may be required in SJWC's service area in dry years. Furthermore, the District would be required to comply with any rationing that may be required with implementation of the Bay-Delta Plan Amendment.

As SJWC receives most of its supplies from Valley Water imported surface water supplies, SJWC's supply reliability is highly dependent on the reliability of Valley Water's supplies. As discussed in the Setting, in January 2019 the Valley Water Board of Directors approved an updated long-term water supply reliability level-of-service goal to develop supplies to meet at least 100 percent of annual water demand identified in the Valley Water's Master Plan during non-drought years and at least 80 percent of annual water demand in drought years. With the phased implementation of planned future projects, Valley Water's available supplies are projected to increase over time. In addition, in November 2019, Valley Water completed its Water Supply Master Plan 2040 (WSMP 2040), which provides a strategy for meeting future water demands consistent with Valley Water's updated level-of-service goal.

Although the SJWC's final 2020 UWMP and Valley Water's final 2020 UWMP were not available for consideration for this EIR, it is anticipated that SJWC's 2020 UWMP will show improved water supply reliability as compared to the 2015 UWMP based on Valley Water's updated level-of-service goal and strategy for meeting future water demands. As such, it is anticipated that SJWC will have adequate water supplies to meet the projected demands for the SJCC FMP. In the event of a water shortage, the District would be subject to the water demand reduction actions enacted by SJWC as part of its Water Shortage Contingency Plan.

Furthermore, the District would continue to implement improvements proposed under the SJCC FMP pursuant to its Campus Design Standards which provides guidelines and standards for new development, and all applicable regulations, for water efficiency and conservation.

For the reasons described above, this impact would be considered less than significant.

Mitigation: None required.

Impact 3.7-3: The proposed SJCC FMP would not result in a determination by the wastewater treatment provider that serves or may serve the SJCC FMP that it does not have adequate capacity to serve the SJCC FMP's projected demand in addition to the provider's existing commitments. ***(Less than Significant)***

Construction

During construction, portable sanitary facilities would likely be provided by the contractor for worker use. The portable facilities (if used) would be transported to off-site location at a facility capable of receiving and treating such wastes. As construction would be temporary and would not place an ongoing demand no wastewater treatment infrastructure would be required to be added to accommodate this temporary demand. Impacts during construction would be less than significant.

Operation

As described in Chapter 2, *Project Description*, the SJCC FMP would include new and repurposed buildings including restrooms and associated wastewater infrastructure internal to the SJCC campus. As design for the proposed facilities is preliminary, associated increases in wastewater volume have not yet been determined. It can be reasonably assumed that students and staff (representing the service population) would generally consist of individuals residing in the City of San José; so use of facilities upon the campus is not anticipated to increase overall use or wastewater demand in the sphere of influence in San José.

Wastewater generated on the SJCC campus is conveyed off-site through the public sewer system owned by the City of San Jose to the RWF for treatment. Average daily flows generated on campus are estimated to be approximately 62,100 gpd (or 0.06 mgd) based on a water demand factor[7] from a comparable campus. The RWF currently has a wastewater treatment capacity of

7 Wastewater demand is based on 90 percent of campus projected water demand [69,000 gpd (projected 2030) X 90 percent =62,100 or 0.06 mgd].

167 mgd, with average daily flows at 110 mgd (City of San José, 2020), which, based on the current sewage flows, leaves the City with approximately 57 mgd of surplus treatment capacity. Under the SJCC FMP, a projected use increase of up to approximately 11,743 gpd (or 0.01 mgd), which equivalent to 0.02 percent of available capacity. The projected increase in demand represents a negligible proportion of overall capacity and not result in wastewater capacity exceedances. Impacts during operation of the SJCC FMP would therefore be considered less than significant.

Mitigation: None required.

Impact 3.7-4: Implementation of the SJCC FMP would not generate waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair attainment of solid waste reduction goals; and would comply with federal, State, or local management and reduction statutes and regulations related to solid waste. *(Less than Significant)*

Construction

Over the duration of the proposed SJCC FMP, construction and demolition activities would generate construction debris at the SJCC campus, some of which would require debris disposal. Construction of the SJCC FMP would construct approximately 378,000 GSF new building space through new construction and renovation, and demolish several existing structures involving approximately 109,000 GSF, which would generate solid waste in the form of concrete, demolition debris, and other materials. Based on the most conservative construction and demolition waste estimates provided by the U.S. Environmental Protection Agency, construction and demolition under the proposed SJCC FMP would result in an estimated 9,271 tons of solid waste (EPA, 2009).[8] Consistent with current CalGreen standards, and SJECCD policy, construction and demolition debris would be transported by a registered transporter to a registered facility that must recover for reuse or recycling and divert from landfill at least 75 percent of all received construction and demolition debris. As a result, construction associated with the SJCC would generate up to approximately 2,318 residual tons of waste that could require disposal at a landfill. Given the existing and future capacities of the landfills where SJCC solid waste is disposed, construction that would occur under the proposed SJCC FMP would not result in construction waste generation that exceeds the permitted capacity of the landfills that serve the campus or be in non-compliance with federal, State, and local statutes and regulations related to solid waste. Therefore, this impact would be less than significant.

Operation

It is estimated that operation of the SJCC FMP would generate approximately 8,588 pounds of solid waste per day.[9] As the SJCC campus would continue to manage the waste stream by

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8 The analysis is based on EPA weighted average generation rates of 4.34 pounds per square foot for new non-residential construction, and 155 pounds per square foot for demolition. SJCC FMP construction/demolition generated waste was calculated based on: [(378,000 square feet of total new CPHP construction * 4.34 pounds/square foot + 109,000 square feet of SJCC FMP demolition * 155 pounds/square foot)/ 2,000 pounds/ton] = 9,271 tons.

9 Based on an estimated solid waste generation rate of 0.8 pounds/day/student [10,735 students (projected 2030) X 0.8 pounds/day/student = 8,588 pounds].

implementing recycling measures, even with an increased student population, operation of the project would not generate significant quantities of solid waste such that local infrastructure capacity would be exceeded, based on the remaining capacity of landfills serving the SJCC. Impacts under the SJCC FMP's operational phase would be less than significant.

Mitigation: None required.

Cumulative Impacts

Impact C-3.7-5: Implementation of the SJCC FMP in combination with past, present, and reasonably foreseeable future projects, would not substantially contribute to cumulative impacts related to utilities and service systems. ***(Less than Significant)***

The geographic scope of cumulative impact analysis for utilities and service systems includes the service areas of each of the relevant utility or service systems providers for water supply, wastewater, stormwater, solid waste disposal utilities that could be affected by the SJCC FMP. This geographic extent is appropriate because increases in demand are generally limited to the service area of the utility purveyor or service provider. The majority of impacts identified in this section are either less than significant or are associated with the temporary construction of the SJCC FMP. No impacts to utilities and service systems would be significant and unavoidable.

Water Supply

The analysis conducted as described under Impact 3.7-2, and the water supply evaluation (Appendix F) is a cumulative analysis of the SJCC FMP's water demand within the greater context of the overall cumulative water demand based on current water supply planning scenarios. The SJCC FMP would not make a considerable contribution to cumulative impacts on water supply, and the impact would be ***less than significant***.

Wastewater

A cumulative impact would occur for wastewater treatment if the incremental proportion of use/demand posed by the SJCC FMP, when considered along with other development and associated use increases would result in a determination that the provider would not have the capacity to serve the SJCC FMP along with existing and reasonably foreseeable future commitments.

The impact analysis described under Impact 3.7-3 considers the SJCC FMP's potential demand on overall available wastewater treatment capacity at the RWF, which notes that with implementation of the SJCC FMP (with associated projected increases in the 2030 service population) about 0.02 percent of the available RWF treatment capacity may be used, which represents a negligible proportion of increased demand relative to capacity. Other projects will be considered for City service approval on a case-by-case basis, based on available RWF treatment capacity at the time of their consideration. The SJCC FMP and associated increases in service population would not make a considerable contribution to cumulative impacts on wastewater treatment capacity, and the impact would be ***less than significant***.

Solid Waste

Along with other projects which generate construction and demolition debris, the proposed SJCC projects would be subject to State standards which aim to reduce, reuse, or otherwise divert solid waste from landfills. These regulations exist in recognition that such projects generate an incremental effect that, when considered together, combine to result in stressors to landfill capacity.

As noted in Impact 3.7-4, the SJCC FMP would comply with SJECCD policies and CalGreen Code standards related to construction and demolition debris diversion, such that a minimum of 75 percent of this solid waste would not enter the landfill. With implementation of these regulatory policies, the SJCC FMP would not result in a cumulatively considerable contribution with respect to solid waste. The impact would be ***less than significant***.

Mitigation: None required.

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CHAPTER 4
Alternatives

4.1 Introduction

An EIR must describe a range of reasonable alternatives to the proposed project that might feasibly accomplish most of the basic objectives of the proposed project and could avoid or substantially lessen any of the project's significant environmental effects. This chapter describes the CEQA requirements for an alternatives analysis, presents the District's project objectives, summarizes the significant effects of the proposed SJCC FMP that cannot be avoided or reduced to less than significant, and describes the alternatives, including those that were considered but dismissed from further evaluation. The chapter then considers the comparative effects of each of the alternatives relative to those of the proposed SJCC FMP, and evaluates the relationship of the alternatives to the project objectives. As required under Section 15126.6(e) of the CEQA Guidelines, an environmentally superior alternative is identified and addressed at the end of this chapter.

4.1.1 CEQA Requirements

CEQA requires that an EIR describe and evaluate a range of reasonable alternatives to the proposed project, or to the location of the proposed project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6(a), (d)). The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to foster informed decision-making and public participation (Section 15126.6(a), (f)).

The range of alternatives shall include alternatives that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant effects of the project (CEQA Guidelines Section 15126.6(a)-(c)). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. In addition, the following may be taken into consideration when assessing the feasibility of alternatives: site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and the ability of the proponent to attain site control (Section 15126.6(f)(1)). If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR (Section 15126.6(f)(2)(B)).

The description or evaluation of alternatives does not need to be exhaustive, and an EIR need not consider alternatives for which the effects cannot be reasonably determined and for which implementation is remote or speculative. An EIR need not describe or evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project (CEQA Guidelines Section 15126.6(d)).

The "no project" alternative must be evaluated. This analysis shall discuss the existing conditions, as well as what could be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services (CEQA Guidelines Section 15126.6(e)(2)).

CEQA also requires that an environmentally superior alternative be selected from among the alternatives. The environmentally superior alternative is the alternative with the fewest or least severe adverse environmental impacts. When the "no project" alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)).

4.2 Factors in Selection and Rejection of Alternatives

The nature and scope of the range of alternatives to be discussed is governed by the "rule of reason." The CEQA Guidelines recommend that an EIR should briefly describe the rationale for selecting the alternatives to be discussed (Section 15126.6(c)). This alternatives analysis considers the following factors:

- The extent to which the alternative would accomplish most of the basic objectives of the proposed project;
- The extent to which the alternative would avoid or lessen the identified significant, or less-than-significant with mitigation, environmental effects of the proposed project;
- Requests by interested parties, community members, and decision makers at the EIR scoping session for information regarding the relative environmental impacts of different development programs and different numbers of housing units;
- The feasibility of the alternative, taking into account site suitability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations;
- The extent to which an alternative contributes to a "reasonable range" of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA Guidelines to consider a "no project" alternative, and to identify an "environmentally superior" alternative in addition to the no-project alternative (Section 15126.6(e)).

4.2.1 Project Objectives

As stated above, the selection of alternatives shall consider the basic objectives of the proposed project. As previously presented in Chapter 2, *Project Description*, the SJCC FMP objectives are to:

- Update and expand SJCC facilities to accommodate projected expansion in demand for community college education and programs resulting from the population growth within the District's service area for year 2030

- Create a functional and usable space/facilities plan based on the SJCC EMP that updates the facility needs to match the projected needs
- Link the SJCC EMP's goals, strategies, and desired productivity to space quantification that balances the current and future curriculum, instructional delivery modes, effective learning environment, and necessary support structures
- Match space needs and utilization with the curriculum, create modern teaching facilities and learning environments, and provide modern support services sufficient to serve student's needs
- Reuse some existing buildings that are in good condition and have adequate space for educational and administrative functions
- Assist the District in meeting its SJCC EMP goals and objectives, particularly those related to provision of educational programs and supportive needs
- Implement a well-conceived and well-justified plan for capital outlay projects that are an outcome of a sound master planning process
- Provide an optimal educational and supportive services to the students of the San José City College

4.2.2 Elimination and/or Reduction of Significant Impacts

CEQA Guidelines Section 15126.6(b) states that "(b)ecause an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

Potentially significant environmental impacts that would result from the proposed project are evaluated in Chapter 3, *Environmental Analysis*, of this EIR. With implementation of the project design features, standard conditions and requirements, and mitigation measures identified for each resource area significantly impacted, all of the potentially significant impacts resulting from the proposed project would be reduced to a less-than-significant level.

As described in Chapter 3, implementation of SJCC FMP would result in a significant and unavoidable project-specific and cumulative impacts related to construction noise.

4.3 Alternatives Considered but Rejected from Further Evaluation

CEQA Guidelines Section 15126.6(c) requires an EIR to identify and briefly discuss any alternatives that were considered by the lead agency and rejected from further evaluation. In identifying alternatives to the proposed project, primary consideration was given to alternatives that would reduce impacts while still meeting most of the basic project objectives as well as the District's planning goals and objectives, such as those articulated in the District's SJCC Educational Master Plan (SJCC EMP) and Facilities Master Plan (SJCC FMP). The alternative scenarios that the District considered but rejected are discussed briefly below, along with the specific reasons why they were not evaluated further in this document.

4.3.1 Alternative Site Location

Implementation of the SJCC FMP at an alternative location was not included as a project alternative because of the likely infeasibility of such an alternative, and the lack of evidence that such an alternative would avoid or substantially reduce the significant impacts of the proposed SJCC FMP. Even if constructing the new facilities on another site were feasible from an economic or educational standpoint, establishment of a new campus of the required size would take many years to obtain funding, find a feasible site, and prepare and implement campus plans. Furthermore, the primary purpose of the SJCC FMP is to authorize additional development of the SJCC campus in a manner consistent with the growth assumptions in the SJCC FMP; a potential alternative that would provide for District growth and development at an alternative site would not accomplish the primary SJCC FMP objectives. For these reasons, this alternative was determined to be infeasible and was not carried forth in the EIR for detailed evaluation.

4.3.2 Shift Growth to the Evergreen Valley College Campus

The District's Evergreen Valley College (EVC) campus is located in southeast San Jose, approximately nine miles from the SJCC campus. The EVC campus currently has plans for expansion of that campus that would accommodate student growth envisioned under the EVC Educational Master Plan (EVC EMP). The EVC Facilities Master Plan (EVC FMP) includes demolition of aging structures; construction of new structures, including classrooms and other educational facilities, and upgrades to existing transportation and circulation facilities. However, the EVC campus at buildout under the proposed EVC FMP could not accommodate a potential shift in the additional students from the SJCC campus to the EVC campus, as capacity even after implementation of the EVC FMP would be limited. Furthermore, it is not known how many of the students from SJCC would attend EVC, considering its distance from the SJCC campus and area general area served by the SJCC. For these reasons, this alternative was determined to be infeasible and was not carried forth in the EIR for detailed evaluation.

4.3.3 No Project - No Development

The No Project - No Development Alternative is the circumstance under which the proposed SJCC FMP would not proceed; and furthermore, any remaining unbuilt development contemplated and approved under the existing SJCC FMP (i.e., SJCC 2025 Updated FMP) would also not occur. Accordingly, under the No Project - No Development Alternative, the existing SJCC would remain in its current state. The existing buildings, infrastructure, circulation system, topography, vegetation, and other physical characteristics of the SJCC campus would remain unchanged. It is assumed that student enrollment on the SJCC campus would not increase above existing conditions, or would only potentially increase slightly, with additional students being accommodated in existing SJCC facilities, under this alternative.

This alternative would not meet any of the objectives of the SJCC EMP or the proposed SJCC FMP, and would not met the projected need for new facilities to meet the anticipated educational demands. For these reasons, this alternative is considered infeasible and not carried forth in this EIR for detailed evaluation.

4.4 Alternatives Selected for Analysis

The alternatives selected for analysis are designed to inform the public discussion and the final decisions by the District Board on the SJCC FMP. Specifically, the range of alternatives is designed to inform decision makers about:

- Potential modifications to the proposed SJCC FMP that might minimize or avoid environmental impacts.
- The relative change in environmental impact (increase or decrease) that might be expected by potential modifications to the proposed SJCC FMP.
- The impact on the District's ability to achieve the SJCC FMP objectives with the potential modifications to the SJCC FMP.

Based on these considerations, the District has identified the following range of reasonable alternatives to be addressed in this EIR.

- **Alternative 1:** No Project - Implement SJCC 2025 Updated FMP
- **Alternative 2**: Reduced Project Alternative
- **Alternative 3**: Renovations Only Alternative

Of these alternatives, Alternative 1 is the "no project" alternative in which only remaining development as planned and previously approved in the SJCC 2025 Updated FMP would be developed. Alternative 2 and Alternative 3 include different scenarios of demolition, construction, and/or renovation. Each are described below, along with their relative impacts in comparison to the proposed SJCC FMP.

4.4.1 Alternative 1: No Project - Implement SJCC 2025 Updated FMP

The No Project - Implement SJCC 2025 Updated FMP would not implement the renovation, demolition, or new construction included in the proposed SJCC FMP (i.e., SJCC Vision 2030 FMP). Instead this alternative would continue to implement the SJCC 2025 Updated FMP, the existing facility master plan for the SJCC campus. The SJCC 2025 Updated FMP identifies several buildings for demolition/removal to eliminate non-functioning space and replace the oldest and most aged facilities with new facilities, as follows:

- Drama + Theater
- General Education Building (partial demolition)
- CTE 100 Building
- Auxiliary Gym

- CTE 200 Building
- Field House
- CTE 300 Building
- Handball Courts (currently location of the Wellness Center)
- Boiler Plant
- Portable Restroom Building
- Pool
- Locker Rooms

The SJCC 2025 Updated FMP proposed the construction of new buildings listed below:

- Physical Education Complex (Jaguar Sports Complex)
- Vocational Technology Building
- Performing Arts Center
- General Education Building

In addition to above-described demolition and new construction, the SJCC 2025 Updated FMP included renovation of some existing structures, including both renovations to change the uses of existing structures and renovations to sustain existing uses, as follows:

- Re-purpose vacated floors of the Technology Center to support instructional program needs identified in the 2025 EMP.
- Renovate Building K to support the Maintenance and Operations function of the college;
- Renovate the General Education Building Complex
- Renovate the Business Building

A number of actions planned in SJCC 2025 Updated FMP have already been implemented. The Auxiliary Gym, Pool, and Field House have been demolished and the CTE Building 300 is in the process of being demolished. The Physical Education Complex (Jaguar Sports Complex) planned in the SJCC 2025 Updated FMP at the former location of the Field House, has been constructed. In addition, Building K, which was planned in the SJCC 2025 Updated FMP for renovation to serve a Maintenance and Operations function, has been demolished, and the Maintenance and Operations building is currently under construction.

The overall change in campus facilities with continued implementation of the SJCC 2025 Updated FMP would result in a net reduction in campus square footage of approximately 116,000 gross square feet compared to existing conditions. This alternative would include approximately 62,000 square feet of new construction and demolition and removal of approximately 178,000 square feet of existing structures. New structures at the SJCC campus would include the construction of a vocational technology building, new performing arts center, and new general education building.

Under the No Project - Implement SJCC 2025 Updated FMP, the overall programmable square footage would be less than what currently exists on campus and what is proposed under the SJCC FMP. However, the combination of renovation of existing structures and construction of new structures is intended to accommodate a projected growth in student population from approximately 11,780 students in 2013 to approximately 14,450 in 2025. Under the 2030 SJCC FMP the Plan is designed to accommodate student enrolment growth from 8,773 in 2020 to 10,735 in 2030. The modest growth of the 2030 SJCC FMP could be anticipated to be accommodated by this alternative.

The No Project - Implement SJCC 2025 Updated FMP Alternative would include transportation improvements such as the southern perimeter loop road and the addition of parking. However, relative the proposed SJCC FMP, this alternative would not include the construction of a large parking structure or a new driveway onto Leigh Avenue.

This alternative would meet the District's objectives of expanding the capacity of campus facilities to meet projected future demand within the SJCC service area and modernizing a number of aged facilities across the campus. Relative to the proposed SJCC FMP, the No Project - Implement SJCC 2025 Updated FMP Alternative would be less effective in achieving the District's objectives related to provision of structures and programming that supports the District's desired academic program offerings and current desires regarding campus layout and function.

As shown in Table 4-1 at the end of this chapter, the No Project - Implement SJCC 2025 Updated FMP Alternative would be less effective at meeting the District's objectives relative to the proposed SJCC FMP.

Comparison of Effects of No Project – Implement SJCC 2025 Updated FMP Alternative to the Proposed SJCC FMP

Aesthetics

This alternative would result in overall less and smaller scale new development at the campus site compared to proposed under the SJCC FMP. Under this alternative, new development on the SJCC campus would occupy a smaller footprint, and would provide less capacity for growth in the SJCC service population than the development proposed under the SJCC FMP. As under the SJCC FMP, this alternative would not result in a substantial adverse impact on scenic vistas. This alternative would also have incrementally less impact related to new sources of light and glare compared to the SJCC FMP, given the overall less development proposed.

Air Quality

This alternative would have less new construction but more demolition activities than that which would occur under the SJCC FMP. However, the majority of the demolition that was planned in the SJCC 2025 Updated FMP has already occurred or is similar to the demolition proposed in the SJCC FMP. Consequently, this alternative would have less impact associated with construction and demolition emissions of criteria pollutants, and toxic air contaminants (TACs) and associated health risks at sensitive receptors, and would similarly mitigate those effects to less than significant with the use of clean construction equipment and implementation of BAAQMD dust control measures.

This alternative would result in less development, resulting in a lesser expansion in student capacity and resultant traffic increases, compared to the SJCC FMP. The specific reduction in traffic generated under this alternative compared to those generated under the SJCC FMP would depend on a number of factors, including the specific levels of instruction and support uses that would be implemented under this alternative. As a result, operations under this alternative would generate fewer criteria pollutant emissions than the less-than-significant but mitigable operational emissions under the SJCC FMP. This alternative would also have less project and cumulative impact associated with exposure of sensitive receptors to substantial project and cumulative operational pollutant concentrations, and require similar mitigation to reduce diesel particulate matter (DPM), which would mitigate those significant effects to less than significant. Lastly, this alternative would have less impact associated with conflict of the SJCC FMP with or obstruction of implementation of the applicable *Clean Air Plan*, and with mitigation the impact would similarly be reduced to less than significant.

Biological Resources

As described this alternative would have less overall new construction and demolition activities compared with the SJCC FMP, and therefore, the overall extent of construction and development-related impacts to biological resources under this alternative would be less than that associated with the SJCC FMP. Significant project and/or cumulative construction-related effects on special-status plant and wildlife species of this alternative would be similarly mitigated to less than significant with applicable survey and resource project measures similar to the proposed SJCC FMP.

Cultural Resources

Similar to the proposed SJCC FMP, this alternative would have no impact to architecturally significant historical resources eligible for listing in the National Register and California Register, as no such resources exist at the SJCC campus site.

This alternative would result in less ground disturbing construction activities compared to the SJCC FMP, and therefore have less potential to affect archaeological and tribal cultural resources. Potentially significant project and cumulative impacts to previously unknown archaeological resources, human remains, and/or tribal cultural resources under this alternative would be similarly mitigated to a less-than-significant level as under the SJCC FMP.

Energy

This alternative would result in less overall construction and demolition activities compared to the SJCC FMP and as a result, would have less construction energy use impact compared to the SJCC FMP. This alternative would also have less increase in development and student growth, and less associated traffic increases, compared to the SJCC FMP, and consequently, would have less operational energy use than the SJCC FMP. As such, the alternative would further reduce the less than significant project and/or cumulative impact associated with consumption of energy resources as under the SJCC FMP; and would have a similarly less than significant conflict with a state or local plan for renewable energy or energy efficiency.

Geology, Soils, Seismicity, and Paleontological Resources

This alternative would result in less ground disturbing construction activities and new building construction compared to the SJCC FMP, and therefore, would have overall less potential to result in effects on seismic ground shaking, liquefaction or unstable soils, landslides, and erosion from ground disturbance during construction, and those effects would be similarly less than significant with compliance with applicable regulatory requirements and the implementation of geotechnical design recommendations and/or mitigation.

Greenhouse Gas Emissions

This alternative would result in less overall construction or demolition activities compared to the SJCC FMP. As a result, this alternative would reduce the significant but mitigable project and/or cumulative construction-related GHG emissions effects as under the SJCC FMP. This alternative would have less increase in development and student growth, and less associated traffic increases at the SJCC campus site than the SJCC FMP, and consequently, operational-generated GHG emissions would be less than that generated under the SJCC FMP. Consequently, this alternative would reduce the significant but mitigable impacts of the SJCC FMP related to operational GHG emissions. Similar to the SJCC FMP, this alternative would not conflict with applicable plans, policies or regulations adopted for the purpose of reducing the GHG emissions.

Hazards and Hazardous Materials

This alternative would result in less overall new construction or demolition activities compared to that under the SJCC FMP. This alternative would also result in less increase in development, and the associated increases in hazardous materials use that would occur with operations under the SJCC FMP. Significant project and/or cumulative impacts associated with routine transport, use, or disposal of hazardous materials under this alternative would be similarly mitigated to a less-than-significant level with compliance with applicable, federal and State laws and regulations regulating transportation, management, and disposal of hazardous materials and wastes. In addition, project and/or cumulative impacts associated with potential accidental release of hazardous materials; and emitting and handling of hazardous materials within one-quarter mile of an existing or proposed school, for this alternative would be similarly less than significant.

Hydrology and Water Quality

This alternative would result in less new construction and groundbreaking activities compared to the SJCC FMP; and an incrementally smaller increase in new impervious surfaces at the campus site, compared to the SJCC FMP, and thus, would generate incrementally less runoff. Project and/or cumulative impacts related to the potential to violate water quality discharges requirements; degradation of surface or groundwater quality; erosion and siltation; effect on flooding; effect on the capacity of stormwater drainage systems; additional sources of polluted runoff; or impedance or redirection of storm flows, would be reduced compared to the proposed SJCC FMP, and similarly less than significant, with compliance with the construction BMPs required by the NPDES Construction General Permit and operational design measures and LID stormwater requirements controls of the Phase II MS4 permit.

Land Use and Planning

This alternative would result in less new development compared to the SJCC FMP. Overall, this alternative would have less project and/or cumulative impacts at the SJCC campus site associated with conflict with land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and incompatibility with adjacent land uses. Therefore, these effects would be less than significant, similar to the proposed SJCC FMP.

Noise and Vibration

This alternative would result in less construction but more demolition activities compared to the SJCC FMP and, as a result, would result in less construction-related noise and vibration impacts than would occur under the SJCC FMP. Therefore, this alternative would result in less project-specific and/or cumulative construction noise compared to the significant unavoidable construction noise impacts that would occur under the SJCC FMP.

This alternative would also have less increase in development and student growth, and less associated traffic increases, compared to the SJCC FMP, and consequently, less operational noise than the SJCC FMP. As such, the alternative would further reduce the less than significant but mitigable project-specific impact associated with operational noise as under the SJCC FMP; and would result in a reduction of cumulative operational noise, relative to the less-than-significant cumulative impact under the SJCC FMP.

Population and Housing

This alternative would also result in no increase in population and housing, as would occur under the SJCC FMP.

Public Services

This alternative would result in a smaller increase in development and student growth at the SJCC campus site compared to the SJCC FMP, and thus, would result in lower demand for public services. For this reason, project and/or cumulative impacts associated with need for new or altered fire protection, police protection, public school facilities, parks, or other public facilities would be less than significant, similar to the proposed SJCC FMP.

Recreation

This alternative would result in less new development and student growth at the SJCC campus site compared to the SJCC FMP. Therefore, the project and/or cumulative impacts of increase in the use of existing neighborhood and regional parks or other existing on- and off-campus recreational facilities, and need for construction of new recreational facilities under this alternative would remain less-than-significant, similar to the proposed SJCC FMP.

Transportation

This alternative would result in less new construction at the SJCC campus site compared to the SJCC FMP. Consequently, the significant construction phase impact to travel conditions along sidewalks and roadways serving the campus site under this alternative would be similarly mitigated to a less-than-significant level with implementation of construction traffic management planning measures.

This alternative would also result in less overall new development and student growth, and less increase in associated operational traffic, than under the SJCC FMP. With less operational traffic, this alternative would have less than significant project and/or cumulative impacts related to conflicts with programs, plans, ordinances or policies addressing the circulation system; increases in VMT; increases in hazard due to design features; and emergency access, similar to the proposed SJCC FMP.

Utilities and Service Systems

This alternative would result in less new development and student growth, and associated increases in public utility demands at the SJCC campus site, compared to the SJCC FMP. As a result, project and/or cumulative impacts related to utilities and service systems under this alternative would be similarly less-than-significant as with the SJCC FMP. This would include impacts associated with: construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities; effects on water supply availability during normal, dry and multiple dry years; effects on wastewater treatment capacity; effects on capacity of local solid waste infrastructure, and compliance with federal, and state and local statutes and regulations related to solid waste.

Tribal Cultural Resources

This alternative would also result in less ground disturbing construction activities compared to the SJCC FMP, and therefore have less potential to affect tribal cultural resources. Potentially significant project and cumulative impacts to previously unknown tribal cultural resources under this alternative would be similarly mitigated to a less-than-significant level as under the SJCC FMP.

4.4.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative would implement portions of the development program proposed under the SJCC FMP. Since the CTE Building 300 and the Child Development Center are in the process of demolition. It is assumed the new construction proposed on these sites under the SJCC FMP would occur under this alternative (i.e., the new CTE Building at the site of the demolished CTE Building 300 Building, and a new Child Development Center-Phase I on the site of the former Child Development Center), as described in Chapter 2, *Project Description*. Additionally, the Reduced Project Alternative also assumes the demolition of the existing Business and General Education Buildings, to be replaced with a new General Education/ Business Complex, as proposed under the SJCC FMP.

The Reduced Project Alternative would meet some of the objectives of the proposed SJCC FMP, in that it would help meet the demand for General Education/Business programs, provide for a new Career Technology Education building and a Child Development Center. However, this alternative would not fully meet the project objectives of expanding capacity of the campus to accommodate anticipated growth in student demand within the SJCC's service area or providing for all anticipated educational and facilities needs from the SJCC FMP. As such, the alternative would assist the District in meeting only some of its SJCC EMP and FMP goals and objectives.

Since development and renovation pursuant to the Reduced Project Alternative would be substantially less than what would occur under the proposed SJCC FMP, it is unknown if it would fully meet the student/administration and faculty needs, necessary to develop and operate the various educational programs in a financially and operationally sustainable manner. However, for purposes of the environmental analysis, it is assumed that the alternative would be potentially feasible.

As shown in **Table 4-1** at the end of this chapter, the Reduced Project Alternative would be marginally better than the No Project – Implement SJCC 2025 Updated FMP Alternative in meeting the project objectives, but would not be as effective at meeting project objectives as the proposed SJCC FMP.

Comparison of Effects of the Reduced Project Alternative to the Proposed SJCC FMP

Aesthetics

This alternative would result in overall less new development at the campus site compared to the SJCC FMP. As under the SJCC FMP, this alternative would not result in a substantial adverse impact on scenic vistas. This alternative would also have incrementally less impact related to new sources of light and glare compared to the SJCC FMP, given the overall less development proposed.

Air Quality

This alternative would have less new construction and demolition activities than that which would occur under the SJCC FMP. Consequently, this alternative would have less impact associated with construction and demolition emissions of criteria pollutants, and toxic air contaminants (TACs) and associated health risks at sensitive receptors, and would similarly mitigate those effects to less than significant with the use of clean construction equipment and implementation of BAAQMD dust control measures.

This alternative would result in less development and student growth, and less associated traffic increases, compared to the SJCC FMP. The specific reduction in traffic generated under this alternative compared to those generated under the SJCC FMP would depend on a number of factors, including the specific levels of instruction and support uses that would be implemented under this alternative. As a result, operations under this alternative would generate fewer criteria pollutant emissions than the less-than-significant but mitigable operational emissions under the SJCC FMP. This alternative would also have less project and cumulative impact associated with exposure of sensitive receptors to substantial project and cumulative operational pollutant concentrations, and require similar mitigation to reduce diesel particulate matter (DPM), which would mitigate those significant effects to less than significant. Lastly, this alternative would have less impact associated with conflict of the SJCC FMP with or obstruction of implementation of the applicable *Clean Air Plan*, and with mitigation, the impact would similarly be reduced to less than significant.

Biological Resources

This alternative would have less new construction and demolition activities compared with the SJCC FMP, and therefore, the overall extent of construction and development-related impacts to biological resources under this alternative would be less than that associated with the SJCC FMP. The significant project and/or cumulative construction-related effects on special-status plant and wildlife species of this alternative would be similarly mitigated to less than significant with applicable survey and resource project measures, as under the proposed SJCC FMP.

Cultural Resources

Similar to the SJCC FMP, this alternative would have no impact to architecturally significant historical resources eligible for listing in the National Register and California Register, as no such resources exist at the SJCC campus site.

This alternative would result in less ground disturbing construction activities compared to the SJCC FMP, and therefore have less potential to affect archaeological and tribal cultural resources. Potentially significant project and cumulative impacts to previously unknown archaeological resources, human remains, and/or tribal cultural resources under this alternative would be similarly mitigated to a less-than-significant level, as under the SJCC FMP.

Energy

This alternative would result in less construction and demolition activities compared to the SJCC FMP and as a result, would have less construction energy use impacts compared to the SJCC FMP. This alternative would also have less increase in development and student growth, and less associated traffic increases, compared to the SJCC FMP, and consequently, would have less operational energy use than the SJCC FMP. As such, the alternative would further reduce the less than significant project and/or cumulative impact associated with consumption of energy resources as under the SJCC FMP; and would have a similarly less than significant conflict with a state or local plan for renewable energy or energy efficiency.

Geology, Soils, Seismicity, and Paleontological Resources

This alternative would result in less ground disturbing construction activities and new building construction compared to the SJCC FMP, and therefore, would have overall less potential to result in effects on seismic ground shaking, liquefaction or unstable soils, landslides, and erosion from ground disturbance during construction, and those effects would be similarly less than significant with compliance with applicable regulatory requirements and the implementation of geotechnical design recommendations and/or mitigation.

Greenhouse Gas Emissions

This alternative would result in less construction or demolition activities compared to the SJCC FMP. As a result, this alternative would reduce the significant but mitigable project and/or cumulative construction-related GHG emissions effects as under the SJCC FMP. This alternative would have less increase in development and student growth, and less associated traffic increases at the SJCC campus site than the SJCC FMP, and consequently, operational-generated GHG emissions would be less than that generated under the SJCC FMP. Consequently, this alternative would reduce the significant but mitigable impacts of the SJCC FMP related to operational GHG emissions. Similar to the SJCC FMP, this alternative would not conflict with applicable plans, policies or regulations adopted for the purpose of reducing the GHG emissions.

Hazards and Hazardous Materials

This alternative would result in less new construction or demolition activities compared to that under the SJCC FMP. This alternative would also result in less increase in development, and the associated increases in hazardous materials use that would occur with operations under the SJCC FMP. Significant project and/or cumulative impacts associated with routine transport, use, or disposal of hazardous materials under this alternative would be similarly mitigated to a less-than-significant level with compliance with applicable, federal and State laws and regulations regulating transportation, management, and disposal of hazardous materials and wastes. In addition, project and/or cumulative impacts associated with potential accidental release of hazardous materials; and emitting and handling of hazardous materials within one-quarter mile of an existing or proposed school, for this alternative would be similarly less than significant.

Hydrology and Water Quality

This alternative would result in less new construction and groundbreaking activities compared to the SJCC FMP; and an incrementally smaller increase in new impervious surfaces at the campus site, compared to the SJCC FMP, and thus, would generate incrementally less runoff. Project and/or cumulative impacts related to the potential to violate water quality discharges requirements; degradation of surface or groundwater quality; erosion and siltation; effect on flooding; effect on the capacity of stormwater drainage systems; additional sources of polluted runoff; or impedance or redirection of storm flows, would be reduced compared to the proposed SJCC FMP, and similarly less than significant with compliance with the construction BMPs required by the NPDES Construction General Permit and operational design measures and LID stormwater requirements controls of the Phase II MS4 permit.

Land Use and Planning

This alternative would result in less new development compared to the SJCC FMP. Overall, this alternative would have less project and/or cumulative impacts at the SJCC campus site associated with conflict with land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and incompatibility with adjacent land uses. Therefore, these effects would be less than significant, similar to the proposed SJCC FMP.

Noise and Vibration

This alternative would result in less construction and demolition activities compared to the SJCC FMP, and as a result, would result in less construction-related noise and vibration impacts that would occur under the SJCC FMP. Therefore, this alternative would result in less project-specific and/or cumulative construction noise compared to the significant unavoidable construction noise impacts that would occur under the SJCC FMP.

This alternative would also have less increase in development and student growth, and less associated traffic increases, compared to the SJCC FMP, and consequently, less operational noise than the SJCC FMP. As such, the alternative would further reduce the less than significant but mitigable project-specific impact associated with operational noise as under the SJCC FMP; and would result in a reduction of cumulative operational noise, relative to the less-than-significant cumulative impact under the SJCC FMP.

Population and Housing

This alternative would also result in no increase in population and housing, as would occur under the SJCC FMP.

Public Services

This alternative would result in a smaller increase in development and student growth at the SJCC campus site compared to the SJCC FMP, and thus, would resulting in an incrementally lower demand for public services. For this reason, project and/or cumulative impacts associated with need for new or altered fire protection, police protection, public school facilities, parks, or other public facilities would be less than significant, similar to the proposed SJCC FMP.

Recreation

This alternative would result in less new development and student growth at the SJCC campus site compared to the SJCC FMP. Therefore, the project and/or cumulative impacts of increase in the use of existing neighborhood and regional parks or other existing on- and off-campus recreational facilities, and need for construction of new recreational facilities under this alternative would remain less-than-significant, similar to the proposed SJCC FMP.

Transportation

This alternative would result in less new construction at the SJCC campus site compared to the SJCC FMP. Consequently, the significant construction phase impact to travel conditions along sidewalks and roadways serving the campus site under this alternative would be similarly mitigated to a less-than-significant level with implementation of construction traffic management planning measures.

This alternative would also result in less overall new development and student growth, and less increase in associated operational traffic, than under the SJCC FMP. With less operational traffic, this alternative would have less than significant project and/or cumulative impacts related to conflicts with programs, plans, ordinances or policies addressing the circulation system; increases in VMT; increases in hazard due to design features; and emergency access, similar to the proposed SJCC FMP.

Utilities and Service Systems

This alternative would result in less new development and student growth, and associated increases in public utility demands at the SJCC campus site, compared to the SJCC FMP. As a result, project and/or cumulative impacts related to utilities and service systems under this alternative would be similarly less-than-significant as with the SJCC FMP. This would include impacts associated with: construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities; effects on water supply availability during normal, dry and multiple dry years; effects on wastewater treatment capacity; effects on capacity of local solid waste infrastructure, and compliance with federal, and state and local statutes and regulations related to solid waste.

Tribal Cultural Resources

This alternative would also result in less ground disturbing construction activities compared to the SJCC FMP, and therefore have less potential to affect tribal cultural resources. Potentially significant project and cumulative impacts to previously unknown tribal cultural resources under this alternative would be similarly mitigated to a less-than-significant level, as under the SJCC FMP.

4.4.3 Alternative 3: Renovations Only Alternative

The Renovations Only Alternative assumes only the campus buildings and facilities that are proposed for renovation under the SJCC FMP would be implemented, rather than the full suite of demolition and new construction assumed under the SJCC FMP. Accordingly, development under this alternative would encompass renovations to the following SJCC campus facilities:

1. CTE Building 200
2. Reprographics and Cosmetology Building
3. Technology Center
4. Jaguar Student Development and Multicultural Center
5. Theater Arts Building
6. Central Plant Expansion
7. Track and Field Replacement

The above-listed existing facilities would undergo renovations similar to that described in Chapter 2, *Project Description*. However, there would be no demolition of any existing buildings that were proposed under the SJCC FMP, with the exception of CTE Building 300 and Applied Sciences Building D (which were previously approved by the District for demolition and slated for demolition in 2021). There would also be no construction of new buildings at the campus that are proposed under the SJCC FMP (i.e., no General Education/Business Complex, Aquatics Center, or Parking Structure).

Implementation of the Renovations Only Alternative would assist the District in meeting its plans for reuse and repurposing of some of the existing buildings and facilities, and would continue to provide for land use compatibility through effective placement, orientation, and circulation of project facilities. Under this alternative, the level of construction on site would be reduced as it would be primarily limited to minor external alternations, and internal renovations to dry walls, flooring, update to interior finishes for repurposing of classrooms and offices. Concurrently, it would develop the limited onsite infrastructure to serve the renovations under this alternative. It is unknown if implementation of the Renovations Only Alternative would provide adequate facilities and infrastructure needed to meet the 2030 EMP.

While this alternative would meet some the objectives of the SJCC FMP, it would generally not meet all of the objectives of the SJCC FMP. This alternative would provide for renovations and repurposing of existing buildings and facilities to accommodate educational programs, sports facilities and expansion of central plant, however, this alternative would not provide sufficient expansion in capacity to accommodate anticipated growth in student demand for community college offerings within the area served by the SJCC. Although the economic feasibility of this alternative would be required to be confirmed (i.e., the ability of the alternative to fund the necessary site development costs, as well as the ongoing fixed operational costs once the project is developed), for the purposes of the environmental analysis, this alternative is considered potentially feasible.

As shown in Table 4-1 at the end of this chapter, the Renovations Only Project Alternative would be marginally better than the No Project – Implement SJCC 2025 Updated FMP Alternative in meeting the project objectives, but would be far less effective at meeting the District’s objectives relative to the SJCC FMP.

Comparison of Effects of the Renovations Only Alternative to the Proposed SJCC FMP

Aesthetics

This alternative would result in overall less and smaller scale construction with no new development at the campus site compared to that under the SJCC FMP. Under this alternative, construction would be limited to renovation of existing structures on the SJCC campus. As under the SJCC FMP, this alternative would not result in a substantial adverse impact on scenic vistas. This alternative would also have incrementally less impact related to new sources of light and glare compared to the SJCC FMP, given the overall less intensive development proposed under this alternative.

Air Quality

This alternative would be limited to renovation of existing structures and thus, have far less overall construction intensity than that which would occur under the SJCC FMP. In particular, this alternative would utilize substantially less construction equipment and vehicles. Consequently, this alternative would have less impact associated with construction emissions of criteria pollutants, and TACs and associated health risks at sensitive receptors, and would similarly mitigate those effects to less than significant with the use of clean construction equipment and implementation of BAAQMD dust control measures.

Since this alternative would be limited to renovation of existing structures and no new development, it would also result in less development and student growth, and less associated traffic increases, compared to the SJCC FMP. The specific reduction in traffic generated under this alternative compared to those generated under the SJCC FMP would depend on a number of factors, including the specific levels of instruction and support uses that would be implemented for renovated facilities under this alternative. As a result, operations under this alternative would generate fewer criteria pollutant emissions than the less-than-significant but mitigable operational emissions under the SJCC FMP. This alternative would also have less project and cumulative impact associated with exposure of sensitive receptors to substantial project and cumulative operational pollutant concentrations, and require similar mitigation to reduce DPM which would lessen those significant effects to less than significant. Lastly, this alternative would have less impact associated with conflict of the SJCC FMP with or obstruction of implementation of the applicable *Clean Air Plan*, and with mitigation the impact would similarly be reduced to less than significant.

Biological Resources

This alternative would be limited to renovation of existing structures, and not involve new building construction or building demolition activities. Compared with the SJCC FMP, the overall extent of construction and development-related impacts to biological resources under this alternative would be less than that associated with the SJCC FMP. The significant project and/or cumulative construction-related effects on special-status plant and wildlife species of this alternative would be similarly mitigated to less than significant with applicable survey and resource project measures, as under the proposed SJCC FMP.

Cultural Resources

Similar to the proposed SJCC FMP, this alternative would have no impact to architecturally significant historical resources eligible for listing in the National Register and California Register, as no such resources exist at the SJCC campus site.

This alternative would result in substantially less ground-disturbing construction activities compared to the SJCC FMP, and therefore have less potential to affect archaeological and tribal cultural resources. Potentially significant project and cumulative impacts to previously unknown archaeological resources, human remains, and/or tribal cultural resources under this alternative would be similarly mitigated to a less-than-significant level as under the SJCC FMP.

Energy

This alternative would result in less construction and demolition activities compared to the SJCC FMP and as a result, would have less construction energy use impacts compared to the SJCC FMP. This alternative would also support lower student growth and therefore would result in lower associated traffic increases as compared to the SJCC FMP, and consequently, would have less operational energy use than the SJCC FMP. As such, the alternative would further reduce the less than significant project and/or cumulative impact associated with consumption of energy resources as under the SJCC FMP; and would have a similarly less than significant conflict with a state or local plan for renewable energy or energy efficiency.

Geology, Soils, Seismicity, and Paleontological Resources

This alternative would result in substantially less ground disturbing construction activities and no new building construction. Compared to the SJCC FMP, this alternative would have overall less potential to result in effects on seismic ground shaking, liquefaction or unstable soils, landslides, and erosion from ground disturbance during renovation activities, and those effects would be similarly less than significant with compliance with applicable regulatory requirements and the implementation of geotechnical design recommendations and/or mitigation.

Greenhouse Gas Emissions

This alternative would result in substantially less construction or demolition activities compared to the SJCC FMP. As a result, this alternative would reduce the significant but mitigable project and/or cumulative construction-related GHG emissions effects as under the SJCC FMP. This alternative would support lower student growth, and therefore, would result in lower associated traffic increases at the SJCC campus site than the SJCC FMP, and consequently, operational-generated GHG emissions would be lower than that generated under the SJCC FMP. Consequently, this alternative would reduce the significant but mitigable impacts of the SJCC FMP related to operational GHG emissions. Similar to the SJCC FMP, this alternative would not conflict with applicable plans, policies or regulations adopted for the purpose of reducing the GHG emissions.

Hazards and Hazardous Materials

This alternative would result in substantially less new construction or demolition activities, but would include the same renovation of older structures as would occur under the SJCC FMP. This alternative would also result in no increase in development, and little to no associated increases in hazardous materials use compared to that which would occur with operations under the SJCC FMP. Significant project and/or cumulative impacts associated with routine transport, use, or disposal of hazardous materials under this alternative would be similarly mitigated to a less-than-significant level with compliance with applicable, federal and State laws and regulations regulating transportation, management, and disposal of hazardous materials and waste. In addition, project and/or cumulative impacts associated with potential accidental release of hazardous materials; and emitting and handling of hazardous materials within one-quarter mile of an existing or proposed school, for this alternative would be similarly less than significant.

Hydrology and Water Quality

As compared to the SJCC FMP, this alternative would result in no new building construction and groundbreaking activities, and little to no increase in impervious surfaces at the campus site, and thus, would generate less new runoff than under the SJCC FMP. Project and/or cumulative impacts related to the potential to violate water quality discharges requirements; degradation of surface or groundwater quality; erosion and siltation; effect on flooding; effect on the capacity of stormwater drainage systems; additional sources of polluted runoff; or impedance or redirection of storm flows, would be reduced compared to the proposed SJCC FMP and similarly less than significant with compliance with the construction BMPs required by the NPDES Construction General Permit and operational design measures and LID stormwater requirements controls of the Phase II MS4 permit.

Land Use and Planning

As compared to the SJCC FMP, this alternative would result in no new building development. Overall, this alternative would have less project and/or cumulative impacts at the SJCC campus site associated with conflict with land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and incompatibility with adjacent land uses. Therefore, these effects would be less than significant, similar to the proposed SJCC FMP.

Noise and Vibration

This alternative would result in substantially less construction and demolition activities compared to those that would occur under the SJCC FMP. As a result, this alternative would result in less construction-related noise and vibration impacts than would occur under the SJCC FMP. Therefore, this alternative would result in less project-specific and/or cumulative construction noise impacts compared to the significant unavoidable construction noise impacts that would occur under the proposed implementation of the SJCC FMP.

This alternative would also have less increase in development and student growth, and substantially less associated traffic increases as compared to the SJCC FMP, and consequently, less operational noise than the proposed implementation of the SJCC FMP. As such, the alternative would further reduce the less than significant but mitigable project-specific impact associated with operational noise as under the SJCC FMP; and would result in a reduction of cumulative operational noise, relative to the less-than-significant cumulative impact under the SJCC FMP.

Population and Housing

This alternative would also result in no increase in population and housing, as would occur under the SJCC FMP.

Public Services

As compared to the SJCC FMP, this alternative would result in a smaller increase in service population compared to that which would occur under the proposed SJCC FMP. Therefore, this alternative would result in lower demand for public services. For this reason, project and/or cumulative impacts associated with need for new or altered fire protection, police protection, public school facilities, parks, or other public facilities would be less than significant, similar to the proposed SJCC FMP.

Recreation

This alternative would result in s smaller increase in service population compared to that which would occur under the proposed SJCC FMP. Therefore, the project and/or cumulative impacts of increase in the use of existing neighborhood and regional parks or other existing on- and off-campus recreational facilities, and the need for construction of new recreational facilities under this alternative would remain less-than-significant, similar to the proposed SJCC FMP.

Transportation

As compared to the SJCC FMP, this alternative would be limited to renovation of existing structures and result in no new construction at the SJCC campus site. Consequently, the significant construction phase impact to travel conditions along sidewalks and roadways serving the campus site under this alternative would be substantially less and would not be anticipated to require mitigation to control construction traffic.

As this alternative would result in less student growth than under the SJCC FMP, there would be less increase in associated operational traffic and any increases would be limited to the effects of minor increases in the capacity related renovation of existing facilities at the SJCC campus site. With less operational traffic, this alternative would have less than significant project and/or cumulative impacts related to conflicts with programs, plans, ordinances or policies addressing the circulation system; increases in VMT; increases in hazard due to design features; and emergency access, similar to the proposed SJCC FMP.

Utilities and Service Systems

This alternative would result in no new building development and only incremental change associated increases in public utility demands at the SJCC campus site from renovation of existing structures, compared to implementation of the SJCC FMP. As a result, project and/or cumulative impacts related to utilities and service systems under this alternative would be less-than-significant as with the SJCC FMP. This would include impacts associated with: construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities; effects on water supply availability during normal, dry and multiple dry years; effects on wastewater treatment capacity; effects on capacity of local solid waste infrastructure, and compliance with federal, and state and local statutes and regulations related to solid waste.

Tribal Cultural Resources

This alternative would also result in substantially less ground disturbing construction activities compared to the SJCC FMP, and therefore have less potential to affect tribal cultural resources. Potentially significant project and cumulative impacts to previously unknown tribal cultural resources under this alternative would be similarly mitigated to a less-than-significant level as under the proposed SJCC FMP.

4.5 Summary Comparison of Alternatives

Table 4-1 provides a summary of comparison of impacts of the proposed SJCC FMP and the SJCC FMP alternatives, and indicates whether the impacts of the alternatives are more or less severe than those of the proposed SJCC FMP. For more information about the methodology used to evaluate potential impacts of the SJCC FMP and an explanation of the resulting impact conclusions, please see Chapter 3, *Environmental Analysis*.

4.6 Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines requires the identification of an environmentally superior alternative to the proposed project. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

From the alternatives evaluated in this EIR, Alternative 3: Renovations Only Alternative is considered the environmentally superior alternative. Among the three alternatives, the Renovations Only Alternative would involve the least amount of demolition and construction and would involve the smallest increase in new campus site development and student capacity over existing conditions.

The Renovations Only Alternative would be anticipated to avoid the two significant unavoidable construction noise impacts, that would occur under the SJCC FMP. The Renovations Only Alternative would also serve to reduce the severity of the significant but mitigable impacts that would occur under the SJCC FMP, including impacts related to conflict with an applicable air quality plan, construction emissions, exposure of sensitive receptors to toxic air contaminant emissions, adverse impacts to protected species, interference with the movement or migration of species, adverse effects to archaeological resources or tribal cultural resources, disturbance of human remains, conflicts with state and local plans for renewable energy, destruction of unique paleontological resources, conflict with applicable greenhouse gas emissions reduction plans or policies, operational noise, construction vibration, and construction traffic effects.

For these reasons, the Renovations Only Alternative would be considered the environmentally superior alternative. However, this alternative would fail to fully achieve a number of the project objectives of the SJCC FMP, including expanding student capacity to accommodate anticipated future demand for community college services within the area traditionally served by the SJCC.

TABLE 4-1
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
I. Aesthetics				
I-a) Except as provided in Public Resources Code Section 21099, the project would have a substantial adverse effect on a scenic vista	NI	NI	NI	NI
I-b) Except as provided in Public Resources Code Section 21099, the project would substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.	NI	NI	NI	NI
I-c) Except as provided in PRC Section 21099, the project would conflict with applicable zoning and other regulations governing scenic quality.	LTS	-/= LTS	-/= LTS	-/= LTS
I-d) Except as provided in PRC Section 21099, the project would create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.	LTSM	- LTS	- LTS	- LTS
II. Agriculture and Forestry Resources				
II-a) The project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the map prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	NI	NI	NI	NI
II-b) The project would conflict with existing zoning for agricultural use or a Williamson Act contract.	NI	NI	NI	NI
II-c) The project would conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.	NI	NI	NI	NI
II-d) The project would result in the loss of forest land or conversion of forest land to non-forest use.	NI	NI	NI	NI
II-e) The project would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or forest land to non-forest use.	NI	NI	NI	NI

SUM	Significant and Unavoidable with Mitigation	-	Lesser impact than that of the proposed CPHP
LTSM	Less than Significant with Mitigation	=	Same (or similar) impact as that of the proposed CPHP
LTS	Less than Significant impact	-/=	Less or similar impact to that of the proposed CPHP
LTCC	Less than Cumulatively Considerable	-/+	Less or greater impact as the proposed CPHP
		=/+	Similar or greater impact to that of the proposed CPHP

TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
III. Air Quality				
Impact 3.1-1: SJCC FMP construction and operation could conflict with or obstruct implementation of the applicable air quality plan.	LTSM	- LTSM	- LTSM	- LTS
Impact 3.1-2: Construction activities associated with the SJCC FMP could result in a cumulatively considerable increase in emissions for which the SFBAAB is in non-attainment under an applicable federal or State ambient air quality standard.	LTSM	- LTSM	- LTSM	- LTS
Impact 3.1-3: Operation of campus facilities and buildings developed under the SJCC FMP could result in a cumulatively considerable increase in emissions for which the SFBAAB is non-attainment under an applicable federal or State ambient air quality standard.	LTS	- LTS	- LTS	- LTS
Impact 3.1-4: Construction activities associated with the SJCC FMP could lead to health risks from exposure of sensitive receptors to substantial concentrations of TACs.	LTSM	- LTSM	-/= LTSM	- LTS
Impact 3.1-5: The proposed SJCC FMP could lead to increased health risks from exposure of sensitive receptors to substantial concentrations of criteria air pollutants.	LTS	- LTS	- LTS	- LTS
Impact C-3.1-6: Implementation of the SJCC FMP combined with cumulative development in the vicinity would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.	LTSM	- LTSM	- LTSM	- LTS
Impact C-3.1-7: Implementation of the SJCC FMP could contribute considerably to cumulative emissions of TACs and $PM_{2.5}$ that could expose sensitive receptors to substantial pollutant concentrations or health risks.	LTSM	- LTSM	- LTSM	- LTS
IV. Biological Resources				
IV-a) The project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	LTSM	- LTSM	-/= LTSM	-/= LTSM
IV-b) The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	NI	NI	NI	NI

SUM	Significant and Unavoidable with Mitigation	-	Lesser impact than that of the proposed CPHP
LTSM	Less than Significant with Mitigation	=	Same (or similar) impact as that of the proposed CPHP
LTS	Less than Significant impact	-/=	Less or similar impact to that of the proposed CPHP
LTCC	Less than Cumulatively Considerable	-/+	Less or greater impact as the proposed CPHP
		=/+	Similar or greater impact to that of the proposed CPHP

TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
IV. Biological Resources (cont.)				
IV-c) The project would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	NI	NI	NI	NI
IV-d) The project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	LTSM	- LTSM	-/= LTSM	-/= LTSM
IV-e) The project would conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.	NI	NI	NI	NI
IV-f) The project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	LTSM	- LTSM	-/= LTSM	-/= LTSM
V. Cultural Resources				
Impact 3.2-1: Implementation of the SJCC FMP would demolish historic architectural resources, but would not result in a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.	NI	NI	NI	NI
Impact C-3.2-2: Implementation of the SJCC FMP would result in cumulatively considerable impacts on historic architectural resources, in combination with past, present and reasonably foreseeable future projects in the vicinity of the SJCC campus site.	NI	NI	NI	NI
V-b) The project would cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5	LTSM	- LTSM	- LTSM	NI
V-c) The project would disturb any human remains, including those interred outside of dedicated cemeteries.	LTSM	- LTSM	- LTSM	NI
VI. Energy				
Impact 3.3-1: The SJCC FMP would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.	LTS	- LTS	- LTS	- LTS
Impact 3.3-2: Energy use associated with the implementation of the proposed SJCC FMP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTSM	- LTSM	- LTS	- LTS

SUM	Significant and Unavoidable with Mitigation	-	Lesser impact than that of the proposed CPHP
LTSM	Less than Significant with Mitigation	=	Same (or similar) impact as that of the proposed CPHP
LTS	Less than Significant impact	-/=	Less or similar impact to that of the proposed CPHP
LTCC	Less than Cumulatively Considerable	-/+	Less or greater impact as the proposed CPHP
		=/+	Similar or greater impact to that of the proposed CPHP

TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
VI. Energy (cont.)				
Impact C-3.3-3: Energy use associated with the implementation of the SJCC FMP would not result in a cumulatively considerable contribution to a significant energy impact.	LTSM	- LTSM	- LTSM	- LTS
VII. Geology and Soils				
VII-a) The project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42. ii) Strong Seismic ground shaking iii) Seismic-related ground failure, including liquefaction. iv) Landslides	LTS	- LTS	= LTS	- LTS
VII-b) The project would result in substantial soil erosion or the loss of topsoil.	LTS	- LTS	= LTS	- LTS
VII-c) The project would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	LTS	-LTS	= LTS	- LTS
VII-d) The project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	LTS	- LTS	= LTS	= LTS
VII-e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.	NI	NI	NI	NI
VII-f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	LTSM	- LTSM	- LTSM	NI

SUM Significant and Unavoidable with Mitigation
LTSM Less than Significant with Mitigation
LTS Less than Significant impact
LTCC Less than Cumulatively Considerable

\- Lesser impact than that of the proposed CPHP
= Same (or similar) impact as that of the proposed CPHP
-/= Less or similar impact to that of the proposed CPHP
-/+ Less or greater impact as the proposed CPHP
=/+ Similar or greater impact to that of the proposed CPHP

TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
VIII. Greenhouse Gas Emissions				
Impact 3.4-1: Construction and operation of development proposed under the SJCC FMP could generate GHG emissions, either directly or indirectly, that could conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs and lead to a significant impact on the environment.	LTSM	- LTSM	- LTSM	- LTSM
IX. Hazards and Hazardous Materials				
IX-a) The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	- LTS	- LTS	- LTS
IX-b) The project 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.	LTS	- LTS	- LTS	- LTS
IX-c) The project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LTS	- LTS	- LTS	- LTS
IX-d) The project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.	NI	NI	NI	NI
IX-e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would result in a safety hazard or excessive noise for people residing or working in the project area	NI	NI	NI	NI
IX-f) The project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LTS	= LTS	- LTS	- LTS
IX-g) The project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	LTS	=LTS	= LTS	= LTS
X. Hydrology and Water Quality				
X-a) The project would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	LTS	- LTS	- LTS	- LTS

SUM Significant and Unavoidable with Mitigation
LTSM Less than Significant with Mitigation
LTS Less than Significant impact
LTCC Less than Cumulatively Considerable

\- Lesser impact than that of the proposed CPHP
= Same (or similar) impact as that of the proposed CPHP
-/= Less or similar impact to that of the proposed CPHP
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TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
X. Hydrology and Water Quality (cont.)				
X-b) The project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin	LTS	- LTS	- LTS	- LTS
X-c) The project would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:		- LTS	-/+ LTS	- LTS
i) result in substantial erosion or siltation on- or off-site;	LTS			
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	LTS	-/+ LTS	-/+ LTS	- LTS
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	LTS	-/+ LTS	-/+ LTS	- LTS
iv) impede or redirect flood flows.	NI	NI	NI	NI
X-d) The project would, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.	NI	NI	NI	NI
X-e) The project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LTS	= LTS	= LTS	= LTS
XI. Land Use and Planning				
XI-a) The project would physically divide an established community.	LTS	=LTS	-LTS	=LTS
XI-b) The project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	LTS	= LTS	= LTS	- LTS
XII. Mineral Resources				
XII-a) The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	NI	NI	NI	NI
XII-b) The project would result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	NI	NI	NI	NI

SUM	Significant and Unavoidable with Mitigation	-	Lesser impact than that of the proposed CPHP
LTSM	Less than Significant with Mitigation	=	Same (or similar) impact as that of the proposed CPHP
LTS	Less than Significant impact	-/=	Less or similar impact to that of the proposed CPHP
LTCC	Less than Cumulatively Considerable	-/+	Less or greater impact as the proposed CPHP
		=/+	Similar or greater impact to that of the proposed CPHP

TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
XIII. Noise				
Impact 3.5-1: Construction activities associated with the implementation of the SJCC FMP could result in temporary increases in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies.	SU	- SU	-/= SU	- LTS
Impact 3.5-2: Stationary sources associated with operation of the proposed SJCC FMP could result in generation of a permanent increase in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies.	LTSM	- LTSM	- LTSM	- LTS
Impact 3.5-3: SJCC FMP-generated traffic noise would result in permanent increases in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies.	LTS	- LTS	- LTS	- LTS
Impact 3.5-4: Construction activities associated with the implementation of the SJCC FMP could result in the generation of excessive groundborne vibration or groundborne noise levels.	LTSM	- LTSM	- LTSM	- LTSM
Impact C-3.5-5: Construction activities associated with the SJCC FMP combined with cumulative construction noise in the vicinity of the SJCC campus would result in a substantial temporary or periodic increase in ambient noise levels in excess of standards established in the City of San José General Plan or Noise Ordinance.	SU	- SU	- SU	- LTSM
Impact C-3.5-6: Operation of the SJCC FMP when considered with other cumulative development would cause a substantial permanent increase in ambient noise levels in excess of standards established in the City of San José General Plan or Noise Ordinance.	LTS	- LTS	- LTS	- LTS
XIV. Population and Housing				
XIV-a) The project would induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	NI	NI	NI	NI
XIV-b) The project would displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	NI	NI	NI	NI

SUM	Significant and Unavoidable with Mitigation	-	Lesser impact than that of the proposed CPHP
LTSM	Less than Significant with Mitigation	=	Same (or similar) impact as that of the proposed CPHP
LTS	Less than Significant impact	-/=	Less or similar impact to that of the proposed CPHP
LTCC	Less than Cumulatively Considerable	-/+	Less or greater impact as the proposed CPHP
		=/+	Similar or greater impact to that of the proposed CPHP

TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
XV. Public Services				
XV-a) The project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: i) Fire protection; ii) Police protection; iii) Schools; iv) Parks; v) Other public facilities.	LTS	- LTS	- LTS	- LTS
XVI. Recreation				
XVI-a) The project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	LTS	- LTS	- LTS	- LTS
XVI-b) The project includes recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	LTS	- LTS	- LTS	- LTS
XVII. Transportation				
Impact 3.6-1: Implementation of the SJCC FMP could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	NI	NI	NI	NI
Impact 3.6-2: Implementation of the SJCC FMP could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	LTS	- LTS	- LTS	- LTS
Impact 3.6-3: Implementation of the SJCC FMP could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LTS	- LTS	= LTS	- LTS
Impact 3.6-4: Implementation of the SJCC FMP could result in inadequate emergency access.	LTS	= LTS	= LTS	= LTS

SUM Significant and Unavoidable with Mitigation
LTSM Less than Significant with Mitigation
LTS Less than Significant impact
LTCC Less than Cumulatively Considerable

\- Lesser impact than that of the proposed CPHP
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TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
XVII. Transportation (cont.)				
Impact 3.6-5: Construction activities under the SJCC FMP could temporarily impact travel conditions along sidewalks and roadways serving the SJCC site.	LTSM	- LTSM	- LTSM	- LTS
Impact C-3.6-6: Implementation of the SJCC FMP, in combination with other development, could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	LTS	- LTS	- LTS	- LTS
Impact C-3.6-7: Implementation of the SJCC FMP, in combination with other development, could result in inadequate emergency access.	LTS	= LTS	= LTS	= LTS
Impact C-3.6-8: The proposed SJCC FMP would cause construction-related traffic impacts that would be cumulatively considerable under cumulative conditions.	LTS	- LTS	- LTS	- LTS
XVIII. Tribal Cultural Resources				
XVIII-a) The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) 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), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	LTSM	- LTSM	- LTSM	NI
XIX. Utilities and Service Systems				
Impact 3.7-1: The SJCC FMP would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.	LTS	- LTS	- LTS	- LTS
Impact 3.7-2: Sufficient water supplies would be available to serve the SJCC FMP and reasonably foreseeable future development during normal, dry, and multiple dry years.	LTS	- LTS	- LTS	- LTS

SUM Significant and Unavoidable with Mitigation
LTSM Less than Significant with Mitigation
LTS Less than Significant impact
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TABLE 4-1 (CONTINUED)
COMPARISON OF THE PROPOSED SJCC FMP AND ALTERNATIVES

Impact	Proposed SJCC FMP	Alternative 1: No Project – Implement SJCC 2025 Updated FMP Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Renovations Only Alternative
XIX. Utilities and Service Systems (cont.)				
Impact 3.7-3: The proposed SJCC FMP 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 SJCC FMP's projected demand in addition to the provider's existing commitments.	LTS	- LTS	- LTS	- LTS
Impact 3.7-4: Implementation of the SJCC FMP would not generate waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair attainment of solid waste reduction goals; and would comply with federal, State, or local management and reduction statutes and regulations related to solid waste.	LTS	- LTS	- LTS	- LTS
Impact C-3.7-5: Implementation of the SJCC FMP in combination with past, present, and reasonably foreseeable future projects, would not substantially contribute to cumulative impacts related to utilities and service systems.	LTS	- LTS	- LTS	- LTS
XX. Wildfire				
XX-a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the project would substantially impair an adopted emergency response plan or emergency plan.	NI	NI	NI	NI
XX-b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the project would, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	NI	NI	NI	NI
XX-c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the project would require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	NI	NI	NI	NI
XX-d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the project would expose people or structures to significant risks, including downslope or downstream flooding for landslides, as a result of runoff, post-fire slope instability, or drainage changes.	NI	NI	NI	NI

SUM Significant and Unavoidable with Mitigation
LTSM Less than Significant with Mitigation
LTS Less than Significant impact
LTCC Less than Cumulatively Considerable

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CHAPTER 5
Other CEQA Considerations

5.1 Introduction

Section 15126 of the CEQA Guidelines requires that evaluation of a project's impact on the environment must consider all phases of the project, including planning, construction, and operation. Further, CEQA Guidelines Section 15126.2(a) requires that the evaluation of significant impacts consider direct and reasonably foreseeable indirect effects of the proposed project over the short-term and long-term. The EIR must identify (1) significant environmental effects of the proposed project, (2) potentially feasible mitigation measures proposed to avoid or substantially lessen significant effects, (3) significant environmental effects that cannot be avoided if the proposed project is implemented, (4) significant irreversible environmental changes that would result from implementation of the proposed project, (5) growth-inducing impacts of the proposed project, and (6) alternatives to the proposed project.[1]

Chapter 2 of the Draft EIR provides the description of the proposed SJCC FMP and Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*, Sections 3.1 through 3.7, provides analysis of the environmental effects of the implementation of the proposed SJCC FMP, potentially feasible mitigation measures, and conclusions regarding the level of significance of each impact before and after mitigation. Chapter 4, *Alternatives*, presents a comparative analysis of alternatives to the proposed SJCC FMP. The other CEQA-required analyses described above are presented in this chapter.

5.2 Significant and Unavoidable Impacts

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed SJCC FMP on various aspects of the environment are discussed in detail in Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*. Significant impacts of the proposed SJCC FMP that cannot be avoided if the EIR is approved as proposed are summarized below.

Section 15126.2(b) also requires: "Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and reasons why the project is being proposed, notwithstanding their effect, should be described." The discussion of the feasibility of alternatives to address significant impacts of the proposed SJCC FMP is discussed in Chapter 4, *Alternatives*.

1 CEQA Guidelines sections 15126.2(a), (c-e), 15126.4, and 15126.6.

5.2.1 Project-Specific Significant and Unavoidable Impacts

Impact 3.5-1: Construction activities associated with the implementation of the SJCC FMP could result in temporary increases in ambient noise levels in the vicinity of the SJCC campus in excess of standards established in the City of San José General Plan or Noise Ordinance, or applicable standards of other agencies.

5.2.2 Cumulative Significant and Unavoidable Impacts

Impact C-3.5-5: Construction activities associated with the SJCC FMP combined with cumulative construction noise in the vicinity of the SJCC campus would result in a substantial temporary or periodic increase in ambient noise levels in excess of standards established in the City of San José General Plan or Noise Ordinance.

5.3 Significant Irreversible Environmental Effects

Under CEQA, an EIR must analyze the extent to which a project's primary and secondary effects would commit future generations to the allocation of nonrenewable resources and to irreversible environmental damage (CEQA Guidelines Section 15126.2(c)). Specifically, Section 15126.2(c) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy); and/or
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.

Each of these issues is discussed below for the proposed SJCC FMP.

5.3.1 Commitment of the Project Site for Future Generations

The SJCC is an existing community college campus that has been built out with urbanized uses and updated over time. The implementation of the SJCC FMP would not alter the types of land uses and activities conducted at the campus and would recommit the land resources of the campus to urban development for future generations.

As discussed in Chapter 2, *Project Description*, the proposed SJCC FMP projects and activities, namely demolition, re-construction/restoration, and new construction would be contained within the developed areas within the SJCC campus.

5.3.2 Large Commitment of Resources

With respect to the commitment of non-renewable resources, and consumption of resources, these would occur during both construction and operation of the proposed SJCC FMP. Construction of new development and demolition or renovation of existing structures and infrastructure would require the use of fossil fuel, construction materials, and water.

Operation of the SJCC campus facilities under the SJCC FMP, would require an irreversible commitment of energy, primarily in the form of fossil fuels, for heating and cooling of buildings, for vehicle fuel, and for energy production; as well as potable and non-potable water for consumption, landscaping, and other uses.

5.3.3 Unjustified Consumption of Resources

Resources that would be permanently and continually consumed by implementation of the proposed project include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in the unnecessary, inefficient, or wasteful use of resources (see Chapter 3, Section 3.3, *Energy*, and Section 3.7, *Utilities and Service Systems*). As shown in Section 3.3, the proposed SJCC FMP's annual net new energy demand for electricity, natural gas, and diesel would increase. However, the annual gasoline consumption from vehicle trips per student to the campus is expected to reduce. In addition, electricity and fossil fuels would also be consumed in the use of vehicles and equipment during construction of the proposed SJCC FMP.

Project Construction

Consumption of non-renewable fossil fuels during construction of the proposed SJCC FMP is described in Section 3.3, *Energy*. Construction of the proposed SJCC FMP would result in the irretrievable commitment of construction materials (e.g., steel products, cement, glass). While construction of the proposed SJCC FMP would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobiles and construction equipment, the consumption of fossil fuels would occur on a temporary basis during the construction period.

Construction methods would employ fuel-efficient equipment consistent with State and federal regulations, such as fuel efficiency regulations in accordance with the CARB Pavley Phase II standards, the anti-idling regulation in accordance with Section 2485 in Title 13 of the CCR, and fuel requirements for stationary equipment in accordance with Section 93115 (concerning Airborne Toxic Control Measures) in Title 17 of the CCR. Use of construction equipment that is compliant with these regulations would result in the use of more fuel-efficient engines and associated fuel savings.

Construction under the SJCC FMP would also involve demolition of six existing structures, and renovation and repurposing of existing structures on the SJCC campus, which would generate solid waste in the form of concrete, demolition debris, and other materials. It is anticipated that the SJCC FMP would comply with City of San José Construction and Demolition Diversion program requirements and that a minimum of 50 percent of these materials would be recycled or otherwise diverted from landfill, consistent with City regulations, per Title 9, Chapter 9.10.2440 of the City's Municipal Code and state objectives for diversion of construction demolition debris.

The SJCC FMP would divert mixed construction and demolition debris to City-certified construction and demolition waste processors using City-certified waste haulers, which would reduce truck trips to landfills, and increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption. As such, the consumption of energy during project construction would not be wasteful, inefficient, or unnecessary.

Project Operation

Operation of the SJCC FMP would result in the demand for electricity and natural gas for project operations, and gasoline and diesel fuel for transportation and backup generation functions. As described in Section 3.3, *Energy*, future energy use for development under the SJCC FMP would result in an increase in annual net new energy demand.

Assuming compliance with 2019 Title 24 Building Energy Efficiency standards and applicable 2019 CALGreen Code requirements, the campus buildings and facilities at buildout would result in a projected net increase in the annual demand for electricity. As described in Section 3.3, *Energy*, the future energy use would represent a very small percentage of future state consumption and would be within projected electrical supplies.

In addition, the SJCC FMP's operational electricity consumption would have a negligible effect on peak-load conditions of the power grid. As the proposed SJCC FMP would comply with the CALGreen Code and with implementation of Mitigation Measure 3.4-1, related to greenhouse gas emissions, all renovated and newly constructed buildings on campus would be required to incorporate design features necessary to achieve LEED Silver certification level or equivalent standards. Implementation of the measures in Mitigation Measure 3.4-1 would reduce energy consumption, promote energy efficiency, and increase the use of renewable electricity at the campus. Therefore, the proposed SJCC FMP would not be anticipated to result in the wasteful or inefficient use of electrical energy.

The analysis of the SJCC FMP in Section 3.3 evaluates the future use of natural gas for the operations of the SJCC campus. The SJCC's Central Plant provides the heating and cooling needs of the majority of buildings on campus. Buildings not served by the Central Plant are served by dedicated package systems. Based on the *Utility Infrastructure Master Plan* prepared for the campus, natural gas usage is anticipated to increase from 21,677 MMBtu in 2019 to 38,547

MMBtu in 2030 with the implementation of the SJCC FMP. Though natural gas usage will increase with the SJCC FMP, greater efficiencies would be introduced through newer equipment and systems. As an example, all three boilers at the Central Plant will be replaced pursuant to an agreement between the SJECCD and BAAQMD. The new boilers, which would serve existing structures and structures constructed pursuant to the SJCC FMP would be more energy efficient than the existing ones (see Section 3.3, *Energy*).

In addition to complying with applicable regulatory requirements regarding energy conservation (e.g., California Building Energy Efficiency Standards and the CALGreen Code), the SJCC FMP also includes design features to further reduce natural gas use. The Career Technology Education (CTE) Building is proposed to be constructed as a Zero Net Energy Building relying entirely on renewable energy in the form of electricity. This would reduce future natural gas use at the campus. For these reasons, operation of the proposed SJCC FMP would not result wasteful or inefficient use of natural gas.

Collectively, the incorporation of the above described conservation measures and features, operation of the proposed SJCC FMP would minimize the consumption of electricity, natural gas, and transportation fuels. Therefore, as the operation of the proposed SJCC FMP would not result in the wasteful, inefficient, or unnecessary consumption of electricity, natural gas, and transportation fuels, and thus would not result in the unjustified consumption of natural resources.

5.3.4 Irreversible Environmental Damage

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage that could be caused by an accident associated with the proposed SJCC FMP. The proposed SJCC FMP could result in the use, transport, storage, and disposal of limited amounts of hazardous wastes during construction and operation. However, as described in the Initial Study, all activities would comply with applicable State and federal laws related to hazardous materials, which significantly reduce the likelihood and severity of the occurrence of accidents that could result in irreversible environmental damage.

As discussed in detail in Section 3.4, *Greenhouse Gas Emissions*, the emission of GHGs is known to have long-term effects on atmospheric conditions that affect the global climate, with resultant changes in sea level, hydrological conditions in rivers, heat island effects, and a range of other conditions. While these changes are not considered irreversible, they could last for generations. As further described in Section 3.4, the proposed SJCC FMP could result in short-term increases in GHG emissions, and despite the implementation of mitigation measures, would result in a net increase in GHG emissions over the existing scenario. As such, the proposed SJCC FMP would contribute to global climate change and related irreversible environmental damage.

The most notable significant irreversible impacts of the proposed SJCC FMP are the short-term commitment of non-renewable and slowly renewable natural and energy resources, such as water and energy resources used during construction activities. Operations associated with future uses would also consume water, natural gas and electrical energy. The unavoidable environmental consequences of the proposed SJCC FMP are described in the appropriate sections in Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*, and Section 4.2, above.

5.4 Growth-Inducing Effects

As required by CEQA Guidelines Section 15126.2(e), an EIR must discuss ways in which a project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, an EIR must discuss the characteristics of a project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, through the stimulation of economic activity within the region. The purpose of this section is to evaluate the potential growth-inducing effects resulting from the implementation of the proposed SJCC FMP in the project area.

In general, a project may foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of the new access to or infrastructure capacity that serves an area); or indirectly stimulates economic expansion or growth that occurs in an area in response to the project (e.g., changes in revenue base, employment expansion).

Elimination of Obstacles to Growth

The elimination of physical obstacles to growth is considered a growth-inducing effect. The SJCC campus is located in a highly urbanized area. Common factors that limit growth include limited capacities of local or regional utility infrastructure, such as storm drainage systems, or wastewater conveyance and treatment systems. Transportation infrastructure can also be a factor that limits growth.

The SJCC Campus, located within a fully urbanized landscape has transportation and utility infrastructure designed to accommodate urban development in the City of San José, unincorporated County of Santa Clara and Southern Bay Area region. The proposed SJCC FMP does not include circulation improvements or expand the capacity of public roadways. As described in Section 3.7, *Utilities and Service Systems*, existing service systems for water supply, wastewater, and storm drainage are either currently adequate to serve the proposed project, or would require localized improvements to accommodate the proposed SJCC FMP. Such improvements would not be sized to provide substantial excess capacity beyond what is needed to serve the proposed SJCC FMP.

As such, the proposed SJCC FMP would not eliminate obstacles to further growth in the City of San José, County of Santa Clara, or surrounding areas.

Economic Effects

Growth can be induced in a number of ways, including the elimination of obstacles to growth, or through the stimulation of economic activity within the region. The discussion of removal of obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in population growth or development unforeseen at the time of project approval. Under CEQA, growth is not necessarily considered beneficial, detrimental, or of little significance to the environment.

Direct Population and Employment Growth

The SJCC FMP anticipates the demand for facility space based on the SJCC Education Master Plan (EMP). The EMP is one of the tools utilized by the District to plan for projected campus population growth and demand for community college educational programs from its primary service area. The District projects that student population at the SJCC campus is anticipated to grow from 8,706 students in 2019 and 8,773 in 2020 to 10,735 students in 2030[2] with concurrent increase in faculty and staff.

Student population growth would not result in a direct population increase leading to a subsequent growth, as the SJCC does not provide housing for students or faculty and administrators. The increase in student population could increase student use of nearby businesses. The increase in faculty to serve the increased student population would be anticipated to induce people moving to the area to work at the campus is likely to be entirely accommodated by the existing and new housing in the City of San José, County of Santa Clara, and other surrounding communities.

The City of San José and County of Santa Clara is the primary study area that would be affected directly by SJCC FMP-related employment effects that could in turn result in demand for additional housing. However, effects may extend beyond the County of Santa Clara to neighboring counties in the Bay Area. It is assumed that future students and employees would make approximately the same residential location decisions as current SJCC students and employees. However, as described in Section 3.6 of the Draft EIR, *Transportation*, implementation of the SJCC would result in a reduction in average daily student vehicle miles traveled due to the anticipated majority of student population growth taking place in areas closer to the SJCC campus.

The potential physical environmental impacts associated with the induced demand for housing resulting from the proposed SJCC FMP are evaluated in the environmental analysis sections of this EIR (e.g., Section 3.1, *Air Quality*; Section 3.3, *Energy*; Section 3.4, *Greenhouse Gas Emissions*; Section 3.6, *Transportation*; and Section 3.7, *Utilities and Service Systems*; see also **Appendix A**, *Initial Study*). To the extent any new housing in the region may be required for the additional staff growth anticipated for the SJCC FMP, it would likely result in some environmental impacts; however, it would be speculative to characterize the site-specific environmental effects resulting from the development of such housing. Further, it is likely that existing or planned future housing would be adequate to provide housing for these individuals as the SJCC facilities expand in capacity pursuant to the SJCC FMP.[3] The General Plans of jurisdictions planning for new housing contain policies and other measures that address the environmental effects of new housing development. Specific housing development projects also would be subject to the environmental review process of affected jurisdictions.

In general, the potential effects of this population growth could include: increased traffic congestion; increased air pollutant emissions; loss of agricultural land and open space; loss of habitat and associated flora and fauna; increased demand on public utilities and services, such as

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2 SJECCD WSCH Forecast.

3 CEQA Guidelines section 15145 states that "[i]f, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."

fire and police protection, water, recycled water, wastewater, solid waste, energy, and natural gas; and increased demand for housing. An increase in population growth would also require governmental services including, but not limited to, public schools, libraries, and parks.

Indirect Economic Growth

In addition to the student population and employment growth generated by implementation of the SJCC FMP, additional local employment could be generated through what is commonly referred to as the "multiplier effect." The multiplier effect refers to the secondary economic effects caused by spending from project-generated students and employees.

The multiplier effect also calculates induced employment. Induced employment follows the economic effect of employment beyond the expenditures of the students and employees within the SJCC campus site to include jobs created by the stream of goods and services necessary to construct and operate the SJCC campus as envisioned in the SJCC FMP.[4] The multiplier effect tends to be greater in regions with larger diverse economies (such as the Bay Area) due to a decrease in the requirement to import goods and services from outside the region, as compared to the effects of spending in smaller economies where goods and services must be imported from elsewhere.

Indirect economic growth would result under the proposed SJCC FMP from non-SJCC jobs that might be induced by the growth in campus-affiliated populations. Indirect jobs that would be generated by implementation of the proposed SJCC FMP include those of suppliers of goods and services to SJCC and induced jobs are created through the household expenditures of SJCC and supplier workers. For example, when a SJCC staff member purchases goods or services at local businesses, additional employees are hired.

The number of indirect and induced jobs generated by a community college is commonly calculated by applying a ratio, or job multiplier, to the number of jobs provided directly by such an institution. The projected increase in jobs under the proposed SJCC is approximately 156 staff and faculty positions by 2030.[5] Using a job multiplier of 0.73,[6] at full development of the campus site under the SJCC FMP (by 2030), an additional 114 jobs elsewhere in the Bay Area could be indirectly caused by or induced by growth under the proposed SJCC FMP.

4 For example, when a manufacturer buys products or sells products, the employment associated with those inputs or outputs are considered induced employment. As an additional example, when a staff member from the campus site goes out to lunch, the person who serves the student or employee lunch holds a job that was indirectly caused by the proposed SJCC FMP. When the server then goes out and spends money in the economy, the jobs generated by this third-tier effect are considered induced.

5 For the purposes of this analysis, the Draft EIR Assumes a conservatively high student-to-staff ratio of 13:1, similar to other similar higher education uses.

6 Multipliers identified in studies of other college campuses range from 0.33 to 1.36 (Stanford, 2017). At 0.73 indirect and induced workers per SJCC worker, the study conducted for USF may provide the best "order of magnitude" estimate for regional impacts for SJCC, as it is in the same Bay Area region with the same range of available local goods and services.

Environmental Effects of Indirectly Caused and Induced Growth

The residential locations of people working in indirect and induced jobs is unknown. It would be speculative to conclude where such workers would reside or be employed in the Bay Area (or beyond), or to determine any associated environmental effects.

Growth induced directly and indirectly by the proposed SJCC FMP would likely affect the greater Bay Area region. It is acknowledged above that the precise nature, location, and magnitude of effects of indirect and induced growth cannot be determined, or are likely to be spread across a large geographic area. However, the proposed SJCC FMP would likely result in an incremental increase in overall demand in the region for housing, commercial and industrial space, and associated infrastructure as a result of induced growth from the expansion in operations at the SJCC campus.

Potential effects could include: increased traffic congestion; increased air pollutant emissions; loss of agricultural land and open space; loss of habitat and associated flora and fauna; increased demand on public utilities and services, such as fire and police protection, water, recycled water, wastewater, solid waste, energy, and natural gas; and increased demand for housing. An increase in housing demand in the Bay Area region would also require governmental services including, but not limited to, schools, libraries, and parks to serve new commercial and residential development.

Indirect and induced employment and population growth could further contribute to the loss of open space because it would encourage conversion to urban uses for housing, commercial space, and infrastructure, although most jurisdictions have adopted smart-growth policies that discourage or prohibit this type of development.

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CHAPTER 6
Acronyms and Other Abbreviations

Acronym or Abbreviation	Definition
2017 Scoping Plan Update	2017 Climate Change Scoping Plan Update
2030 GHGRS	*2030 Greenhouse Gas Reduction Strategy*
$\mu g/m^3$	microgram(s) per cubic meter
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AFY	acre-feet per year
ALUC	Santa Clara County Airport Land Use Commission
Airport	Norman Y. Mineta San José International Airport
AR4	Fourth Assessment Report
ARM	Archaeological Resource Management
ASF	assignable square feet
ATCM	Air Toxic Control Measure
avg.	average
BAAQMD	Bay Area Air Quality Management District
BAAQMD CEQA Guidelines	Bay Area Air Quality Management District *California Environmental Quality Act Air Quality Guidelines*
BACT	Best Available Control Technology
BART	Bay Area Rapid Transit
BMP	best management practice
BOT	Board of Trustees
Btu	British thermal unit(s)
C&D	construction and demolition
CAA	Clean Air Act
CAAQS, or "state standards"	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CALGreen Code	California Green Building Standards Code
California Register	California Register of Historic Resources
CalRecycle	California Department of Resources and Recycling
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CARE	Community Air Risk Evaluation

Acronym or Abbreviation	Definition
CBC	California Building Code
CCA	Community Choice Aggregator
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	*Guidelines for Implementing the California Environmental Quality Act*
CFR	Code of Federal Regulations
CGP	Construction General Permit
Checklist	City of San José Greenhouse Gas Reduction Strategy Compliance Checklist
City	City of San José
City General Plan	*Envision San José 2040 General Plan*
CL	city landmark
CLUP	Norman Y. Mineta San José International Airport's Comprehensive Land Use Plan
CMA	congestion management agency
CMP	congestion management program
CNEL	community noise equivalent level
CNG	compressed natural gas
CNRA	California Natural Resources Agency
COVID-19	Coronavirus disease 2019
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
Construction General Permit	General Construction Activity Stormwater Permit
County	County of Santa Clara
CPUC	California Public Utilities Commission
dB	decibel(s)
dBA	A-weighted decibel(s)
DGE	diesel gallon equivalency
District	San José Evergreen Community College District
DNL	day-night average noise level
Downtown	City of San José Downtown area
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
DSA	Division of State Architect
DTSC	California Department of Toxic Substances Control
EIR	environmental impact report
EMFAC2017	Emission Factor model
EMP	educational master plan
EMS	Emergency Medical Services
EPA	U.S. Environmental Protection Agency
ESA	Environmental Science Associates
EV	electric vehicle

Acronym or Abbreviation	Definition
EVC	Evergreen Valley College
EVC EMP	Evergreen Valley College Educational Master Plan
EVC FMP	Evergreen Valley College Facilities Master Plan
FHWA	Federal Highway Administration
FMP	facilities master plan
FTA	Federal Transit Administration
General Plan	*Envision San José 2040 General Plan*
GHG	greenhouse gas
GHGRS	City of San José Greenhouse Gas Reduction Strategy
gpd	gallons per day
GSF	gross square feet
GWP	global warming potential
HAP	hazardous air pollutant
HI	hazard index
hp	horsepower
HRA	Health Risk Assessment
HRI	City of San José Historic Resources Inventory
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I-280	Interstate 280
I-880	Interstate 880
IEPR	Integrated Energy Policy Report
in/sec	inch(es) per second
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ITE	Institute of Transportation Engineers
kBtu	thousand British thermal units
km	kilometer(s)
kV	kilovolt(s)
kW	kilowatt(s)
kWh	kilowatt-hour(s)
lb	pound(s)
LCFS	low carbon fuel standard
LEED®	Leadership in Energy and Environmental Design
L_{eq}	equivalent-continuous sound level, or “average sound level”
LID	Low Impact Development
L_{max}	maximum instantaneous noise level experienced during a given period of time
LOS	level of service
LRT	light rail train
m	meter(s)
MEIR	Maximally Exposed Individual Receptor
MERV	minimum efficiency reporting value
mgd	million gallons per day
MMBtu	million British thermal units

Acronym or Abbreviation	Definition
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric ton(s)
$MMTCO_2e$	million metric ton(s) of carbon dioxide equivalent
mpg	miles per gallon
mph	miles per hour
MS4	municipal separate storm sewer system
MT	metric ton(s)
MTC	Metropolitan Transportation Commission
$MTCO_2e$	metric ton(s) of carbon dioxide equivalent
$MTCO_2e$/year/SP	metric ton(s) of carbon dioxide equivalent per year per service population
Municipal Code	City of San José Municipal Code
MW	megawatt(s)
MWELO	Model Water Efficient Landscape Ordinance
MWh	megawatt-hour(s)
NAAQS, or “national standards”	national ambient air quality standards
National Register	National Register of Historic Places
NECPA	National Energy Conservation Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHA	not historic-age
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO_2	nitrogen dioxide
Noise Ordinance	City of San José Noise Ordinance
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPDES General Stormwater Permit	National Pollutant Discharge Elimination System General Construction Permit for Discharges of Stormwater Associated with Construction Activities
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor’s Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PA	public address
PDA	priority development area
PE	physical education
PG&E	Pacific Gas and Electric Company
PHEV	plug-in hybrid electric vehicle
PM	particulate matter
PM_{10}	particulate matter that is 10 microns or less in diameter
$PM_{2.5}$	particulate matter that is 2.5 microns or less in diameter
ppb	part(s) per billion
ppm	part(s) per million
PPV	peak particle velocity
PRC	Public Resources Code

Acronym or Abbreviation	Definition
Program	climate protection program
Project	San José City College Vision 2030 Facilities Master Plan Draft Environmental Impact Report
REL	reference exposure level
RMS	root mean square
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RWF	San Jose-Santa Clara Regional Wastewater Facility
SAR	Second Assessment Report
SB	Senate Bill
SBWR	South Bay Water Recycling
SCAQMD	South Coast Air Quality Management District
Scoping Plan	Climate Change Scoping Plan
SFBAAB, or Bay Area	San Francisco Bay Area Air Basin
SFPUC	San Francisco Public Utilities Commission
SJCC	San José City College
SJCC EMP	San José City College Educational Master Plan
SJCC FMP	San José City College Vision 2030 Facilities Master Plan
SJCE	San José Clean Energy
SJECCD	San José Evergreen Community College District
SJFD	San José Fire Department
SJVAPCD	San Joaquin Valley Air Pollution Control District
SJWC	San Jose Water Company
SO_2	sulfur dioxide
SP	service population
Standards	Secretary of the Interior's Standards for the Treatment of Historic Properties
SR	State Route
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TA Handbook	Transportation Analysis Handbook
TCR	The Climate Registry
TIA	transportation impact analysis
TPA	transit priority area
USGBC	U.S. Green Building Council
USGCRP	United States Climate Change Research Program
UWMP	Urban Water Management Plan
V/C	volume-to-capacity ratio
Valley Water	Santa Clara Valley Water District
VdB	vibration decibel(s)
VDECS	Verified Diesel Emissions Control Strategies
VMT	vehicle miles traveled
VOC	volatile organic compound
VTA	Santa Clara Valley Transportation Authority

Acronym or Abbreviation	Definition
W	watt(s)
WRAP	Western Regional Air Partnership
WSA	Water Supply Assessment
WSMP 2040	Water Supply Master Plan 2040
ZEV	zero-emission vehicle

CHAPTER 7

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